



# EAWOP CONGRESS

The Future is Now: the changing world of work

Katowice, Poland

BOOK OF ABSTRACTS

HOST CITY:  **KATOWICE**  
*dla odmiany*

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## Introduction

So much has happened in the last two years that has changed our lives, our work and the ways we think about ourselves and the world in which we live. That is why we came to the decision to focus our congress on the theme “**The Future is Now: the changing world of work**”. When considering these words, we kept changing our minds about the punctuation. Then we realized that different forms of punctuation were leading us to focus on different facets of the same topic and that our congress theme asks crucial questions about *contribution*, *urgency*, and *delivery* and most definitely represents a call to action from our profession. These different facets we believe to be:

- **The future is now.** *Contribution.* Our future is being created by many professionals in for example Engineering, IT, AI, Economics, Medicine, Human Resources. How will we develop new competences and how will we compete and collaborate? How will we help lead the way?
- **The future is now!** *Urgency.* We cannot wait to solve the problems of pandemics, migration, war, refugees, sustainability, climate and social change, violence against women and children and economic crises.
- **The future is now?** *Delivery.* How much of the present do we want in our future? What changes are desirable? What changes are essential? Can we even deliver our desired changes? How?

Our call to action focuses on these questions:

- **Where is our voice? What must we say? How should we say it?**

We were expecting, and there was great interest in attending our event, and we received many superb submissions that contributed to our understanding of the changing world and the place that we have in it. All submissions were enhanced by a fantastic, invited programme that included a cross-section of great thinkers and superb speakers.

Fortunately, it was possible to meet and share this face-to-face event with you, our fellow work and organizational psychologists! In fact, Congress was a wonderful opportunity to renew old friendships and to make new ones.

We hope that participants greatly enjoyed the location. Katowice is the capital of the Upper Silesia region and in the past was famous for many coal mines and heavy industry. Nowadays, it is a city of new technologies and innovation with many international companies. In 2024, Katowice will hold the title of the European City of Science: <https://www.europejskiemiastonauki.us.edu.pl/en.php>

Thanks to all 21st EAWOP Congress participants! Due to your contribution, enthusiasm, and good mood, we had a great meeting in Katowice. We were impressed by your openness and networking approach. See you in Prague in May 2025!

**Barbara Kożusznik**  
Chair, Programme Committee

**Annemarie Hiemstra**  
President, EAWOP

**Barbara Smorczevska**  
Chair, Congress Taskforce

## Keynote Speakers

### **Keynote Speaker**

#### **Only (Re)connect: 20+ Years of the Social Identity Approach to Psychology in Organizations**

ALEX HASLAM

Professor of Psychology and Australian Laureate Fellow at the University of Queensland

It is 20 years since the breadth of organization research informed the Social Identity Approach was first extensively reviewed in *Psychology in Organizations*. Since that time, interest in the approach has boomed — to the point where its scope and depth is now almost impossible to chart. Nevertheless, this talk attempts to do this. Alongside a survey of key developments, it does so by focusing on three key topics that are the focus for symposia and workshops elsewhere in the conference: leadership, organizational change, and followership. Research shows that social identity is central to all these phenomena and can thereby provide a platform for a range of positive organizational outcomes. However, at the same time, it also highlights the ways in which toxic identities (and the identity leadership and engaged followership that support them) can also have problematic consequences for organizations and their members. These considerations lead to a call for greater attention to the links between social identity and health, and to the forms of identity leadership that sustain healthy organizations. The practical implications of the analysis are also brought home by a discussion of 5R — an evidence-based leadership development programme that leverages social identity insights to help leaders build inclusive, effective and flourishing teams.

## **Keynote Speaker**

### **The Future of Research in Work and Organizational Psychology – How New Technologies Allow New Insights**

MARIANNE SCHMID MAST

HEC Lausanne Business School, University of Lausanne, Switzerland

This talk about what could be and not so much about what is. It is not so much a talk about results, it is rather a talk about possibilities. It is also not an advertisement for using new technologies for the sake of using them; it is an invitation to think about whether and how new technologies can help us address and answer questions that can otherwise not be investigated. Why should you use an immersive virtual reality setting in which participants stand on a plank facing a void while training to be a persuasive presenter? Can one make bosses who have to fire collaborators more empathic by training them beforehand to fire themselves (i.e., their virtual self)? Research shows that women emerge as leaders less often than men, but is it an effect of women behaving less leaderlike than men or is it an effect of the perceivers who are biased and associate men more easily with leadership than women? New technologies can help us tease apart those effects experimentally. Another example concerns the training of new communication skills. These are typically learned by presenting the trainee with videos of role models. What if the role model was you in a video already showing perfect mastery of the skill to learn? Would that accelerate your learning? Creating such a video is possible with a deep fake technology called pose transfer. Curious to boggle your mind? Happy to see you in my talk.

## **Keynote Speaker**

### **Subtle Yet Powerful: Gender Stereotypes as Barriers to Women's Leadership**

JANINE BOSAK

Professor of Organizational Psychology at the Dublin City University (DCU) Business School, Ireland

Women remain vastly underrepresented in leadership roles within business, academia, and in the political realm. One critical explanation for gender inequality and gender imbalance in leadership is the perceived lack of fit between beliefs about communal qualities (e.g., helpful, kind) in women and beliefs about agentic qualities (e.g., assertive, dominant) expected and desired in leaders. I will present my research illustrating the ways in which such a lack of fit can manifest itself in (i) bias against female leaders and women aspiring to become a leader and (ii) in self-directed bias among women leaders themselves. Moreover, I will discuss the question of the malleability of the perceived lack of fit, particularly important for stereotype and bias reduction, and I will close the talk with suggestions for how organizations and individuals can address biases and enhance efforts toward gender equality in leadership.

## **Keynote Speaker**

### **“...a time for war and a time for peace...”: What role can and should Work and Organizational Psychologists take in times of war?**

MARTIN C. EUWEMA

Full professor for Organizational Psychology at the University of Leuven, Belgium

Confronted with a brutal war in Ukraine, and related crisis in Europe, within the EU the attitude towards war, the need to defend, and the use of military force, has changed dramatically. This also challenges us, as psychologists, and in particular Work and Organizational psychologists, to rethink how we can and should contribute in times of war, postwar, as well as in rebuilding peace. In this keynote Martin first shows the importance of our work as W&O psychologists throughout the complete deployment cycle (from recruitment and selection, to training, monitoring, and reintegrating). Secondly, challenges on our professional and personal ethics, how to engage, and relate to brutal violence, being close to, or far from home. Finally, Martin discusses the need for academic work on conflict and negotiation in the process of post-war, promoting the academic-practitioner.

## **Keynote Speaker**

### **What makes a livelihood sustainable?**

STUART CARR

The UNESCO Chair on Sustainable Livelihoods and Professor of Psychology, Industrial and Organizational Psychology Program, Massey University, New Zealand

The concept of a job has served WOP well, but has delivered far less for workers at large in this 21st-century. Most of the world's workforce does not even have one, and those that do are mostly trapped in working poverty and precarity. It is time to move on by setting more expansive, inclusive goals for 'who' we serve, 'how' we serve, and 'what' we aspire to deliver. Sustainable Livelihoods is that goal.

Goaling sustainable livelihoods includes prioritising decent work and wellbeing. It includes for example (1) fair incomes; (2) work security; and (3) social protection. Livelihoods help protect people from stress and shocks, plus enhance their capabilities and assets. Sustainable means contributing to the livelihoods of others, both now and for future generations.

These ideals are instantiated in three extant WOP projects: (1) GLOW (Global Living Organisational Wage) is a 30-country network that asks, Is there a global living wage that enables people, organisations and communities to prosper and thrive? (2) Project SAFE (Security Assessment For Everyone) is an interdisciplinary network that includes linking work security to nine other forms of Human Security, from personal to global. (3) Clean SLATE (Sustainable Livelihoods And The Ecosystem) reconceptualises the value of work occupations according to their ecological footprints for life, land, sea and air.

Together, these projects walk the talk on Sustainable Livelihoods and allow us to see tangible ways to renew our professional commitment to Humanitarian Work Psychology.

# The Future is Now Speakers

## **The Future is Now Speaker**

### **The Paradigm Shift in Talent Management: Engagement in the Post-Pandemic Era**

RICHARD GRIFFITH

Executive Director of The Institute for Culture, Collaboration, & Management at the Florida Institute of Technology

In the modern workplace, perhaps no condition has been more sought after than employee engagement – an employee’s positive state when at work characterized by enthusiasm and absorption in work tasks. Engagement has been linked to a number desirable outcomes such as individual performance, customer-satisfaction, loyalty, and profit (Harter, Schmidt & Hayes, 2002), and thus been viewed as a panacea in the modern workplace. However, left unchecked, recent research has suggested that employee engagement can also lead to undesirable outcomes such as burnout, workplace aggression, and work addiction. In addition, work engagement has been complicated by the pandemic and we see new relationships with work characterized by terms such as The Great Resignation and Quiet Quitting. This talk will explore the trials of the new era, and challenge organizational psychologists to elevate their research and practice to address this paradigm shift.

## **The Future is Now Speaker**

### **Workplace bullying and harassment: From an organizational taboo to the development of robust ethical infrastructures in organizations**

STÅLE VALVATNE EINARSEN

Department of Psychosocial Science, University of Bergen

While bullying and harassment started out as a taboo in organizational life and in the field of work and organizational psychology, it is currently one of the more studied phenomena and concepts in the field, with empirical findings showing its great importance for the field. Workplace bullying and harassment can and should be studied in its own right as it is one of the most severe stressors potentially facing workers and managers in contemporary organizations. So, what is the current state of knowledge regarding its causes and outcomes, its prevention and management. Based on the current knowledge, how can we build bully-proof organizations? But more than this; bullying and harassment constitutes a paradigm and a new set of lenses when studying work, psychology, organizations and leadership in general. Hence, which new general insights have and may come from this line of research? How have and can this line of research inform the field of work and organizational psychology in general. Some of the findings may be surprising and rather novel and may even question some basic premises in psychology; "Vulnerable workers react more strongly than others when facing interpersonal problems and stressors at work!". What is revealed instead is a reversed buffer-effect. And there is more...

## **The Future is Now Speaker**

### **The Past and Future of Personality Assessment**

RYNE A. SHERMAN

Chief Science Officer at Hogan Assessment Systems

Personality assessment began during WWI as a solution to the problem of how accurately and efficiently to screen large numbers of job candidates. Decades of research show that well-validated personality assessments provide the fairest, most accurate, and most efficient way to make personnel decisions. Despite the undeniable practical value of personality assessment, academics substantially disagree about its meaning and goals. For example, trait theory, the dominant academic perspective, contends that traits exist inside of people, that these traits cause behavior, and the goal of assessment is to measure these traits. For this perspective, the two major issues concern: (a) the structure of traits (e.g., Big 5, HEXACO); and (b) faking on assessments. However, other views (e.g., Socioanalytic Theory; Functional perspectives) contend that traits are simply observable patterns in others' behavior, that these behaviors reflect actors' agendas, and that the goal of assessment is to predict performance outcomes. For these perspectives, the major issue concerns predicting important outcomes, not understanding trait structure or faking. This talk illustrates the critical difference between these views by highlighting the concept of Ambition, a behavior pattern associated with career success that is curiously missing in Five-Factor Model frameworks. I suggest that trait perspectives ignore this important variable for ideological and not empirical reasons. Finally, I note that deciding whether assessment concerns measuring traits or predicting outcomes will crucially determine the future of assessment.

## **The Future is Now Speaker**

### **Headaches (and their remedies) in pursuit of best practice test development for a new multi-scale measure of leader wellbeing**

AUDREY MCGIBBON

Executive Director & Founder, EEK & SENSE

Broad consensus in the scientific literature depicts wellbeing as an unstable and dynamic construct. Consensus also exists between academics and practitioners that wellbeing is a largely subjective and multi-dimensional construct. The conceptualisation of wellbeing as a complex psycho-social construct reflective of the interaction between a combination of individual factors, home-work-family conflict factors and organisational factors (job-demands-resources) is increasingly understood and adopted by organisations. Likewise, there is broad acceptance that wellbeing is both an enabler of individual and organisational outcomes, and an outcome measure in its own right, but is only partially under an individual's direct control subject to the context, actions and inactions of others.

*Is 'leader wellbeing' a new or even valid construct?*

*Why develop a new measure for 'leader wellbeing'? What if existing mental health and general wellbeing scales can provide valid measures of leader wellbeing? What if they can't?*

Long before 'employee wellbeing' became the occupational phenomenon it is today, I was curious to answer these perplexing questions. More than curious. Deeply concerned. Our rooms were filling with overwhelmed managers, jaded executives in the throes of an existential crisis, lonely and emotionally fragile leaders, unfit and unhappy resentful professionals who routinely sacrificed their health and family life in pursuit of success. Once seen, it couldn't be unseen. As practitioners, it triggered a crisis of conscience. Compelled to find a new methodology which would address leaders' mental health and wellbeing needs as the starting point for leadership development rather than an incidental or belated component, we unwittingly embarked upon a journey which has continued unabated for almost ten years. A review of existing measures failed to establish a suitable measure – the scales were too clinical and oriented towards diagnosis of mental ill-health; too generic and broad in their scope as assessments of overall subjective wellbeing; or too narrow with single construct foci.

A new measure specifically of 'leader wellbeing' (GLWS®) was warranted to ensure successful application with senior professional, managerial and executive populations. In this session, it will be my privilege to share how we approached the development and evaluation process for a new measure of leader wellbeing by adopting conventional item and scale development methodology to a significant extent; making modifications to standard approaches where required for theoretical and/or practical reasons; pivoting to reflect rapidly changing global, political, economic, societal, health, organisational, environmental and legal norms; accommodating our philosophical stance of leader wellbeing as both an outcome measure and a measure of outcomes. Over the decade of our independent

research, we have sincerely attempted as practitioners to navigate and uphold orthodox best psychometric test design – but this has not been without its challenges.

By sharing how we built and evaluated our items, scales and reflective model of leader wellbeing with 6500+ individuals across Australia, UK, Hong Kong, China, New Zealand, Singapore, USA and Canada, the main tensions we encountered will be evident. Ultimately, we have established excellent scale reliabilities, robust convergent and divergent discrimination for all scales, and very good /excellent CFI, TLI, RMSEA and SRMR factor values which held strong across the whole sample, between samples and across gender. We have established beyond reasonable doubt that leader wellbeing exists as a latent construct, and that the approach we take to measuring wellbeing across both work and personal/home life domains provides new information beyond current measures, and that our six scales within our model for leader wellbeing each add incremental value.

Please contact me if you would like to discuss, utilise my data or the tool in your research.

## **The Future is Now Speaker**

### **Safe haven? Refugees' challenges and threats in the receiving country's labour market, their coping, and avenues for adversarial growth and meaningfulness**

UTE-CHRISTINE KLEHE & KATJA WEHRLE, Department of Work and Organizational Psychology at the Justus-Liebig-University Giessen (Germany)

Managing involuntary career transitions and/or traumas is challenging under the best of circumstances. For migrants, and particularly for refugees, this is especially the case. For these workers, typical career-related self-management behaviours related to exploration, deciding, and planning often require extra steps in overcoming numerous context-specific barriers. While commanding only meagre or exhausted resources, refugees must navigate an innately foreign context with its different requirements, power structures, and professional scripts. This mismatch of scripts, however, shapes refugees' self-regulation, inviting under-, mis- and overregulation, which can influence locals' interpretation of refugees' efforts and, with this, refugees' overall integration. In addition, employers' trust in hiring refugees can erode from trust violations between the different stakeholders involved in refugees' integration (i.e., refugees themselves, local employers and their existing workforce, various authorities, and/or official and unofficial supporters). Together with refugees' fundamental uncertainties (e.g., residence decisions), lacking personal resources (e.g., language skills, social networks), and loss of time in the process, these situations threaten some of the last resources refugees have left: Their fundamental understandings of themselves. Yet, refugees cope with these adversities in numerous adaptive and proactive manners. While social connections and rich local opportunities assist refugees' adaptation, refugees also exert career-adaptive responses characterized by high self-regulation (e.g., thought and emotion regulation, adaptive goal setting), paving the way to successful integration. Amid their struggles, refugees in our studies still managed to rebuild connections to themselves and others, weave together personally meaningful careers, and potentially experience psychological growth.

## **The Future is Now Speaker**

### **Evidence-based practice in organizational psychology: Where did we go wrong and how can we do it better?**

ROB BRINER

Professor of Organizational Psychology at Queen Mary, University of London and was co-founder and Scientific Director of the Center for Evidence-Based Management

The idea of evidence-based practice has been around for some time, yet it is still unclear that organizational psychology as a profession is particularly evidence-based. What exactly is evidence-based practice? How evidence-based is organizational psychology and how can we know? How has evidence-based practice been promoted and developed within the profession? Where did we go wrong in promoting the idea? How can the profession get better at evidence-based practice?

## **The Future is Now Speaker**

### **The role of humans in the age of intelligent machines**

JOANNA BRYSON

Professor of Ethics and Technology

Governments and transgovernmental agencies such as the EU are starting to encode into law the AI principles about which we have now achieved global consensus: 1) that the use of AI must be responsible, 2) that those building and deploying AI must be held accountable for any malfeasance or lack of due diligence, 3) that AI must be adequately transparent to achieve these goals, 4) that AI must be used justly, and 5) that above all, AI use must be human-centred. But what does human-centred mean, and can it be achieved? In this talk, Bryson gives a brief introduction to the current issues of digital governance of AI, including transparency of intelligent systems, labour impacts, geopolitics, and security.

## Invited Panels & Symposia

### EAWOP Climate Change Panel

Gerdien de Vries

Alex Haslam | Annemarie Hiemstra | Sławomir Cyza | Carina Keller | Terri Morrissey

What does integrating science and practice really mean and how can it most effectively be accomplished?

Rob Briner | Audrey McGibbon

### Toxic behaviour and toxic leadership

Alex Haslam

- Rethinking the roots of toxic behaviour (Alex Haslam | Stephen Reicher)
- Doing good as a warrant for doing bad: Why people 'obey' in a Milgram-type paradigm (Megan Birney | Niklas Steffens)
- Toxic behaviour in business (Fergus Neville)
- High-Reliability Followership in elite military teams (Sally Knox | Kirsten Way | Alex Haslam)

Welcome to the dark side: Identifying and mitigating individual and contextual predictors of counterproductive and unethical work behavior

Ute-Christine Klehe | Lenke Roth

- Systemic factors promoting unethical behaviors in the German academic system – analysis and possible remedies (Daniel Leising)
- What You See is What You Get: Measuring Counterproductive Work Behavior in Behavioral Observations (Valerie Sophie Schröder)
- Mind the trap – Mindfulness renders immune to the temptation of fraud (Myriam Bechtoldt)
- Competition Sucks: How Psychopaths Burn their Coworkers Out by Engaging in Counterproductive Work Behaviors (Lenke Roth | Ute-Christine Klehe | Sebastian Schmitz)

Science & practice work together: Have practitioners gone wild? Goal setting and feedback interventions in practice

Colin Roth | Roman Soucek

Science & practice work together: Better futures for young people and organizations

Angela Carter | Belgin Okay- Somerville

Science & practice work together: Leading hybrid teams: unique challenges and opportunities

Eleni Giannakoudi | Anita Keller

Science & practice work together: Science and practice working together

Diana Rus | Helen Baron | Angela Carter

Risks, barriers and challenges in the emergence of female leadership

Janine Bosak | Marianne Schmid Mast | Mary Kinahan

- How sexist encounters impact women's leadership aspirations: the pernicious effects of benevolent sexism. (Nana Oforu | Clara Kulich | Soledad de Lemus | Fabio Lorenzi-Cioldi)
- The Role of Gender and Risk Perception in Informal Leadership Emergence (Siobhan Ayres | Janine Bosak | Clara Kulich | Stephanie Keenan)
- Gendered Language in Entrepreneurial Pitching (Anely Bekbergenova | Marianne Schmid Mast)
- Getting ahead versus getting along: Investigating how gender stereotypes are contributing to gender inequality in HEIs (Audrey Giles | Mary Kinahan | Deirdre O'Shea | Lisa van der Werff)

Business application of personality assessments

Kyle Cermak

- Psychometrics in Team Coaching and Individual Development (Rostislav Benak)
- The differences in personality traits and derailments among managers in Europe's east and west (Lea Jakob)
- Do cultures tend to negatively influence self-esteem of women in managerial positions? (Piotr Olaf Zylicz)

Refugee Research Incubator

Ute-Christine Klehe | Katja Wehrle

Rebuilding the people after crisis: What can WOP and military psychology contribute?

Martin Euwema

- Psychology and the Military Effort: A History of Reciprocal Enrichment (Salvatore Lo Bue)
- The reintegration process of military service members: the role of the organisation (Vita Glorieux)
- Supporting veterans to find their place in civilian society. A mission impossible? (Jacco Duel)

- Resilience in the Military (Ingrid Covington)

### Identity Leadership: A Global Perspective – part 1

Rudolf Kerschreiter | Rolf van Dick

- The Global Identity Leadership Development (GILD) Project: Introduction, aims and some results (Rolf van Dick | Rudolf Kerschreiter | Jérémy Lemoine | Niklas K. Steffens | Alex Haslam)
- Trust in the leader and team identification as underlying mechanisms linking identity leadership sub-dimensions to work-related outcomes (Kira Bibic | Svenja Frenzel | Rudolf Kerschreiter | Jérémy Lemoine | Niklas K. Steffens | Alex Haslam | Rolf van Dick)
- Identity leadership is not only about being prototypical of the group: A latent profile analysis (Jérémy Lemoine | Rolf van Dick | Rudolf Kerschreiter | Martyna D. Swiatczak | Niklas K. Steffens | Alex Haslam)
- Polish adaptation of the Identity Leadership Inventory (Sylwiusz Retowski | Dorota Godlewska-Werner)

### Identity Leadership: A Global Perspective – part 2

Rolf van Dick | Rudolf Kerschreiter

Discussant: Alex Haslam

- How to best measure Identity Leadership in a specific situation? Validity evidence for the Identity Leadership Inventory (Rudolf Kerschreiter | Dennis Kondzic | Rolf van Dick | Jérémy Lemoine | Niklas Steffens | Alex Haslam)
- To Be or Not to Be a Good Leader? A Coincidence Analysis of Identity Leadership, Work-Related Attitudes, and Burnout (Martyna Swiatczak | Jérémy Lemoine | Rolf van Dick | Rudolf Kerschreiter | Niklas Steffens | Alex Haslam)
- Identity leadership increases trust in one's fellow citizens and civic citizenship behaviors (Lucas Monzani | Kira Bibic | Rudolf Kerschreiter | Jérémy Lemoine | Niklas Steffens | Alex Haslam | Rolf van Dick)
- Identity Leadership by national leaders during the pandemic and beyond (Svenja Frenzel | Alex Haslam | Nina Junker | Rolf van Dick)

## Guest Panels & Symposia

AOP: WOP contribution to sustainable development goals

Gosia Kozusznik | Vicente Martínez- Tur | Ishbel McWha-Hermann | Alexandra Michel

AOP: IWOP Declaration of Identity

Barbara Kozusznik | Sharon Glazer | Annemarie Hiemstra | Alex Haslam | Vicente Martinez Tur | Richard Griffith

AOP: Meet the editors

Gosia Kozusznik | Deirdre O'Shea

- Paula Brough, Griffith University, Australia - Associate Editor, Work & Stress
- Claudia Buengeler, Kiel University, Germany - Editor, Organizational Psychology Review
- Charles Calderwood, Virginia Tech, USA - Associate Editor, Journal of Organizational Behavior
- Nele de Cuyper, KU Leuven, Belgium - Co-Editor, Applied Psychology: An International Review
- Ute Hülshager, Maastricht University, the Netherlands - Associate Editor, Journal of Occupational Health Psychology
- Jonas Lang, University of Exeter, UK - Associate Editor, Journal of Applied Psychology
- Sandra Ohly, University of Kassel, Germany - Editor, European Journal of Work and Organizational Psychology
- Shani Pindek, University of Haifa, Israel - Associate Editor, Work & Stress
- Kristina Potočnik, University of Edinburgh, UK - Associate Editor, Journal of Management Studies
- Roni Reiter-Palmon, University of Nebraska Omaha, USA - Editor, Organizational Psychology Review
- Ulrike Fasbender, University of Hohenheim, Germany - Associate Editor, Journal of Occupational & Organizational Psychology
- Lisa Schurer Lambert, Oklahoma State University - Co-Editor, Organizational Research Methods

AOP Interactive: Ethical, relevant and rigorous research 6 years after – implementation of the Memorandum of Understanding (EJWOP, 2017) in the WOP community

Gudela Grote | M. Gloria González- Morales

- How menopause affects women at work (Belinda Steffan)
- Impact of watching gender stereotypical TV show (Dana Unger)
- The importance of role models, mentors, and sponsors for the retention and career progression of women in STEM (Julie Jebsen)
- The challenges and opportunities of embedding a gender perspective in a large research project (Carol Linehan)

AOP: Gender equality in the workplace

Kristina Potočnik | Belinda Steffan | Dana Unger | Julie Jebsen | Carol Linehan

EAWOP Incubator: Threats and securities

Roberta Fida | Michael Knoll | Karen Niven | Ivana Vranjes

EAWOP Incubator: Improving migration and refugee integration

Rosalind Searle | Ute-Christine Klehe | Katja Wehrle | Jelena Zikic

EAWOP Incubator: What is the EAWOP Impact Incubator and our role?

Rosalind Searle | Annemarie Hiemstra

EAWOP Incubator: Creating and sustaining impact from work & organizational psychology science

Jo Silvester

EAWOP Incubator Symposium: From precarious work to sustainable livelihoods via decent work conditions?

Stuart Carr

- Humanitarian work: policy and praxis (Ishbel McWha-Hermann | Rosalind Searle)
- The living wage in South Africa (Ines Meyer | Jonathan Molefe)
- Defining work-related precariousness and how to measure it to secure health and wellbeing (Christian Seubert | Lisa Seubert)
- Redressing underemployment as a form of precarious work (Donald Truxillo | Deirdre O'Shea)

EAWOP Incubator: World Café – Getting involved

Stuart Carr | Ute-Christine Klehe | Jo Silvester | Roberta Fida | Ishbel McWha-Hermann | Michael Knoll

## **Invited Symposium 1**

### **Toxic behaviour and toxic leadership**

Alex Haslam, University of Queensland

science

This symposium contains four papers that explore issues related to the psychology of toxic leadership. The papers are informed by a social identity perspective, and explore the ways in which leaders facilitate toxic behaviour in groups by cultivating a strong sense of identification in followers and enjoining them to see toxic activity as necessary for the protection and advancement of the group.

Keywords: Toxic leadership, social identity, group dynamics

### **Paper 1**

#### **Rethinking the roots of toxic behaviour**

Alex Haslam, University of Queensland; Stephen Reicher, University of St Andrews

This talk revisits classic work in psychology into the dynamics of toxic behaviour. In particular it re-examines Zimbardo's Stanford Prison Experiment and Milgram's Yale Obedience studies and argues that these do not, as conventionally understood, show how people act toxically because they are unaware of the consequences of their actions but rather that they understand and indeed celebrate what they are doing. As an alternative to conformity accounts that dominate the literature, we argue that this involves a process of identity leadership and engaged followership and will illustrate the power of such an analysis in relation to real-world examples of toxic behaviour.

*Keywords: identity leadership; group dynamics*

### **Paper 2**

#### **Doing good as a warrant for doing bad: Why people 'obey' in a Milgram-type paradigm**

Megan Birney, Staffordshire University; Niklas Steffens, University of Queensland

This talk draws on a series of experimental studies in which we investigate an 'engaged followership' reinterpretation of Milgram's classic 'obedience' studies. We argue that people 'obey' because the experimenter convinces them that they are participating in a valuable scientific enterprise that will contribute to human progress. Across four experiments we show that the more a study is presented as a piece of 'prototypical' science, the more worthwhile it is seen to be, and the further participants will go in implementing toxic instructions from the experimenter.

*Keywords: identity leadership; obedience*

### **Paper 3**

#### **Toxic behaviour in business**

Fergus Neville, University of St Andrews

This talk applies the 'engaged follower' analysis to toxic behaviour by business organisations. It argues that the more that people identify with an organisation and endorse its values and goals, the more they will be willing to implement toxic instructions. To support this analysis, we first use this lens to examine real-world examples of corporate misbehaviour. We then go on to present the results of two studies which examine the relationship between identification with the organisation and misconduct. Third, we draw out the implications of the analysis for practical efforts to minimise misconduct in the future.

*Keywords: identity leadership; toxic behaviour*

## **Paper 4**

### **High-Reliability Followership in elite military teams**

Sally Knox, Alex Haslam & Kirsten Way | University of Queensland

The military is widely regarded as an extension and tool of government and the society it represents and serves. As a result, unreliable or problematic military behaviour during operations can have far-reaching strategic consequences. Historically, literature on military leadership focused on the psychology of individuals (their traits, styles, and attributes) and the role that leaders and their leadership play in staving off disaster. This paper develops a different framework for understanding these issues that draws on a new psychology of leadership which understands leadership as a dynamic group process involving all group members. This suggests that social identity strength and content — and the leadership that shapes this — could enable military groups to avoid potentially catastrophic consequences of military operational errors. It also points to the importance of social identity as a basis for high-reliability followership. Using social identity and High-Reliability Organisation theorising, this paper presents evidence from semi-structured interviews with members from elite military teams that supports this new framework. Results suggest that engaged followership is a critical determinant of effective military leadership — and that this is shown by group members who have internalised behaviours as a part of their social identity in ways that support high-reliability and thereby minimize the potential for toxic outcomes.

*Keywords: High-reliability; followership; identity leadership*

## Invited Symposium 2

### **Welcome to the Dark Side: Identifying and Mitigating Individual and Contextual Predictors of Counterproductive and Unethical Work Behavior**

Ute-Christine Klehe & Lenke Roth | Justus-Liebig-University Giessen

science

What will be covered and why. Bullying, theft, deception, fraud – unethical and counterproductive work behaviors cause major problems in organizations on so many levels, be it individual suffering, organizational underperformance, or a loss of reputation of complete industries. The current symposium brings together four papers that address these issues on multiple levels. On the problem side, Roth et al. address how the effect of psychopathy as an individual predictor on CWB is moderated by the contextual factor of organizational culture and how and when the CWB shown impairs the well-being of others. Leising et al. extend this perspective to a highly relevant practical context by focusing on unethical behavior in the academic system and identifying the characteristics that can shape the behavior of people within the system so that it becomes primarily self-interested and less aligned with academic ideals. Possible solutions to this problem represent systemic as well as individual factors. Here, Leising et al. proposes a set of systemic parameters, whereas Kleinmann et al. and Bechtoldt et al. address individual approaches to reducing counterproductive and unethical behaviors in the workplace. Kleinmann et al. focus on measuring counterproductive work behaviors in selection contexts. Using behavioral observations in a standardized setting, they aim to predict counterproductive work behavior without bias due to social desirability or distortion of other-ratings. Bechtoldt et al. experimentally demonstrate how to mitigate unethical behavior with a short-term mindfulness intervention.

Relevance to the Congress Theme. The papers of this symposium identify individual and contextual predictors of counterproductive and unethical behavior behaviors and address approaches on both the structural and individual level of how to mitigate these behaviors.

Research/Practical Implications. Research and practical implications will be highlighted on both the systemic and individual level. The latter pertaining to both personnel selection and interventions.

Overall conclusions. Counterproductive and unethical behaviors can wreak havoc in the workplace and our lives – yet understanding the individual and contextual predictors of these behaviors, we are able to design tools and structures that help us reduce their occurrence in the workplace.

*Keywords: Counterproductive Work Behavior, Unethical Behavior*

#### **Paper 1**

##### **Systemic factors promoting unethical behaviors in the German academic system – analysis and possible remedies**

Daniel Leising, TU Dresden

Theoretical background. In January 2022, the German Psychological Society (DGPs) tasked a newly founded committee with analyzing the systemic factors that enable or promote unethical behavior within the German academic system, and with proposing possible remedies. In this talk, I will give an overview of the current state of this process. The committee analyzed case examples, reviewed the relevant literature and consulted with numerous outside experts.

New Perspectives/Contributions. The committee identified many relevant system characteristics that may shape the behavior of people within the system such that it becomes primarily self-serving and less aligned with academic ideals such as transparency, replicability and accountability. To name but a few of these system characteristics: (a) Dysfunctional incentives (rewarding quantity more than quality), (b) flawed peer-review, (c) short term contracts, (d) unnecessarily steep power differentials, (e) lack of professionalism in personnel selection processes, (f) overburdening of professors with too many tasks, (g) low awareness of and low commitment to ethical standards, (h) weak control and sanctioning mechanisms.

Conclusions – research and or practical implications . The committee also developed many recommendations as to how these system parameters may be altered in a way that ultimately makes unethical behavior less likely. I will present a select number of these suggestions, as well. The process is ongoing, however. Necessary next steps will be to prioritize the suggestions that were already made, assess the proper level of the system that each intervention must target, attempt to implement the most promising ones, systematically evaluate the outcome, and then feed the conclusions back to the wider scientific community, and to the public. Relevance to the Congress Theme. This talk highlights several urgent needs for change in the German academic work environment. These are necessary to fortify the system better against occurrences of unethical behavior, which seems to be unacceptably widespread.

Relevant UN SDGs . Good health and wellbeing; Decent work and economic growth; Reduced inequalities; Peace, justice, and strong institutions; Quality education

*Keywords: Academia, Ethics, System*

## **Paper 2**

### **What You See is What You Get: Measuring Counterproductive Work Behavior in Behavioral Observations**

Valerie Sophie Schröder, University of Zurich

Research goals and why the work was worth doing. The goal of this research was to explore a new approach to measuring counterproductive work behavior (CWB) in selection contexts. CWB negatively impacts organizational success and the well-being of others. However, research and practice have difficulties identifying predictors of CWB, given that its measurement comes with certain challenges.

Theoretical background. Generally, CWB is harder to assess compared to other performance constructs, because of the difficulty to observe such behaviors from the outside. As a consequence, ratings of CWB are likely less informed by actual observations of deviant behavior and more by distortions such as overall impressions of an employee (Sackett et al., 2006; Spector & Fox, 2002). Thus, despite a common understanding in personnel selection research that other-ratings of job performance provide a more meaningful measure to examine and understand relationships with correlates, studies in the field of CWB research more often use self- compared to other-ratings (Gonzalez-Mulé et al., 2014). Previous findings give credence to this practice, as they indicate that other-ratings of CWB do not capture incremental validity over self-ratings (Berry et al., 2012). These practices however are based on studies solely comparing self- and other-ratings measured in questionnaires. A potential alternative way to retrieve a more comprehensive rating of performance is by using behavioral observations in a standardized setting.

**Method.** In a simulated Assessment Center (AC) setting, situations were manipulated in order to elicit the necessary cues for individuals to show CWB. Behavioral observations for interpersonal CWB (e.g., interrupting or making fun of others) were conducted during interactive assessment center exercises (namely role play, group discussion, business simulation). Behavioral observations for organizational CWB included five hidden observations in ostensibly non-evaluative situations (e.g., lying in tests, stealing exercises). Due to its situation-specificity, CWB can only be compared if ratees are put into the exact same situation. AC observations provide the necessary standardization and have several advantages, which qualify them to complement self- or supervisor ratings with additional perspectives (Heimann et al., 2021). Both CWB-I and -O were also measured with self- and supervisor ratings. In addition, we measured common predictors of CWB (i.e., personality and intelligence). A total of 205 participants took part in our study.

**Results.** We found that behavioral observations of CWB-I and CWB-O correlated with supervisor rated CWB ( $r = .26$  and  $.23$ , respectively). Observed CWB was not related to self-rated CWB. Additionally, intelligence showed a significant negative relation to observations of all hidden observations (hidden observations overall) during the AC day. Personality showed almost no meaningful relations with behavioral observations. With regard to the other CWB measures, intelligence showed higher correlations with supervisor ratings of CWB compared to self-ratings. Conversely, personality showed higher correlations with CWB measured by self-ratings compared to supervisor ratings. Overall, the results indicate that CWB observations include meaningful variance that is not captured by self-ratings, and, more generally, that observing CWB in ACs is possible.

**Limitation.** To allow for full standardization, data were collected in a simulated setting. Generalization of hidden observations to and their application for real selection scenarios can be questioned, especially with regard to country-specific regulations of process .

**Conclusion .** Measuring CWB remains a challenge in and outside of personnel selection research. This study provides a starting point for research for using alternative measures when assessing CWB. Our findings indicate that there may be some observable variance in supervisor rated CWB that is not captured by self-ratings and that common predictor constructs likely predict either visible or private behaviors.

**Relevance to the congress theme.** By researching ways to measure (and eventually predict) CWB, our study aims to make work a better place and secure employees well-being. CWB-I in specific has detrimental impact on work climate and psychological safety at work, influencing a number of work-related outcomes such as job satisfaction and tenure.

**Relevance UN SDGs .** Our work contributes to two Sustainable Development Goals: (1) decent work and economic growth , given that CWB is expensive for organizations and hinders its success, impacting economic growth and (2) reduced inequalities , given that CWB gives advantage to dishonest employees and preventing it can help reduce inequality.

*Keywords: Counterproductive Work Behavior, Behavioral Observations, Personnel Selection*

### **Paper 3**

#### **Mind the trap – Mindfulness renders immune to the temptation of fraud**

Myriam Bechtoldt, EBS University of Business and Law

**Research goals** . Time and again, spectacular cases of fraud in organizations cause great damage to society. For example, in the more recent past, WireCard, a large German financial services provider, falsified balance sheets and booked 1.9 billion € that probably never existed. Significant people included the CEO, COO and several top executives. Monitoring programs do not prevent such fraud (Thiel, Bonner, Bush, Welsh & Garud, 2021). So what is to be done?

**Theoretical background** . Previous research established the notion that both trait and state variables are powerful predictors of individuals' unethical decision making. The present work investigates the role of state mindfulness and individual differences in dispositional sensitivity to injustice on cheating behavior in a group performance task.

**Design/Methodology/Approach/Intervention** . In a laboratory experiment with 395 participants, we assessed dispositional justice sensitivity and experimentally induced mindfulness via a 10-minute meditation. We then analyzed cheating behavior in a performance task. The incentive structure of the experiment was designed to allow participants to cheat on their true performance to positively influence their group payment.

**Results** . The higher participants scored on mindfulness, the less likely they were to cheat; this was also true for high scores on perpetrator sensitivity (fear of behaving unfairly). In turn, participants who scored high on victim sensitivity (fear of being unfairly disadvantaged) were more likely to cheat. There was no interaction of dispositional justice sensitivity and state mindfulness.

**Limitations** . The results derive from a laboratory experiment with high internal validity; future research should validate these findings in the field. In addition, we were unable to determine the extent to which the individuals who lied did so for prosocial reasons, i.e., to help their group, or for purely self-serving reasons, i.e., to increase their personal gain.

**Conclusion** . Our work highlights the importance of dispositional sensitivity to injustice and the role of state mindfulness in explaining cheating behavior. Resulting conclusions for organizations might be to screen job candidates for justice sensitivity and to install a mindfulness practice within the organization.

**Relevant SDG-Goal** . Peace, justice, and strong institutions.

*Keywords: Cheating, Mindfulness, Justice sensitivity*

#### **Paper 4**

#### **Competition Sucks: How Psychopaths Burn their Coworkers Out by Engaging in Counterproductive Work Behaviors**

Lenke Roth, Sebastian Schmitz & Ute-Christine Klehe | Justus-Liebig-University Giessen

**Research goals and why the work was worth doing**. This study served to examine a) the effect of employees' psychopathy on their coworkers' well-being via employees' exhibition and coworkers' perception of counterproductive work behavior (CWB) and b) how a competitive workplace climate moderates these effects.

**Theoretical background**. CWB bears severe consequences for others in the organization – including reduced well-being like burnout (e.g., Carlson et al., 2013; Islam et al., 2021). Yet, we need to differentiate: not all CWB actually happening is also perceived by others (cf. Berry et al., 2012), and we don't know which of these two, action or perception, causes CWB's aversive consequences on others? Psychopathy – particularly secondary psychopathy – fosters CWB (e.g., Blickle & Schütte,

2017; Ma et al., 2021; Szabó et al., 2021), whereas primary psychopathy's effects on CWB appear inconsistent and contradictory (e.g., Schilbach et al., 2020 vs. Blicke & Schütte, 2017 vs. Sutton et al., 2020). Possibly, the relationship between psychopathy and CWB may vary by context – here organizational climate. In a competitive climate, where only the own performance counts and everyone looks after themselves first, psychopathic employees may exhibit more CWB, perceiving a competitive climate as more tolerant towards such behavior (cf., Kong & Yuan, 2018). Also, in an organization with a competitive climate, coworkers may be more discerning of their colleagues' CWB, given, for example, the prevailing rivalry and lower moral tolerance in such culture (cf., Deng et al., 2022). Therefore, this study examines the interactive effects of employees' psychopathy and competitive organizational climate on coworkers' burnout via employees' CWB and coworkers' perceptions thereof.

**Method.** We collected data from 121 coworker dyads in Germany. Dyads were peers of similar status, working together for at least 6 months on a regular work contract for at least 20 hours per week. All participants (140 women, 101 men, one diverse; average age = 38.11 years) reported their psychopathy (Levenson Self-Report Psychopathy Scale; Levenson et al., 1995), their own CWB and their perception of their coworkers' CWB (CWB-C; Spector et al., 2010), the competitive climate in their organization (Competitive Work Environment Scale; Flechter & Nusbaum, 2010), and their burnout (nine-item short-form of the Maslach Burnout Inventory – General Survey; cf. Sutton et al., 2020).

**Results.** Employees' overall psychopathy was positively linked to their own CWB, which was positively linked to their CWB as perceived by coworkers, which in turn related to coworkers' burnout. In sum, we found that the effect of employees' psychopathy on coworkers' burnout was fully mediated by the CWB used by employees and subsequently perceived by coworkers – effects that also held when differentiating between primary and secondary psychopathy. Competitive organizational climate positively moderated the positive link between employees' CWB and their coworkers' perceptions of such CWB – i.e., coworkers became more discerning of CWB in competitive organizations. Competitiveness also positively moderated the positive link between employees' secondary psychopathy and CWB – i.e., it took the breaks off secondary psychopathy to engage in CWB.

**Limitations.** Given that the first part of the model (employees' psychopathy and employees' CWB) and the second part of the model (coworkers' perception of employees' CWB and coworkers' burnout) were rated by the same sources, respectively, single-source bias might have colored results – which could not explain the moderating effect by competitive culture, however.

**Practical Implications.** That psychopathy can potentially cause harm in the workplace is a valid concern. This study shows not only that psychopathy seems to foster CWB, but also the process as to how and when employees' psychopathy links to coworkers' burnout. Both call for careful personnel selection. Organizations may consider assessing job applicants' levels of psychopathy. Considering the moderating effects of the competitive climate, managers should avoid creating a competitive work climate to inhibit employees' secondary psychopathic tendencies to translate into CWB in the workplace.

**Relevance to the Congress Theme.** Western – including European – societies build on individual self-interest and a certain level of competitiveness. Yet, both of these can foster counterproductive work behavior, which in turn can undermine both the well-being of others and thus sustainability of our societies.

Relevant UN SDGs. Our study contributes to the Sustainable Development Goal „decent work and economic growth“. Impairing sustainable economic growth, CWB hinders the organizational success and influences coworkers' well-being.

*Keywords: Psychopathy, Counterproductive Work Behavior, Burnout*

## **Invited Symposium 7**

### **Identity Leadership: A Global Perspective – Part 1**

Rudolf Kerschreiter, Freie Universität Berlin, Germany; Rolf van Dick, Goethe University Frankfurt, Germany

science

**Presentations :** This is the first part of a two-part symposium. The goal of the two symposia is to present a current global perspective on identity leadership. This first symposium comprises five presentations. Identity leadership is a rather novel leadership concept rooted in the social identity approach that has been developed by Haslam, Reicher, and Platow (2011, 2020). One of the central ideas of identity leadership is that group leaders are an essential part of the groups they lead because it is through a shared sense of ‘we’ and ‘us’ that leaders can gain influence on followers. In other words, by fostering a shared social identity via identity leadership leaders can exert power through their followers rather than power over them. To build such a shared sense of ‘us’ leaders can make use of the four dimensions of identity leadership, namely by being seen as “one of us” (identity prototypicality), by advancing the group’s interests (identity advancement), by supporting the group in developing a group identity (identity entrepreneurship) and by creating structures that enable the group to successfully work together in line with the group’s identity (identity impresarioship). Steffens et al. (2014) developed an operationalization for identity leadership, the so-called identity leadership inventory (ILI). In the first presentation, van Dick et al. provide an overview of the Global Leadership Identity (GILD) project, introduce its core ideas, and report some of the findings of the ILI validation. Specifically, they demonstrate that the ILI is metrically invariant across cultures and explains variance in criteria above and beyond more traditional leadership constructs. In the second presentation, Bibic et al. dive deeper into the GILD project data and investigate trust in the leader and team identification as mechanisms linking the dimensions of the ILI to certain work-related criteria. More specifically, they propose that identity prototypicality and identity advancement are connected to criteria via trust in their leader, whereas identity entrepreneurship and identity impresarioship are connected to criteria via team identification. The results of structural equation modeling mainly support the proposed relationships. In the third presentation, Lemoine et al. present the results of a latent profile analysis of the ILI. Specifically, they test whether there are profiles of identity leadership, check whether these profiles differ only on identity prototypicality and whether the profiles are associated with different work-related criteria. Results based on the first GILD phase suggest that there are two (high and low) profiles of identity leadership and that followers of a non-identity leader have lower levels of job satisfaction and OCB and higher levels of burnout than followers of an identity leader. Results from the second GILD phase confirm these findings. In the fourth presentation, Retowski and Godlewska-Werner provide nuanced insights into the findings of the GILD project in Poland. They confirm the four-dimensional structure and the reliability of the ILI in the Polish language and the general pattern of results. In addition, they offer a subscale analysis showing which ILI subscales are most strongly associated with certain criteria in Poland. In the fifth presentation of this first symposium, Hernandez Bark and van Dick investigate identity leadership in virtual settings with two longitudinal studies. Preliminary analyses support the conclusion that the positive effects of identity leadership are not restricted to face-to-face settings.

Relevance to the Congress Theme : In recent years, change processes in the world of work have been speeded up by external challenges. In this symposium, we focus on how leaders can support the groups they lead in dealing with these challenges by creating shared identities that provide followers with a secure base upon which followers can play an active role in shaping the future.

Research/Practical Implications : This symposium brings together five presentations that provide novel insights into how and under what circumstances identity leadership contributes to group and organizational functioning. Although the present studies base their conclusions on large international datasets, future research is needed that complements these studies with additional methodological perspectives such as experimental, longitudinal, and diary approaches to strengthen the conclusions and develop practical guidance for leaders.

Overall conclusions : The presentations in this symposium showcase that identity leadership can play an important role in making teams and organizations fit to deal with current challenges in the world of work. By fostering shared identities via identity leadership leaders can contribute to successful adaptation to change and ultimately to the accomplishment of group goals and employee health.

*Keywords: leadership, identity, group*

## **Paper 1**

### **The Global Identity Leadership Development (GILD) Project: Introduction, aims and some results**

Rolf van Dick, Goethe University Frankfurt, Germany; Rudolf Kerschreiter, Freie Universität Berlin, Germany; S. Alexander Haslam, University of Queensland, Australia; Niklas K. Steffens, University of Queensland, Australia; Jérémy Lemoine , University of East London and ESCP Business School, UK

Research goals and why the work was worth doing: Goals of this project were to build a community of researchers on all continents to work on identity leadership, promote the ideas and share knowledge of identity leadership and, specifically, to validate the Identity Leadership Inventory across cultures.

Theoretical background: Leadership is essentially a group process whereby a leader brings group members together to accomplish tasks that are relevant for group viability and progress. In the recent years, it has been found that leaders who help to create a sense of shared identity in teams and organizations are more successful in winning their followers' support. This process has been referred to as "identity leadership" (Haslam, Reicher & Platow, 2011, 2020) and it comprises four dimensions, namely (1) identity prototypicality (leaders' ability to represent what the group is about), (2) identity advancement (leaders' actions to defend and promote the group's interests), (3) identity entrepreneurship (leaders' creation and management of a sense of shared identity), and (4) identity impresarioship (leaders' creation of structures that help the group live out its identity). These dimensions were operationalized by Steffens et al. (2014) in the Identity Leadership Inventory (ILI).

Design/Methodology: In the GILD project, data have been collected in with cross-sectional self-report surveys in two phases in 2016/17 (7,682 participants from 26 countries) and in 2020/21(7,855 participants from 29 countries). Participants were asked to evaluate their direct supervisor's identity leadership (and other leadership constructs such as authentic leadership, transformational leadership, LMX) and then report on their own work-related attitudes and behaviors (e.g., team identification, trust, OCB, job satisfaction, innovative behavior, burnout). In a German subsample the survey was applied in a longitudinal, two-wave design.

Results: We confirmed the reliability and validity of the ILI and found metric invariance across cultures. Moreover, we found that identity leadership contributes to performance (engagement, innovation) and well-being (satisfaction, burnout) above and beyond other leadership constructs.

Limitations: The research is mostly cross-sectional and uses self-report. More longitudinal and experimental research is needed to uncover the dynamic development of shared identities and to establish causal relationships.

Conclusions: Identity leadership is a valuable concept that can help leaders make the workplace both more productive and healthier.

Relevance to the Congress Theme: In teams with strong group identities and with leaders who facilitate and actively contribute to such identity development, employees are both agents of change and better able to cope with change due to strengthened social support and the experience of collective self-efficacy.

Relevant UN SDGs: This research contributes to the SDGs of promoting health and well-being in the workplace and beyond.

*Keywords: leadership, identity, group*

## **Paper 2**

### **Trust in the leader and team identification as underlying mechanisms linking identity leadership sub-dimensions to work-related outcomes**

Kira Bibic, Goethe University Frankfurt, Germany; Rudolf Kerschreiter, Freie Universität Berlin, Germany; Rolf van Dick, Goethe University Frankfurt, Germany; S. Alexander Haslam, University of Queensland, Australia; Niklas K. Steffens, University of Queensland, Australia; Jérémy Lemoine, University of East London and ESCP Business School, UK; Svenja Frenzel, Goethe University Frankfurt, Germany

Research goals and why the work was worth doing: Identity leadership aims to integrate key group processes in leadership, whereby leaders and their employees are considered members of the same group and hence share a collective identity (Haslam et al., 2020). Identity leadership comprises four distinct dimensions: Prototypicality, advancement entrepreneurship, and impresarioship (Haslam et al., 2011; Steffens et al., 2014). So far, studies mainly focus on the overall construct of identity leadership – including all four dimensions – and consistently linked identity leadership to valuable workplace outcomes (i.e., job satisfaction, burnout, innovative work behavior, and occupational citizenship behavior (OCB) (van Dick et al., 2018). Yet, the distinct roles of the four sub-dimensions remains understudied. Extending earlier findings, we address this research gap by proposing that the sub-dimensions trigger the two distinct mechanisms of (1) trust in the leader and (2) team identification, which underlie the relationship between the IL-dimensions and work-related outcomes. Furthermore, we suggest that the respective dimensions vary in their importance for the underlying mechanisms.

Theoretical background: Our study draws on previous findings on identity leadership based on social identity theory (Tajfel & Turner, 1979). In line with theoretical understandings of Identity Leadership, we propose that the different dimensions operate through distinct mechanisms (Haslam et al., 2011; Steffen et al., 2014). Specifically, we suggest that prototypicality and advancement predominantly influence employees' trust in their leader, whereas entrepreneurship and impresarioship are

considered more critical for strengthening employees' level of team identification. In turn, trust in the leader and team identification, respectively, are predicted to be directly associated with job satisfaction, burnout, innovative work behavior, and OCB (van Dick et al., 2018).

**Design and methodology:** Using structural equation modeling with latent factors, we tested our parallel mediation model in two different global samples as part of the GILD (Global Identity Leadership Development) project in two phases. The first data collection was conducted in 2016/17 (Phase 1: N =7,682), and Phase 2 in 2018 ( N =7,294).

**Results obtained:** We found that the relation between prototypicality and trust was significantly stronger than the relationship between prototypicality and team identification in both samples. Also, in both samples we found our hypothesis confirmed that identity advancement and trust was more strongly related than advancement and team identification. As predicted, in Sample 2, the relationship between entrepreneurship and team identification was stronger than the relation between entrepreneurship and trust and impresarioship was more strongly related to team identification than to trust in Sample 2. In addition, trust in the leader and team identification were positively associated with job satisfaction, innovative work behavior, and OCB, and negatively associated with burnout in both samples. Most indirect effects were in line with our hypotheses.

**Conclusions- research or practical implications:** These findings provide new insights into the operating principles of identity leadership dimensions and, consequently, offer valuable practical implications for future work-related interventions (e.g., leadership trainings).

**Limitations:** Firstly, we analyzed data of cross-sectional nature. Thus, we cannot make causal inferences. Secondly, the obtained data is based on self-reports making the study prone to social desirability and common method bias.

**Relevance to the Congress Theme:** Identity leadership centers around shaping a collective identity among leaders and followers. When leaders foster this identity development, employees are not only agents of change but will also find it easier to deal with change as they receive more social support and make collective self-efficacy experiences.

**Relevant UN SDGs:** Our study demonstrates many connections with SDG 3 ('Good Health and well-being') and SDG 8 ('Decent work and economic growth') as it covers valuable work outcomes that contribute to a healthy work environment and accordingly promote people's well-being.

*Keywords: leadership, identification, trust*

### **Paper 3**

#### **Identity leadership is not only about being prototypical of the group: A latent profile analysis**

Jérémy Lemoine, University of East London and ESCP Business School, UK; Rudolf Kerschreiter, Freie Universität Berlin, Germany; S. Alexander Haslam, University of Queensland, Australia; Niklas K. Steffens, University of Queensland, Australia; Martyna D. Swiatczak, University of Bergen, Norway; Rolf van Dick, Goethe University Frankfurt, Germany

#### **Research goals**

This project had three research goals. First, we aimed to test whether there are profiles of identity leadership. Second, we sought to check whether these profiles differed only on identity prototypicality or whether the other identity leadership dimensions would give a richer

representation of identity leadership. Third, we aimed to see whether these identity leadership profiles would be associated with different work-related outcomes among the followers.

### Theoretical background

Based on the social identity approach (i.e., the social identity theory, Tajfel & Turner, 1979; the self-categorization theory, Turner et al., 1987), Haslam et al. (2011) developed the concept of identity leadership. Identity leadership is composed on four dimensions: identity prototypicality, identity entrepreneurship, identity advancement and identity impresarioship. Some empirical studies support the importance of identity entrepreneurship (e.g., Gleibs et al., 2018), identity advancement (Steffens et al., 2016) and identity impresarioship (Reicher & Haslam, 2017). However, most studies focus on identity prototypicality (for a review, see Hogg et al., 2012; for a meta-analysis see Steffens et al., 2022). Results of studies investigating the four identity leadership dimensions (e.g., Steffens et al., 2014) suggest the four dimensions are highly correlated. Therefore, there is a need for empirical studies which investigate whether identity entrepreneurship, identity advancement and identity impresarioship add to the concept of identity leadership above and beyond identity prototypicality.

### Methodology

This paper used data from Phases 1 and 2 of the Global Identity Leadership Development (GILD) project. In 2016-2017, 7,682 participants from 26 countries took part in the first phase of the GILD project and in 2020-2021, 7,855 participants from 29 countries took part in the second phase. Participants were asked to complete an online survey measuring several constructs including identity leadership of their direct manager and their own levels of job satisfaction, Organisational Citizenship Behaviour (OCB) and burnout.

### Results

First, we conducted a latent profile analysis on the data from the first phase of the GILD project using the latent score of a bifactor (S-1) model with identity prototypicality as the general reference factor and three specific reference factors for identity entrepreneurship, identity advancement and identity impresarioship. The results showed that there are two distinct profiles of identity leaders. Second, we interpreted these profiles, with results suggesting that there is a profile of identity leaders (32%) who are perceived as having a high level of identity leadership (i.e., high level on the general reference factor). They also have higher levels of identity entrepreneurship and impresarioship that go above and beyond the differences of identity leadership explained by the general reference factor. The other profile (68%) refers to the non-identity leaders. They are perceived as having a low level of identity leadership (i.e., low level on the general reference factor) as well as lower levels of identity entrepreneurship and impresarioship. Third, we investigated whether these identity leadership profiles were associated with different work-related outcomes among the followers. We found that followers of an identity leader had higher levels of job satisfaction and OCB and lower levels of burnout than followers of a non-identity leader. All these results were reproduced on the data of the second phase of the GILD project with 35% of managers identified as identity leaders and 65% of them identified as non-identity leaders.

### Limitations

The research is based on cross-sectional self-reported data. Longitudinal and experimental studies are necessary to confirm the findings of this study.

### Conclusions

This paper gives empirical evidence that identity leadership is more than being prototypical of the group; it is also about being able to create a group identity (i.e., identity entrepreneurship) and promoting this identity (i.e., identity impresarioship). Doing so can lead to more positive outcomes among the followers. These important findings help develop our knowledge of identity leadership and allow us to make practical recommendations to managers on how to promote identity leadership practices.

Relevance to the Congress Theme

Identity leadership is a recent conceptualisation of leadership and is changing our perception of leadership by offering a view of leadership which is based on the group rather than the leader. This conceptualisation is very applicable to the workplace and its evolution (e.g., flatter hierarchy, remote working).

Relevant UN SDGsBy promoting good leadership practices which influence employees' well-being at work, this paper contributes to the third (i.e., Good Health and Well-being) and eighth (i.e., Decent Work and Economic Growth) UN sustainable development goals.

*Keywords: leadership, prototypicality, group*

#### **Paper 4**

##### **Polish adaptation of the Identity Leadership Inventory**

Sylwiusz Retowski, SWPS University, Poland; Dorota Godlewska-Werner, University of Gdansk, Poland

Research goals and why the work was worth doing: The main goal of the present research is to test the validity and reliability of the Polish version of ILI. We formulate hypotheses about discriminant and criterion validity, i.e. we want to confirm the relevance of the Polish ILI version to some key positive dimensions connected with performed work.

Theoretical background: There are four key elements of identity leadership: identity prototypicality; identity advancement; identity entrepreneurship; identity impresarioship which are measured with the Identity Leadership Inventory (ILI, Steffens et al., 2014). Identity leadership increases team identification, job satisfaction, work engagement, and perceived team support; it also increases the level of trust in a leader and produces higher performance (Steffens et al., 2014a; Steffens et al., 2014b; van Dick et al., 2018). The higher the level of identity leadership, the better the well-being of team members.

Design/Methodology/Approach/Intervention: The sample consisted of 952 employees from different organizations located in Northern and Central Poland. In addition to the Identity Leadership Inventory, four other scales were used: Job Satisfaction Scale, Trust in the Leader Scale, Work Engagement Scale, and Intension to Quit Scale. Data were collected online with an anonymous survey. All participants took part voluntarily. We conducted CFA using Mplus version 8.5. In other analyses, SPSS ver. 25 were used.

Results: The results of the study confirm that the Polish 15-item version of the Identity Leadership Inventory (ILI) has a four-dimensional structure (prototypicality, advancement, entrepreneurship, and impresarioship) and is characterised by good reliability. The Identity Leadership Inventory-Short Form also shows a good fit with the data. As expected, the relationships between identity leadership

and important work-related outcomes (general level of job satisfaction, work engagement, and trust in a leader) were also significant. Linear regression confirmed that work engagement and job satisfaction were predicted mainly by the advancement subscale, whereas trust was predicted simultaneously by three predictors: prototypicality, advancement, and entrepreneurship. The intention to quit was explained mainly by two subscales of the ILI: entrepreneurship and impresarioship.

Limitations: The cross-sectional design does not allow causal inference. The data collected were based solely on self-reports. In future research, it would be necessary to apply more complex designs, e.g. longitudinal or multilevel. We also believe that more research is needed into a more diverse set of organizations. It seems that Polish organizations dominated by traditional hierarchical organizational culture may be much more resistant to identity leadership.

Conclusions – research and or practical implications: In line with other research, the 15-item Polish version of the Identity Leadership Inventory (ILI) showed a four-dimension structure justifying the differentiation into the four facets: prototypicality, advancement, entrepreneurship, and impresarioship as suggested by authors Steffens et al. (2014b) but also allows the calculations of an overall ILI score. Both the overall score and the four subscales showed good reliabilities. The Identity Leadership Inventory-Short Form also showed a good fit to the data. Identity leadership appears to be a universal construct (van Dick et al., 2018). It is worth noting that Polish organisations are characterised by a relatively high degree of power distance. In high-distance cultures, employees are more often in formal relations with their superiors – it may result, for example, in their lesser identification with leaders. Based on these characteristics, we predicted that Polish employees might be less responsive to the influence of identity leadership. However, it turned out that despite these cultural differences, the results of our research are very similar to those in other countries. Intercorrelations among the ILI subscales, short version of ILI, and four outcomes (work engagement, job satisfaction, trust, and intention to quit) confirmed the hypotheses.

Relevance to the Congress Theme: Our research is part of the GILD project (Global Identity Leadership Development). The results of the research can inspire Polish leaders and organizations to influence employee attitudes and well-being.

Relevant UN SDGs: Our research is in line with the 8<sup>th</sup> goal of the Sustainable Development Goals of the UN related to promoting productive employment and decent work for all.

*Keywords: leadership, identity, group*

## Invited Symposium 8

### Identity Leadership: A Global Perspective – Part 2

Rolf van Dick, Goethe University Frankfurt, Germany; Rudolf Kerschreiter, Freie Universität Berlin, Germany

science

This second part of the double symposium on a global perspective on identity leadership comprises four presentations and a discussant. Identity Leadership refers to a social identity-based concept of leadership in which the leader is conceptualized as an essential part of the group they lead who tries to accomplish group goals through their followers rather than by exerting power over followers. Leaders are more successful in doing so, the more they are seen as being “one of us”, the more they advance the group’s interests, help develop a group identity and create structures for the group to successfully work together in line with this identity. This concept has been developed by Haslam, Reicher, and Platow (2011, 2020) and Steffens et al. (2014) have provided an operationalization, the identity leadership inventory, comprising an overall score and scores for each of the four dimensions identity prototypicality, identity advancement, identity entrepreneurship, and identity impresarioship. In the first presentation, Kerschreiter et al. provide further evidence for the validity of the identity leadership concept from the Global Leadership Identity (GILD) project based on data from 2020/2021 with up to 27 countries. More specifically, they provide additional validity evidence for the Identity Leadership Inventory. Furthermore, and for the first time, they provide validity evidence for the Identity Leadership Inventory – Short Form and the Identity Leadership Scenarios, an additional form of measurement of Identity Leadership based on participants’ answers to four different scenarios specially designed for this purpose. Swiatczak et al. also present results from a secondary analysis of both phases of the GILD data set (first wave 2016-17 with N =7,682, second wave 2020-2021 with N =7,855) employing a case-based configurational approach with coincidence analyses. Results show that while the absence of identity leadership can explain burnout at work, the presence of identity leadership cannot prevent burnout at work. This means that identity leadership on its own is not sufficient to prevent burnout. Further analyses and implications will be discussed. Monzani et al. provide an analysis based also on the GILD data set but they go beyond organizational leadership and will show that national country leaders’ identity leadership relates to participants’ civic citizenship behavior, that is their motivation to help their country and their fellow citizens. Furthermore, they show that this relation is mediated by perceived trust in one’s fellow citizens. Also going beyond organizational leadership, Frenzel et al. present results from a different collaborative international project conducted during the COVID-pandemic. They show that national leaders’ identity leadership relates to participants’ perceptions of shared national identification among the country’s citizens which in turn relates to more motivation to follow governmental regulations, i.e. stronger adherence to non-pharmaceutical measures such as handwashing or wearing a facemask. Finally, Haslam will provide an overall discussion involving also the audience.

discussant: Alex Haslam, University of Queensland, Aust

*Keywords: leadership, identity leadership, social identity*

### Paper 1

#### How to best measure Identity Leadership in a specific situation? Validity evidence for the Identity Leadership Inventory

Rudolf Kerschreiter, Freie Universität Berlin, Germany; Rolf van Dick, Goethe University Frankfurt, Germany; Alex Haslam, University of Queensland, Australia; Niklas Steffens, University of Queensland, Australia; Jérémy Jérémy E. Lemoine, University of East London, UK; Dennis Kondzic, Freie Universität Berlin, Germany

## 1. Research goals

This research project had three main goals. First, we aimed to provide further validity evidence for the identity leadership inventory (ILI). Second, we sought to provide sound validity evidence for the short form of the identity leadership inventory (ILI-SF). Third, we examined if a newly developed measure of identity leadership, the identity leadership scenarios (ILS), would be associated with the ILI, the ILI-SF, and with a specific work-related outcome in predicted ways among followers.

## 2. Theoretical background

Haslam, Reicher, and Platow (2011) developed the concept of identity leadership with the goal of capturing a leader's contribution to their base of influence in a group beyond the well-established notion of leader group prototypicality (for a review, see Hogg et al., 2012; for a meta-analysis see Steffens et al., 2022). Building on the social identity approach (i.e., social identity theory, Tajfel & Turner, 1979, and self-categorization theory, Turner et al., 1987), they conceptualized Identity Leadership as a four-dimensional concept consisting of identity prototypicality, identity entrepreneurship, identity advancement and identity impresarioship. The results of empirical studies supported the notions of identity advancement (Steffens et al., 2016), identity entrepreneurship (e.g., Gleibs et al., 2018), and identity impresarioship (Reicher & Haslam, 2017) in addition to identity prototypicality (Steffens et al., 2022). However, validity evidence for the ILI-SF and the ILS was missing. The present research sought to provide additional validity evidence for the ILI and first validity evidence for the ILI-SF and the ILS.

## 3. Methodology

This research used data from Phase 2 of the Global Identity Leadership Development (GILD) project. In 2020-2021, 7294 participants from 28 countries took part in the second phase of the GILD. Participants completed an online survey measuring several constructs including identity leadership of their direct supervisor, Leader-Member Exchange, and trust in the leader as well as and their own levels of team identification, job satisfaction, Organisational Citizenship Behaviour (OCB), idea generation and burnout.

## 4. Results

To provide validity evidence based on internal structure we conducted confirmatory factor analyses on the data from the second phase of the GILD. The results showed that the theoretically postulated models for (a) the ILI, (b) the ILI-SF, and (c) the ILS, fit the data well. To provide validity evidence based on relations to other variables we first examined evidence for convergent validity, then evidence for discriminant validity, and lastly evidence for validity based on test-criterion relationships. Results supported convergent validity, discriminant validity, and validity based on test-criterion relationships for the ILI, the ILI-SF, and the ILS. Finally, due to the different cultures in the data set, it is important to ensure that the items are measurement invariant across these cultures. Results of the measurement invariance analyses provided support for at least weak measurement invariance for the ILI, ILI-SF, and the ILS.

## 5. Limitations

The data for this research is cross-sectional and self-reported. Therefore, it is necessary to confirm the findings of this study with longitudinal and experimental studies.

## 6. Conclusions

This research provides support for the notion that identity leadership can be validly assessed with the long (ILI) and the short (ILI-SF) version of the ILI. Based on the results, we recommend the use of ILI for manifest analyses. However, for latent modeling, we recommend the ILI-SF because it is a more parsimonious model, and it explains the same amount or even more variance in certain variables than the ILI. In addition, we provide first validity evidence for the newly developed ILS. Altogether, this research exemplifies how basic theory and basic research methods contribute to a better understanding of leadership in groups in the real world. This allows us to give practical recommendations to supervisors.

## 7. Relevance to the Congress Theme

The concept of Identity Leadership offers a modern view of leadership which bases leadership on the group rather than the individual leader. This represents a shift in leadership research that is not only changing our perception of leadership, but also is very applicable to current developments in modern workplaces like remote work and shared leadership responsibilities.

*Keywords: leadership, identity leadership, validity*

## Paper 2

### **To Be or Not to Be a Good Leader? A Coincidence Analysis of Identity Leadership, Work-Related Attitudes, and Burnout**

Martyna Swiatczak, University of Bergen, Norway; Alex Haslam, University of Queensland, Australia; Rolf van Dick, Goethe University Frankfurt, Germany; Niklas Steffens, University of Queensland, Australia; Rudolf Kerschreiter, Freie Universität Berlin, Germany; Jérémy Lemoine, University of East London, UK

#### 1. Research goals

This study uses a novel research method from the family of configurational comparative methods, i.e. Coincidence Analysis (Baumgartner, 2009; Baumgartner & Ambühl, 2020), to unravel the complex interplay between identity leadership, work perceptions, and burnout. In doing so, it pursues several goals: First, it provides a more nuanced view on the formation and prevention of burnout at work. Second, it elaborates detailed paths via which organisations may prevent burnout at work. Third, it introduces a novel research method to the field of work and organisational psychology.

#### 2. Theoretical background

Grounded in the social identity approach, Haslam et al. (2017) have conceptualised identity leadership as a group-based social influence process that revolves around leaders creating, embodying, promoting, and embedding a shared sense of “we” among those they lead. Meanwhile, identity leadership has been widely shown to promote beneficial work environments by positively influencing relationships at work, individual well-being, and organisational performance (e. g. van Dick et al., 2018). However, previous studies investigating the relationship between identity leadership and burnout do not provide completely straightforward evidence. For example, van Dick et al. (2018) do not find a direct relationship between identity leadership and burnout.

### 3. Design/Methodology/Approach/Intervention

To improve our understanding of the relationship between identity leadership and burnout at work we employ a case-based configurational approach and conduct Coincidence Analyses on two datasets collected in two waves (first wave 2016-17 with N =7,682, second wave 2020-2021 with N =7,855) of the Global Identity Leadership Development (GILD) project. This methodological approach allows us to investigate the complex interplay between identity leadership and other work perceptions, i.e. trust, identification, and satisfaction at work, in the formation and prevention of burnout.

### 4. Results obtained or expected (if not available, it must be made clear when they will be)

Preliminary results show that while the absence of identity leadership can explain burnout at work, the presence of identity leadership cannot prevent burnout at work. This means that identity leadership on its own is not sufficient to prevent burnout. To further investigate configurations that are sufficient to prevent burnout at work, we integrate several work-related attitudes that have been preciously shown to impact burnout, namely trust, identification, and job satisfaction. Taking into consideration the interplay between this broad set of potential causal factors, we show that either the absence of identification or the absence of satisfaction at work instantiate burnout while the lack of identification is instantiated by the combination of absent identity leadership and absent trust.

### 5. Limitations

Homogeneity is a central condition for causal inference via Coincidence Analysis. While the multi-level approach of the study helps to keep potential confounders constant, full homogeneity cannot be guaranteed. Therefore, further experimental studies are needed to confirm or reshape our results.

### 6. Conclusions – research and or practical implications

Our study sheds light on the complex causal mechanisms leading to burnout at work. They not only contribute to close current research gaps concerning the relationship between identity leadership and burnout, but also provide practical pathways for practitioners showing how to prevent burnout at work.

### 7. Relevance to the Congress Theme and UN SDGs

As such our study directly contributes to the congress theme by shaping positive change in the world of work. Moreover, it is of relevance to many of the UN SDGs. More precisely, preventing burnout at work contributes not only to economic growth and decent work conditions, but also shapes good health, and well-being.

*Keywords: leadership, identity leadership, coincidence analysis*

## **Paper 3**

### **Identity leadership increases trust in one's fellow citizens and civic citizenship behaviors**

Lucas Monzani, Ivey Business School at Western University, Canada; Rolf van Dick, Goethe University Frankfurt, Germany; Alex Haslam, University of Queensland, Australia; Niklas Steffens, University of Queensland, Australia; Jérémy Lemoine, University of East London, UK; Rudolf Kerschreiter, Freie Universität Berlin, Germany; Kira Bibic, Goethe University Frankfurt, Germany

## 1. Research goals and why the work was worth doing:

Creating a sense of group membership among followers is a central aspiration of Identity Leadership. As Frenzel et al (2022) recently showed, if a sense of a collective identity motivates group members to contribute to a common goal, at the national level it should elicit civic citizenship behavior. Specifically, it was demonstrated that Identity Leadership predicted adherence to non-pharmaceutical interventions (e.g., mask wearing behaviors), mediated by perceived national Identity (PSNI). That is, the feeling that one's fellow citizens have a common understanding of what it means to be a citizen of the respective country and have a sense of cohesion. At the national level, we consider trust in one's fellow citizens an equally important construct than PSNI for encouraging civic citizenship behavior as the identification process also occurs between followers. Consequently, we predict that national leaders' identity leadership will influence such civic citizenship by the underlying mediation of trust in one's fellow citizens.

Given the importance of civic citizenship behavior for the collective mental and physiological wellbeing of a nation's population (e.g., Frenzel et al., 2022), understanding the attitudinal and behavioral drivers of civic citizenship behaviors is not only important but also urgent in the current zeitgeist.

2. Theoretical background Our study is grounded on a recent application of Social Identity Theory (Tajfel & Turner, 1979) to the study of leadership behaviors, mainly identity leadership (Haslam et al., 2011; Hogg, 2001). In short, Identity Leadership claims that merely representing a prototype of what makes a group (or nation) unique is not enough; leaders also must (re)shape, advance and protect their followers' shared interests. As a result, identity leaders create a "shared sense of us" that elicits positive follower attitudes and behaviors. The GILD project has documented the positive follower outcomes of identity leadership in more than 30 countries worldwide (van Dick et al., 2018). We elevate this logic to the national level, being civic citizenship behavior our main outcome of interest. Thus, we hypothesize that:

Hypothesis 1: Trust in one's fellow citizens will mediate the effect of politicians' identity leadership behaviors on civil citizenship behaviors.

## 3. Design/Methodology/Approach/Intervention

We conducted a secondary analysis of the GILD dataset (N = 7395). We employed Hayes' PROCESS macro to test an indirect effect model (Model 4), using trust in one's fellow citizens as mediating mechanism. We requested robust standard errors (HC3) and bootstrapped 95% CIs in 20,000 subsamples to increase the confidence in our results.

## 4. Results

Our results show that as participants' perceived frequency of identity leadership in their national leaders increased so did participants' trust in their fellow citizens ( $B = .28$ ,  $SE = .01$ ,  $p < .0001$ ), and the frequency of their civic citizenship behaviors ( $B = .15$ ,  $SE = .01$ ,  $p < .0001$ ). In turn, trust in fellow citizens also predicted civic citizenship behaviors ( $B = .35$ ,  $SE = .01$ ,  $p < .0001$ ) and mediated an indirect effect of national leaders' identity leadership ( $B = .09$ ,  $SE = .01$ ,  $p < .0001$ ). Thus, our results support our hypotheses.

## 5. Limitations

One clear limitation of our study is that we analyzed a cross-sectional design to test causal relations. However, this design choice was a necessary trade-off to collect a global dataset. Therefore, while we

cannot make causal claims, the results align with prior studies showing similar results in the predicted direction.

#### 6. Conclusions – research and or practical implications

Scholars and practitioners should take note of our findings. Whereas parsimonious in nature, our work showcases identity leadership as capable of shaping trust among fellow citizens and eliciting civic citizenship behaviors, result which seems to replicate across more than 30 nations worldwide.

#### 7. Relevance to the Congress Theme

More and better civic citizenship behaviors are absolutely critical to address some of the big and urgent issues explored in this congress (pandemic, war, social change). Therefore, our study provides valuable insights that might be of interest of the congress audience.

*Keywords: identity leadership, trust, civic citizenship*

### **Paper 4**

#### **Identity Leadership by national leaders during the pandemic and beyond**

Svenja Frenzel, Goethe University Frankfurt, Germany; Rolf van Dick, Goethe University Frankfurt, Germany; Nina Junker, University of Oslo, Norway; Alex Haslam, University of Queensland, Australia

##### 1. Research goals and why the work was worth doing:

In the early stages of the COVID-19 pandemic, adherence to non-pharmaceutical interventions (NPIs; e.g., washing hands, and wearing facemasks) was critical to reduce the spread of the virus as effective vaccines were yet to be developed (Chowdhury et al. 2020). Nevertheless, the effectiveness of NPIs depends on people adhering to them (Eikenberry et al. 2020). In the face of this health crisis, it is meaningful to examine how national leaders can motivate their citizens to adhere to NPIs. Here, scientific discussions and commentary suggest that identity leadership is a critical gatekeeper (van Bavel et al. 2020; Haslam et al. 2021), which connects national leaders to their citizens. This study aimed to test this claim empirically.

##### 2. Theoretical background

Identity leadership is a leader's ability to create a shared identity among the people they lead – a sense of 'we'-ness (Haslam et al. 2020). Citizens who perceive a shared national identity (PSNI) within their country should be more willing to contribute to collective goals and keep fellow citizens safe. In other words, by engaging in identity leadership, national leaders secure support for their policies through engaged and intrinsically motivated followership (Steffens & Haslam 2013).

Accordingly, we predicted the following mediation model: National leader's identity leadership relates to more PSNI, which, in turn, relates to more adherence to NPIs.

##### 3. Design and Methodology

We conducted a multi-national two-wave study to test our model. Therefore, we collected data in China ( N = 548), Germany ( N = 182), Israel ( N = 198) and the USA ( N = 108) from March-July 2020 and four weeks later.

We measured identity leadership at Time 1 with the Identity Leadership Inventory (Steffens et al., 2014) and asked participants to think about the highest political leader in their country while

answering the questions. At Time 2, PSNI was measured with items adapted from Doosje et al. (1995), and we asked participants how much they would engage in different health-protective behaviors recommended by the government to assess adherence to NPIs.

#### 4. Results obtained

Identity leadership and PSNI were positively associated in all four countries. In turn, PSNI positively predicted adherence to NPIs in China, Germany, and the USA but not in Israel. Accordingly, the indirect effect of identity leadership on adherence via PSNI was significant in China, Germany, and the USA and insignificant in Israel. In addition, we found a positive direct effect of identity leadership on adherence in Germany. Thus, the more individuals perceived Angela Merkel to engage in identity leadership, the more they adhered to NPIs. By contrast, we found a negative direct effect of identity leadership on adherence in the USA. This means the more people perceived Donald Trump as an identity leader, the less they adhered to health-protecting NPIs. We performed exploratory analyses to test mediation with only extreme cases (participants with low or high identity leadership values).

#### 5. Limitations

We only used complete cases for data analyses as we experienced significant dropouts in Germany and the USA from Time 1 to Time 2. We assume that our final samples consist of relatively compliant individuals, which has to be considered when interpreting our results. Furthermore, the items to assess adherence to NPIs were created ad-hoc due to the lack of validated instruments at the beginning of the pandemic.

#### 6. Conclusions – research and or practical implications

The results show that national leaders, who engage in identity leadership, have two ways through which they can reach their citizens. The indirect effect of identity leadership on adherence via PSNI is the first way ('relational path'). As predicted, leaders strengthen their citizens' adherence by creating a shared national identity within their country. The second way ('content path'), represented by the direct effect of identity leadership on adherence, shows that the leadership content reflects in their followers' behavior. As an identity leader, Angela Merkel emphasized the importance of adhering to NPIs continuously, while Donald Trump downplayed the threat of the virus.

#### 7. Relevance to the Congress Theme

This study highlights identity leadership's positive and negative effects on collective mobilization and proposes ways for leaders and their followers to collectively shape a desirable future.

*Keywords: identity leadership, Covid-pandemic, shared national identity*

## Panel discussions

### Panel discussion PA1

#### **Are we ahead of the trend or just following? The role of WOP in emerging technologies at work**

Pascale Le Blanc, Eindhoven University of Technology; Markus Langer, University of Saarbrücken; Vicente González Romá, University of Valencia; Gudela Grote, ETH Zürich; Anna-Sophie Ulfert, Eindhoven University of Technology

science&practice

With its potential to solve critical societal issues, amongst other staff shortages, the implementation of emerging technologies, such as artificial intelligence (AI), is booming in all areas of our lives. As technologies become increasingly competent and autonomous, they are said to fundamentally transform how we will work in the future (Parker & Grote, 2020). Yet, despite the clear goal to support employees or extend human capabilities at work, Work and Organizational Psychology (WOP) perspectives are rarely considered in technology development and implementation. Beyond how operators react to certain system characteristics, we still know little about how emerging technologies are used at work and affect work design, and how they may change the future of work. At the same time, WOP rarely takes an active role in technology development, and WOP research has thus far focused on a descriptive or explanatory lens on technology use and implementation.

In the past years, emerging technologies at work has become a prominent topic at WOP conferences and is starting to appear more frequently in WOP literature – but are we already too late to the party?

Our panelists will discuss relevant questions regarding the status quo of WOP research in this interdisciplinary field. For instance, what is the role of WOP researchers in developing and implementing emerging technologies? And what should our role be? Should WOP take a more normative stance in technology development and implementation projects? And if yes, what would the benefits be? How can we ensure that central WOP topics, such as work design, personnel selection, or teamwork, are considered in technology development and implementation?

With their diverse research backgrounds, the panelists present unique viewpoints on the topic of emerging technologies at work. Gudela Grote has long been engaged in the development of socio-technical design methods (Grote et al., 2000; Boos et al., 2013), particularly addressing the increasing gap between control and accountability (Boos et al., 2012). More recently, she has highlighted the importance of prospective work design for emerging AI technologies (Parker & Grote, 2020). Markus Langer is an up-and-coming researcher in the field of AI systems and personnel selection. In his work, he particularly highlights the role of trust, transparency, and justice from different key organizational stakeholders' perspectives (e.g., Langer & Landers, 2021). Vicente González-Romá is a professor of work and organizational psychology. He is currently researching the influence of job digitalization and robotization on job characteristics and work outcomes (e.g., González-Romá et al., 2022). Anna-Sophie Ulfert-Blank is an emerging researcher in the field of human-AI teaming. In her work, she specifically addresses the role of autonomy, trust, and interpersonal relationships (e.g., Ulfert et al., 2022). As an expert in the field of human-centered implementation of emerging technologies in the workplace and sustainable employability, Pascale Le Blanc will moderate this discussion (Berkers et al., 2022).

In the panel discussion, we want to explore what role WOP researchers should take in this emerging and multidisciplinary field and how current approaches may differ from previous research on

automation at work. This will raise questions such as: Should we become more actively involved in technology development and implementation? What would be the benefits of WOP in technology development? And how can we overcome barriers faced when getting involved?

This discussion will cover an analysis of where we see barriers to our research that hinder us from “getting involved” in the actual development and implementation in practice. At the same time, we discuss the perils of being overlooked by other fields of research and practice with respect to the changing world of work.

Based on the relevance of this topic to WOP research and practice, the invited panelists' quality, and the discussion's interactive format, we expect a high level of participant interest with a medium to large audience size.

The planned discussion aligns with the SDG of “Decent work and economic growth” as the WOP research community aims at creating “decent” work environments. Yet, as we mentioned before, this perspective is currently lacking in practice when it comes to the implementation of emerging technologies. The panel will address these concerns, anticipating potential negative consequences and ways to overcome them. In addition, it also is closely related to the SDGs of good health and well-being and (reduced) inequalities. With its potential to solve critical societal issues, amongst other staff shortages, the implementation of emerging technologies, such as artificial intelligence (AI), is booming in all areas of our lives. As technologies become increasingly competent and autonomous, they are said to fundamentally transform how we will work in the future (Parker & Grote, 2020). Yet, despite the clear goal to support employees or extend human capabilities at work, Work and Organizational Psychology (WOP) perspectives are rarely considered in technology development and implementation. Beyond how operators react to certain system characteristics, we still know little about how emerging technologies are used at work and affect work design, and how they may change the future of work. At the same time, WOP rarely takes an active role in technology development, and WOP research has thus far focused on a descriptive or explanatory lens on technology use and implementation.

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In the panel discussion, we want to explore what role WOP researchers should take in this emerging and multidisciplinary field and how current approaches may differ from previous research on automation at work. This will raise questions such as: Should we become more actively involved in technology development and implementation? What would be the benefits of WOP in technology development? And how can we overcome barriers faced when getting involved?

This discussion will cover an analysis of where we see barriers to our research that hinder us from “getting involved” in the actual development and implementation in practice. At the same time, we discuss the perils of being overlooked by other fields of research and practice with respect to the changing world of work.

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*Keywords: emerging technologies, development, implementation*

### Panel discussion PA3

#### **Speaking about silence in healthcare: A necessary evil and a toxic norm that corrodes quality of care, employee well-being, and patient safety?**

Michael Knoll, University of Leipzig; Madeline Carter, Northumbria University, Newcastle; Rosalind Searle, University of Glasgow; Anthony Montgomery, University of Macedonia, Greece

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Why this topic justifies inclusion in the programme

The caring sectors are major employers in every country in Europe and beyond, and are highly-relevant in terms of timely and ongoing societal challenges (e.g., Covid-19, aging workforce coupled with increased demand on healthcare, shortage in financial resources). Silence in healthcare is ubiquitous and negatively affects employees' well-being, organizational learning, and their potential to provide care to patients. However, certain types and levels of silence are a necessary component of functioning in healthcare. For example, withholding information can be a norm that contributes to team loyalty, concealing mistakes may preserve the reputation of healthcare professionals, and concealing bad diagnoses may keep patients hopeful. In this sense, patient safety initiatives to encourage healthcare professionals to 'speak-out' might take too narrow a perspective and run the risk of ignoring the prevailing professional norms and potential positive effects of silence.

The panel represents an opportunity to delineate and discuss the constructive, destructive, and ambivalent forms of silence in healthcare. We provide evidence for the detrimental role of silence but also challenge the widespread assumption that employee silence is always problematic. We do so by discussing positive and negative roots of silence in healthcare, and that the withholding of information may be a cultural norm that is transmitted when people are socialized in the medical professions or healthcare institutions. The panel aims to stimulate a debate on what needs to change for healthcare workers to feel comfortable about sharing information.

Why these panel members will add value

Anthony Montgomery held roles in health care education at the Royal College of Surgeons in Ireland-Medical University of Bahrain and was co-principal investigator of an European Commission Grant concerning Organizational culture, professional burnout and quality of health care in hospitals (ORCAB).

Michael Knoll contributed several innovations to silence research including evidence for the need to distinguish motives for silence, implicit motives for silence as basis of an organizational culture of silence, longitudinal studies on the negative and reciprocal relationships between silence and health.

Prof. Rosalind Searle is an advocate of research-practitioner dialogue and Director of the EAWOP Impact Incubator. She published "Making impact in healthcare contexts" in a recent issue of EJWOP showing her expertise in the field of this panel.

Fredrik Bååthe works closely with clinicians to engage their voices about balancing the dynamic tension among professional fulfillment, quality of patient care and organizational constraints. Previously Head of the A&E Department at Sahlgrenska University Hospital he also holds a clinical leader perspective.

Madeline Carter is an organizational psychologist whose research focuses on workplace bullying and negative behaviours in healthcare. In the UK NHS, she examined barriers to challenging and reporting bullying in healthcare.

#### Implications for research and practice

The panel discusses potential reasons for the disappointing outcomes reported by speaking up interventions in healthcare. Initiatives to address silence in healthcare need to enable employees to understand when withholding and sharing information is appropriate or represents a cultural norm. In terms of practice, one central challenge for clinical leaders in healthcare is to valorize behaviors that enhance psychological safety among teams, while modeling the sharing of information that leads to improvements in patient safety and quality of care. The proposed panel will clarify areas for future research, and outline how research can be translated into practice. It will become evident that initiatives to understand silence in the caring professions need to integrate knowledge from a broad range of work and organizational psychology areas including worker well-being, organizational culture, professional development and socialization, job performance and safety, and counterproductive work behaviors and include the voice of marginal agents in healthcare (e.g., janitors in hospitals, policy makers, relatives of patients, monitoring bodies).

#### Expected/intended audience and size

Besides targeting practitioners and academics involved in the caring professions, the panel takes a broader perspective and draws on knowledge from diverse domains across work and organizational psychology attracting researchers interested in cross-domain integration. The panel will also draw upon the results and attract participants of the 2021 EAWOP Small Group Meeting on “Voice and Wellbeing in the Caring Professions – Linking Research and Application”. To attract the input of frontline healthcare workers, support staff in healthcare, patients and relatives of patients, the event is live via Twitter. Opportunities to contribute their experiences are provided. Why this topic justifies inclusion in the programme

The caring sectors are major employers in every country in Europe and beyond, and are highly-relevant in terms of timely and ongoing societal challenges (e.g., Covid-19, aging workforce coupled with increased demand on healthcare, shortage in financial resources). Silence in healthcare is ubiquitous and negatively affects employees’ well-being, organizational learning, and their potential to provide care to patients. However, certain types and levels of silence are a necessary component of functioning in healthcare. For example, withholding information can be a norm that contributes to team loyalty, concealing mistakes may preserve the reputation of healthcare professionals, and concealing bad diagnoses may keep patients hopeful. In this sense, patient safety initiatives to encourage healthcare professionals to ‘speak-out’ might take too narrow a perspective and run the risk of ignoring the prevailing professional norms and potential positive effects of silence.

The panel represents an opportunity to delineate and discuss the constructive, destructive, and ambivalent forms of silence in healthcare. We provide evidence for the detrimental role of silence but also challenge the widespread assumption that employee silence is always problematic. We do so by discussing positive and negative roots of silence in healthcare, and that the withholding of information may be a cultural norm that is transmitted when people are socialized in the medical professions or healthcare institutions. The panel aims to stimulate a debate on what needs to change for healthcare workers to feel comfortable about sharing information.

*Keywords: Silence, health care, organizational culture*

## Panel discussion PA4

### Unions and Work & Organizational Psychology? Yes!

Denise Vesper, Universität des Saarlandes; Cornelius J. König, Universität des Saarlandes; Magnus Sverke, Stockholm University; David Martínez-Iñigo, King Juan Carlos University; Joanna Grzymala-Mszczynska, Jagiellonian University; Julian Barling, Queen's University

science&practice

#### Topic justification

In the last years, numerous employees at different companies fought for their right to unionize. One example being the wildcat strikes among delivery drivers (e.g., in Berlin, Krantz, 2021), which gained considerable media attention. Following the congress theme of “The future is now: The changing world of work”, we plan to discuss how work and organizational psychology (WOP) can become more involved in these labor relations issues. We incorporate different perspectives in our panel discussion, also aligning with the EAWOP 2023 congress theme. These perspectives include cross-cultural perspectives with our panelists stemming from different countries with different cultural backgrounds and different legal systems (i.e., Canada, Poland, Spain, and Sweden). Furthermore, we also incorporate perspectives differing in experience with conducting research in this area with both senior researchers as well as more junior researchers to this area. We also want to discuss how WOP can profit from incorporating trade union perspectives in different research areas. Further questions that we will address are how collaborations between researchers and unions could be introduced and managed. Another looming question is what differences and similarities between trade union members and non-union members could be.

#### Value of panelists

Julian Barling has numerous publications on union membership (Barling et al., 1991; Barling, Fullagar, Kelloway, 1992; Barling, Fullagar, Kelloway, et al., 1992) and also on strikes (Barling, Fullagar, Kelloway, et al., 1992; Barling & Milligan, 1987; Bluen & Barling, 1988). In the late 1980s he already published a paper on industrial relations as a blind spot in teaching, research, and practice in WOP (Barling, 1988). Hence, he can add valuable insights and long-term experiences regarding unions and WOP.

Joanna Grzymala-Mszczynska’s research focuses on motivations to engage in collective actions. In her preprint “When strike fails: The role of personal significance and positive expectations in maintaining a commitment to worker protests” she assesses willingness to engage in teachers' strike actions despite experiencing short-term failure (Grzymala-Moszczynska et al., 2021). She also has some practical experience, as she co-established the trade union Workers Initiative at Jagiellonian University

David Martínez-Iñigo conducted research on shop stewards and union members’ loyalty in Spain (Martínez-Iñigo et al., 2020; Zacharewicz et al., 2016) and also on organizational culture and its relation to change in trade unions (Martínez-Iñigo et al., 2012).

Magnus Sverke also studied union support (De Witte et al., 2008; Goslinga & Sverke, 2003). Furthermore, he conducted research on consequences of job insecurity for unions (Sverke & Goslinga, 2003). His book “The future of trade unionism: International perspectives on emerging union structures” (Sverke, 2019) was first published in 1997. All these aspects make him a valuable panelist for the questions to discuss.

Implications for research and practice.

With this panel discussion, we aim to raise awareness among WOP researchers, but also practitioners on the role of trade unions. So far, WOP has widely neglected unions and labor relations (Cascio & Aguinis, 2008; Zickar, 2004). However, we are sure that in the future, labor relations will become an even more relevant aspect of employers and employees working lives and WOP researchers should also start to conduct more research on the issues that arise in labor relations.

Expected audience size.

We expect that 20-50 people will attend the panel discussion, because the topic of unions has increased in media attention and the on-going debate about the focus of WOP on employers rather than employees and their experiences throughout their working life (Bergman & Jean, 2016; Ruggs et al., 2013, but see, e.g., Anseel et al., 2018) has also received considerable attention from WOP researchers.

Relevant UN SDGs

This panel discussion addresses the following UN SDGs: decent work and economic growth; reduced inequalities; peace, justice; and strong institutions; and partnerships for the goals.

Keywords: *unions, industrial relations, work and organizational psychology*

## Panel discussion PA5

### AI-based Assessments: Should we embrace the technology?

Claudia Nuttgens, AMS; Alan Redman; Nathan Mondragon; Patrick Lockhart

practice

According to a recent analysis of the talent assessment marketplace by Rocket-hire, the estimated global market is approximately 4.5 billion and expected to grow to 6.6 billion by 2025. In this same survey of talent assessment providers, one-third and growing use advanced formats or novel based AI methods. Additionally, over half of the talent assessment vendors are 10 years or younger firms and most (62%) of these firms offer AI-based tools. Conversely, of the more established firms that are 10+ years old, only 16% offer an AI-based solution. Emerging legislation on the use of AI is also proving challenging to interpret locally and globally and is resulting in extreme caution in the application of technologies that automate selection decision-making.

Published research, as often the case, is lagging behind the creation and implementation of these novel or AI-based assessment solutions. In the field there is a conflict between the more predominant and established talent assessment providers and the younger, less established AI-based providers. In this session we aim to shed light on this issue by bringing together two assessment providers (one without and one with AI-based tools) and discuss the pros and cons of each approach from the viewpoint of a Recruitment Process Outsourcing provider/customer.

This Panel session will dive deep into the reasons behind choosing not to deploy AI-based methods and conversely reasons why to choose and deploy AI-based assessments. Experts from the talent assessment field with global perspectives will represent the various viewpoints. More specifically, Dr. Alan Redman who is the Head of Science and Technology at Psycruit will discuss and defend the reasons why AI-based tools have not been undertaken and Nathan Mondragon, Chief I/O Psychologist at HireVue will take the pro-side of the AI-based argument. More than vendor perspectives, the customer viewpoint is critical and will be taken by Patrick Lockhart, Senior Manager, at Alexander Mann Solutions. Leading or facilitating the discussion will be the Global Head of Assessments at AMS, Claudia Nuttgens (CPsychol).

Given the nascent nature of AI-based assessments, the scientific papers are minimal and far behind documenting the actual work taking place in the field (and lab) of the vendors creating these solutions. Solutions range from scraping social media for personality profiling, skills matching, and job matching solutions, to using machine learning to create complex scoring algorithms of game play behavior, to more traditional psychometric design principles combined with advanced data identification tools like natural language processing. No matter the sophistication of the psychometric design principles deployed (or not), the amount of peer reviewed research available to digest is sparse. In this session we hope to peel back some of the research available and identify many areas in dire need of academic rigor research. In the end, the audience will have a more informed basis on why they should look into AI-based assessments or not, and where the best AI-assessment Use Cases might exist for their specific organizational talent assessment needs. According to a recent analysis of the talent assessment marketplace by Rocket-hire, the estimated global market is approximately 4.5 billion and expected to grow to 6.6 billion by 2025. In this same survey of talent assessment providers, one-third and growing use advanced formats or novel based AI methods. Additionally, over half of the talent assessment vendors are 10 years or younger firms and most (62%) of these firms offer AI-based tools. Conversely, of the more established firms that are 10+ years old, only 16% offer an AI-based solution. Emerging legislation on the use of AI is also

proving challenging to interpret locally and globally and is resulting in extreme caution in the application of technologies that automate selection decision-making.

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*Keywords: Artificial Intelligence, AI-assessments, Machine Learning*

## Panel discussion PA6

### **Workplace assessment cannot be regulated so test publishers will continue to decide what makes a good test and who can use it**

Nigel Evans, European Federation of Psychologists' Associations; Dragos Illescu, International Test Commission; Ian Florance, European Test Publishers Group; John Hackston, The Myers Briggs Company; Helen Farrell, SHL

practice

Why this topic justifies inclusion in the programme

Regulation in any area of life is a double edged sword. On the one hand it 'pulls up' less than thorough operators and protects consumers, on the other it can stifle creativity and put extra burdens on those who are already operating to high standards.

Workplace testing and assessment is currently self-regulated in Europe with clear standards to which to aspire from EFPA (European Federation of Psychology Associations). These test standards come in the form of the EFPA Test model which lays down very clear criteria for reviewing the quality of a psychological test, and EFPA Euro Test qualifications which give specific details to assess competence in test use.

However, the guardians of test supply are not individual country Psychology Associations, but the test publishers themselves. They have the ultimate power in determining who can access their tests, and to a large degree confirm that their test is fit for purpose.

Is this right? Should there be more regulation in Workplace Testing?

Why these panel members will add value

Panel members are drawn from global test publishers with varying degrees of regulation, together with representatives of international trade and professional bodies.

Chair: Nigel Evans, Chair of the Board of Assessment, European Federation of Psychologists' Associations

Panel:

- Helen Farrell, Europe Training Lead, SHL
- John Hackston, Head of Thought Leadership, The Myers-Briggs Company
- Ian Florance, General Secretary, The European Test Publishers Group
- Dragos Illescu, Past President, International Test Commission

Implications for research and practice

There are far reaching implications for rights of access to tests and assessments. Test publishers need to justify their logic for supply and quality control in order to ensure fairness to practitioners and their clients. For example: why should one practitioner have instant access, whilst another has to undergo significant extra training, even though they have the same qualifications want to purchase the same test, yet happen to be in different locations.

Expected audience size and why

50+ since many WO psychologists deploy tests and assessment in their work regardless of whether it is recruitment, selection, or developmental in application.

*Keywords: Tests, Assessment, Regulation*

## **Panel discussion PA7**

### **The EuroPsy Specialist Certificate in Work and Organizational Psychology**

Vicente Martínez-Tur, Fred R.H. Zijlstra, Per Straumsheim, Francisco J. Medina, Jose Ramos

science&practice

Facilitator: Vicente Martínez-Tur (IDOCAL-University of Valencia, Spain), member of the EuroPsy Specialist European Awarding Committee for Work and Organisational Psychology

Work and Organizational psychologists increasingly work in cross-national settings. In this context, it is a must for the future to have shared standards and tools to guarantee a proper professional service at the European level. The EuroPsy Specialist Certificate in Work and Organizational Psychology is a label of quality and an European standard of education and professional training in Work and Organizational Psychology, within the frame of the EuroPsy system. It was set by EAWOP, the European Association of Work and Organizational Psychology, in collaboration with EFPA, the European Federation of Psychologists' Associations. Progress has been significant in recent years, with several countries implementing the certificate, but there are still important challenges ahead.

The aim of this panel discussion is for participants to get the opportunity to discuss several relevant aspects of the Certificate such as the competences' model on which the certificate is based; training of Registered Specialists as supervisors for the Certificate; challenges; good practices on how to demonstrate competence; and map of Work and Organizational Psychology education in Europe.

The session will last 60 minutes, and it will be structured in 2 parts:

**Overview.** Each discussant will give a 10-minute overview of one of the aforementioned Certificate topics.

**Debate.** This will be an interactive discussion and brainstorming between the panelists and the audience about The EuroPsy Specialist Certificate in Work and Organizational Psychology and its challenges.

An audience of about 40 persons is expected, interested in the Certificate. The topic has a close connection to Quality education United Nation goal.

**Panel Participants:**

Fred R.H. Zijlstra, University of Maastricht (The Netherlands). He is Professor of Work and Organizational Psychology at Maastricht University and Scientific Director of the Center for Inclusive Organizations in this University, funded by the Dutch Social Security Fund. He is also President of ENOP 2017 – present. He has published on a wide array of topics such as interruptions during work; work and health, recovery after work, organizational climate and effects of technology on work. Also factors that hinder or facilitate return to work of people who have been long term absent from work for health reasons has the attention in order to develop policy relevant measures. In the last couple of years the topic of Inclusive Organizations was introduced focusing on including 'people with limited capacity' in organizations.

Per Straumsheim, Norwegian Psychological Association . He did his training in Work and Organizational psychology at the University of Oslo. He is now working in the education department at the Norwegian Psychological Association, especially with the training and development in work and organizational psychology. Per has been involved with research and several projects regarding supervision and development of supervised practice for psychologists. He is now the Chair of the

European Awarding Committee for the EuroPsy specialist certificate in Work and Organizational Psychology.

Francisco J. Medina, University of Seville (Spain) . He is Associate Professor of Work and Organizational Psychology in the University of Seville, Dean of the Faculty of Psychology, President of the Spanish Association of Deans of Psychology and past-chair of International Cooperation Office in the University of Seville. Francisco is Associate Editor of the Journal of Work and Organizational Psychology, and Chair of the Spanish S-NAC of the EuroPsy WOP Certificate. His research topics are focused on conflict resolution, power and influence, negotiation and mediation; research that has been published in some refereed journals. He is International Advisor from UNESCO Chair in Ecuador.

Jose Ramos, University of Valencia (Spain). He is Full Professor of Work and Organizational Psychology at the Department of Social Psychology and the Research Institute IDOCAL, University of Valencia (Spain). Former Dean of the Faculty of Psychology (2006-2012) and Head of Department of Social Psychology (2015-2021). Member of the Executive Committee of EAWOP (2015-2019) and SCEPS (Spanish Scientific Society of Social Psychology, 2020-). President of the Spanish National Award Committee of EuroPsy: European Certificate in Psychology (2010-). Coordinator, at the University of Valencia, of the International Joint Master on Research in Work and Organizational Psychology (Universities of Maastricht, Leuphana and Valencia). His research interests are managerial work, service quality, psychological contract, stress, youth careers and gender equity at work. The EuroPsy Specialist Certificate in Work and Organizational Psychology

*Keywords: EuroPsy, Specialist Certificate, Work and Organizational Psychology*

## Panel discussion PA8

### The Future of Work and Organizational Psychology: leaving academia?

Yvonne G.T. van Rossenberg, Institute for Management Research, Radboud Universiteit, Nijmegen, The Netherlands; Severin Hornung, University of Innsbruck, Institute of Psychology; Luc Dorenbosch, Tilburg University / NSvP / De BaanIngenieurs; Amalia Raquel Pérez-Nebra, Universidad de Zaragoza, Psychology and Sociology Department, Zaragoza, Spain.; Mehmet A. Orhan, EM Normandie Business School, Métis Lab, Paris, France

science&practice

#### Topic Justification

Our field faces challenges, such as a limited relevance of our research for society (Bartunek, 2007), isomorphism of our research practices (Edwards, Berry, 2010), the burnout crisis in academia (Levecque et al., 2017), and the realisation that the best-evaluated graduate programs are the ones that make their teachers sickest (Cassandre, 2011). In addition, we find ourselves in a system in which publications are written primarily for individual scholarly recognition and career progression (Tourish, 2019), which diminishes relevance and meaning. The Covid-19 pandemic seems to have strengthened these effects, making precarious jobs more uncertain, increasing mental health issues and high lightening the issue of irrelevance.

The current academic environment is particularly unhealthy for Early Career Academics (ECAs), individuals in the first ten years after starting their PhD studies who aspire a career in academia (Bosanquet et al., 2017). We understand the position of Working on (prolonged) temporary contracts makes ECAs vulnerable to a discontinuation of their career outside of their control. There are several systemic factors in academia that reduce ECAs' control over adhering to those requirements, such as prolonged publication times (Van Dijk & Van Zelst, 2019), biased review and selection processes (Herschberg et al., 2018a, 2018b), and shifting requirements in number and outlets for publication. A recent study among ECAs (90% of which were PhD students) in 26 countries across 234 institutions found evidence that graduate students "are more than six times as likely to experience depression and anxiety as compared to the general population" (Evans et al., 2018, p. 282).

Besides the outflux of staff due to redundancies and failing to make tenure requirements, we identify also tenured professors on permanent contracts who show withdrawal (Harrison & Newman, 2013), or even deliberately are choosing to transition out of academic positions. With a global shortage of labour, and most western countries facing an aging (academic) population, this outflux of academic is worrisome.

Traditional models of work demands and resources seem to fail to explain such sudden outflux, given these academics have reached a very comfortable and stable position. With even the "winners" in the system looking for opportunities to leave, this raises the question whether the current evaluation systems and human resource management strategies are still appropriate to ensure the functioning of universities and the sustainable well-being of their employees (Biron et al., 2008).

#### Why these panel members will add value

The panelists are both theory experts in the people management fields related to leaving academia, as well as having personal experience, covering different approaches. Dr. Amalia Raquel Pérez-Nebra will provide an "outside" perspective from the Brazilian academic context, discussing how all aspects of dignity in the workplace (Bal, 2017; Thomas & Lucas, 2019) of are violated in Brazil's academia.

This includes universal themes such as “publish & perish”, internationalization requirements (Altbach & Knight, 2007; Knight & De Wit, 2018; Stromquist, 2007), income inequality, and the lack of recognition for research involving practice. Dr. Mehmet A. Orhan will discuss his experience of dominance of the academic elite, restrictions of academic freedom, and experience of critiquing theoretical models in our field (Bal et al., 2019). Dr. Severin Hornung will propose novel theoretical avenues for addressing the phenomena, connecting theory with his experience of his academic position. Dr Luc Dorenbosch will discuss his continuous search being an academic without wanting or seeking to work in academia fulltime. His discussion also includes the theoretical understanding of identifying most as a “prac-ademic”, an ‘ambivalent’ hybrids oscillating between his past practitioner and present academic self (Lam, 2020).

#### Expected audience size and why

We have all thought about it at some point in our career: what about leaving? This panel symposium provides the space to share experience, pinpoint pressures and develop new theoretical directions to make sense of this issue. The idea for this panel discussion was developed at the EAWOP Small Group Meeting on the Future of WoP in Brussels, September 2022, and attendants of this SGM have indicated their interest in this session. In addition, this is a topic of high relevance (not only for) early career academics, hence we expect an audience size of 20-40 attendants.

#### UN SDG

We seek to explore alternative explanatory directions including (though not limited to) the marketization and managerialism in academia, dignity at work, (alternatives to) the neoliberal ideology in WOP (Bal & Doci, 2018), and radical sustainable HRM practices (Bal & Brooks, 2022). This relates to the UN SDG of quality education, good health and wellbeing, decent work and reduced inequalities in academia.

Keywords: Future of Work and Organizational Psychology, healthy academia, dignity in academia

## Demonstrations

### Demonstration D1

#### Where's the limit? Talking about sexual harassment at work helps prevent it

Lise Keller, The Danish Sector Working Environment; Charlotte Bredal, FOA; Birthe Oest Larsen, The Danish Employees and Competence Agency

practice

Presenters:

- Keller, Lise, lke@bfa.dk, Certified MSc in Psychology

Psychologist Specialist in work and organizational psychology

The Danish Sector Working Environment Council, Welfare & Public Administration

- Oest Larsen, Birthe, biola@medst.dk Certified MSc in Psychology

Psychologist Specialist and Supervisor in work and organizational psychology

The Danish Employees and Competence Agency

- Bredal, Charlotte, chbr@foa.dk Chairman, Psychosocial following group,

The Danish Sector Working Environment Council, Welfare & Public Administration

In Denmark there is a long tradition for workers and employers organisations to work together on developing and disseminating guidelines and tools for workplaces, helping to prevent and manage occupational health and safety risks. The Danish Work Environment Council, consisting of unions and employers' organisations in the public and private sector, are working on disseminating knowledge targeted at the workplaces in their sector. It is a non-profit organisation.

The facilitators are experienced psychologist, who work together - from different positions.

The demonstration

Sexual harassment can be a work-related issue. Therefore, it must be managed and prevented at the workplace. In cooperation with the Danish Working Environment Authority (WEA) a campaign, to stimulate dialogue and promote prevention at workplaces, was | 2021-2022 realized with many different elements which will be presented at the workshop:

- Take the pulse – questionnaire
- Tool for dialogue at workplaces
- Special for the leaders
- Guides and posters
- Dialogue cards to start the dialog

The demonstration will concentrate at the dialogue cards

The dialogue cards help facilitate good discussions about sexual harassment and individual boundaries in the workplace.

Such discussions can make it clear that we all have different boundaries, something we need to be aware of when we work together.

Input and reflections from the discussions can provide an understanding of what constitutes sexual harassment and unwanted sexual attention.

The conversations can also provide the impetus for new policies on sexual harassment or identify areas of existing policies that need to be revisited.

Purpose for dialog cards

The dialog cards help you talk about unwanted sexual harassment in the workplace. The dialogue cards present fictitious scenarios about sexual harassment or unwanted sexual attention from others, including managers and colleagues.

Targeted attendees

All with interest in creating dialogue about sexual harassment.

Outcome

Since the facilitators will guide a session with the dialogue cards the attendees will get experience and opportunity to discuss different situations.

The dialogue cards are free for all to download and use afterwards.

*Keywords: Sexual harassment, Dialog at the workplace, Cooperation between Authority, employer and employees*

## Demonstration D2

### HUCAMA FACTORS: Integrated Personality, Ability & Competency Assessment

Rainer Kurz, Michele Guarini | HUCAMA Group

science&practice

#### Introduction

In the era of paper and pencil testing psychometric instruments were physically separate and reporting typically restricted to profile charts. With the advent of computer-based assessment expert systems were developed to facilitate interpretation. Thanks to the Internet instruments covering personality, ability and competency modalities may be used seamlessly. Accordingly integrated reporting across these three modalities would be helpful.

The HUCAMA Factors suite was developed to provide an integrated suite of tools that builds on leading academic and practitioner models.

Core, extended and full questionnaires were developed covering 16, 32 and 48 facets respectively for personality predictors and competency criterion assessments. Results are grouped under variations of the Great 8 factors (Kurz & Bartram, 2002) – a leading taxonomical model widely used in academia and applied practice.

Whereas the original Great 8 Competencies (Kurz & Bartram, 2002) were backwards mapped to existing instruments, the new suite of tools has been designed from scratch to provide a refined Great 8 Success Factors model with many practical and scientific advances.

With respect to the ability predictor modality a universally applicable non-verbal reasoning test was developed with Diagrammatic Matrices, Number Series and Spatial Reasoning components of 8 minutes each.

Across all three modalities Personal Report formats were developed with a common look and feel. Furthermore, Interactive Report formats were developed that provide value add features that facilitate interpretation and use of assessment results.

#### Description of the session specifying interactive element

The following elements will feature in the demonstration:

- Dynamic personality, ability and competency assessment formats.
- Personal Report formats for participants.
- Dynamic Report formats for users.
- In-Depth Report formats for expert practitioners.
- Competency Fit formats for business users.
- Capability Fit formats for business users.

#### Implications for research and practice

Newcomers as well as experienced assessment practitioners and academics find themselves confronted with a large array of assessment tools designed to measure personality, emotional intelligence, learning agility, competencies, capabilities and aptitudes. The HUCAMA Factors research program synergises these diverse strands of measurement (and marketing) to arrive at parsimonious solutions for general, professional and executive roles.

In the development study 466 professionals and managers completed 758 self-report items. From these items Competency Factors was developed with 48 competency items and Personality Factors with 240 items measuring 48 facets. Both tools share a higher-order structure based on the Great 8 Competencies (Kurz, Bartram, 2002). These in turn are paired up into GETTING THINGS RIGHT, GETTING ALONG, GETTING AHEAD and GETTING ALIGNED clusters inspired by the work of Hogan & Holland (2003), Silzer & Church (2009), Emotional Intelligence and Learning Agility research.

In a criterion-related validity study 113 professionals and managers who completed the HUCAMA FACTORS questionnaires were rated by external reviewers. A very high observed average point-to-point validity at factor level of .47 was found that compares very favourably to the corresponding value of .16 (N>4000) for OPQ found by Bartram (2005), .21 (N=855) for PAPI found by Kurz (2019), and .23 (N=369) / .21 (N=1835) for Wave Professional Styles found by Jeffery-Smith, MacIver (2021). The PF48 Total observed validity of .50 (N=113) compares favourably to corresponding values of .21 (N=855) for a PAPI composite found by Kurz (2019), .25 (N=308) for a Saville Consulting Wave Professional Styles composite reported by Hopton (2012), and values around .30 (N>4000) for an OPQ composite in Bartram (2005).

The integrative nature of the tool development harnesses the evidence built up over the last 35 years to provide insights that are backed by data. This in turn can improve performance and wellbeing at work.

Expected audience size and why

The demonstration session is aimed at practitioners and academics who are interested in a fresh take on long established psychological measurement modalities personality, ability, and competency. The demonstration can be adapted to the level of interest and size of facilities available. The presenters have considerable experience in utilising electronic presentation devices in conference settings.

*Keywords: Personality, Ability, Competency*

## Demonstration D3

### Learning Charisma 2.0: A Gamified Experience

Stefanie Franziska Krügl, Clara Antonia Seif el Dahan, Helena Marie Hüster | South Westphalia University of Applied Sciences

practice

Takeaway benefits

Didn't we all read articles that made us want to fall asleep, fight our eyelids to stay open, and just stop reading? Yet, other articles inspire us, are simple to understand, and sometimes even make us sad when we finish them. How do you write, talk, and present? Do you do it in an inspiring way? As researchers, we must ensure that our work has an impact and that people remember it. Who talks about a dull Netflix show? No one. In this workshop, we teach you the basic ingredients of charisma that will spice up your research papers.

Scholars demonstrated it: Charisma can be taught (Antonakis et al., 2011; Jacquart & Antonakis, 2015) and by employing charismatic leadership tactics (CLTs), we are able to persuade others to regard us as more trustworthy, influential, and leader-like.

Exercising the charisma muscle requires dedication and a well-planned training program that addresses all aspects of charisma (substance, frame, deliver). Based on the findings of Antonakis et al. (2011) we created a tailored charisma training program for the research project KernTrafo - a transformation concept for personnel of nuclear power plants in the process of decommissioning. Using the design thinking methodology at the beginning, we iterated former concepts of charisma training in different settings and training-groups (e.g. managers in nuclear power plants, but also students and managers in several large and medium-sized corporations).

As a result, a well-founded, but also entertaining and playful two-day training concept was developed, allowing highly qualified engineers, managers as well as master craftsmen to communicate charismatically during a vast transformation process. We were guided by the motto "doing, not talking" in order to make the concept accessible, especially for participants without an academic background. We reduced the theoretical information to a minimum and conveyed the content primarily through game concepts.

Description of the session

The training is divided into two parts. First, understanding charisma and second, applying charisma. Due to time constraints we only focus on some selected tactics here.

Understanding charisma (15 minutes)

The groups learn about the concept of CLTs. It begins with the participants being divided into five-person training groups. Following a brief introduction to the concept of charismatic leadership, we will begin learning charismatic leadership tactics (CLTs) using a matching game. Playing cards with short sentences that include one CLT each will be matched with cards that contain examples.

Applying charisma (30 minutes)

Now the groups practice incorporating CLTs into their own behavior. Each group receives a set of very short stories as well as a deck of playing cards bearing the names and explanations of the CLTs. They are putting the CLTs into practice by telling stories in their respective groups.

We will close with a short wrap-up and Q&A Session.

#### Implications for research and practice

This training is related to the topic „Charismatic Leadership” and the UN Sustainable Development Goal „Quality Education,” and thus promotes the experience-based application of scientific findings. Working with non-academically trained managers who do hard physical work in addition to management tasks demonstrates time and again how little scientific research takes this group into account. As a result, it is time to present our research findings in a way that allows everyone to participate. The presented training concept is a step in that direction. The KernTrafo research project will publish the entire training concept, which participants can see parts of here, under the Creative Commons BY 3.0 license (<https://creativecommons.org/licenses/by/3.0/>), ensuring broad possibilities for use in research and practice.

#### Expected audience size and why

We anticipate at least eight participants. This is the smallest number of people for whom two small training groups work well. We can spontaneously scale up to 10 groups of 5 people each, for a total of 50 participants. In theory, the format can also be used with groups of up to 100 people, but if there are more than 50 participants, the information must be obtained in advance in order to properly prepare the materials.

*Keywords: Charismatic Leadership, Leadership Training, Gamification*

## **Demonstration D4**

### **The Digital Applications of an Inclusive Big Five Psychometric in a Developmental Context – An Interactive and Fun Experience**

Jonathan Cannon, Stewart Desson | Lumina Learning

science&practice

#### Takeaway Benefits

There are three key takeaways:

- 1) How to make the application of psychometrics more sustainable
- 2) How to make the application of psychometrics more scalable
- 3) How to make the application of psychometrics more effective in virtual settings

Participants will learn how two digital applications: Lumina Splash App and Spark Coach, integrate robust science with practical, digital applications for use in developmental contexts.

These tools will be demonstrated with supporting virtual and hybrid working models in mind while also demonstrating how to apply psychometrics in an inclusive way, valuing all ways of being, and avoiding biases inherent in traditional personality psychometrics.

#### Description of Session

The session aims to be an immersive experience, allowing participants to assess their own personalities using the Lumina Splash app, followed by group discussions around diversity in personality and its value.

One volunteer will receive a live experience of receiving feedback using the Spark Coach application, a digital visualisation of the Lumina Spark personality psychometric.

Finally, there will be discussion around the use of digital applications in developmental contexts.

#### Implications for Research and Practice

The demonstration will highlight the benefits of user validity (MacIver et al , 2014) in the use of digital psychometric tools in developmental contexts, especially when integrated with robust science.

The experience will also show the benefit of digital tools in the interactive exploration of psychometric data by users in ways that traditional paper or PDF solutions never can, producing new possibilities in creating meaning for users through interactivity. This further supports virtual and hybrid models of work, addressing an over-reliance on face-to-face workshops and coaching sessions.

The digital application of psychometrics addresses the issue of limited budget in some organisations restricting the availability of coaching for some levels, while also allowing for single practitioners to run large scale projects through the effective use of technology.

Research is ongoing into the user validity of such applications.

#### Expected Audience Size

This live experience is optimal for 10-20 participants, though any number can be accommodated through minor changes to the design of the session if notice is provided.

The workshop is designed to last 45 minutes.

*Keywords: Lumina Splash, Remote Working, Digital Applications*

## Demonstration D5

### Why are we vague? Towards conceptual precision in work and organizational psychology

Bram Fleuren & Wilken Wehrt | Maastricht University

science

This proposed demonstration aims to offer an interactive discussion on conceptual precision in Work and Organizational Psychology. Conceptual precision is crucial in science as it facilitates identifying valid operationalizations and promotes the testability of theories. With conceptual precision we mean providing consistent and specific descriptions that demarcate what the concept is – and what it is not – and that suggest how the concept can be used adequately in research. Accordingly, conceptual precision is a cornerstone of sound and meaningful research. However, maintaining conceptual precision can be challenging, as it requires careful thinking and a critical consideration of – sometimes ‘established’ – concepts.

We believe that the field of Work and Organizational Psychology exhibits conceptual imprecision to a relatively high degree. Thus, we aim to offer a discussion on conceptual imprecision, common field-specific examples and reasons potentially driving it. Moreover, the ultimate aim of this intended demonstration is to develop non-moralistic suggestions on how to handle and avoid conceptual imprecision at the individual, research group, and organizational level. This will be done in an interactive way, by continuously asking input from the audience to stimulate critical reflections and discussion.

The first part of our demonstration aims to discuss different manifestations and bases of conceptual imprecision. Specifically, we argue that conceptual imprecision manifests itself in several ways within our field. These include, for instance: i) aspecificity of theories and concepts; ii) sustaining vague but ‘established’ concepts; iii) presentation of categorizations based on frameworks or opinion as given facts; iv) imprecise naming of constructs; v) disconnects between concept and operationalization; vi) umbrella terming; vii) repackaging; and viii) using overly fancy language to explain simple ideas imprecisely. We go over each of the topics one-by-one and ask the audience about their perspective on and experiences with the topic, by engaging in extensive discussion with the attendance, we hope to collect ideas and test our own preconceptions. We highlight several potential reasons for these forms of imprecision, ranging from competition among researchers, suboptimal research practice socialization and peer-pressure in collaborations, to following buzzwords and practices to market a paper effectively.

In the second part of our intended demonstration, we plan to move from observations to solutions. Specifically, we argue that raising awareness for the importance of conceptual precision may help to foster a more conceptually critical culture of debate within Work and Organizational Psychology. Such a culture would be (more) immune against the influx of imprecisely defined concepts. Instead, it may inspire constructive exchanges that promote conceptual differentiation and clarification and, consequently, clearer theorizing and empirical testing. To create such a culture, we offer an interactive discussion about suggestions for improving conceptual precision individually, and in collaborations with team-members, supervisors, reviewers and editors. Together with the audience, we hope to generate suggestions for research groups, research organizations (e.g., universities), and journals to foster conceptual precision. Further, a movement towards conceptual precision may facilitate acceptance of alternative methodologies (e.g. qualitative) by shifting criteria for judging the adequacy of methods from ‘what has been done and is established’ towards ‘what makes sense and

captures the phenomena of interest adequately'. By exchanging ideas with attendants, we aim to modestly contribute to ongoing (meta-)debates about the state and goals of our discipline.

Finally, our intended demonstration relates to the EAWOP 2023 conference theme as for a bright future of Work and Organizational Psychology, we need to do better as a field. Conceptual precision is key in fostering high quality research to study the complex and dynamic phenomena that characterize the current and future world of work. Moreover, if our talk is successful at stimulating conceptual precision or gets colleagues from the field to at least think about it more, the better research it might create contributes to the UN Sustainable Development Goals. That is, high quality Work and Organizational Psychology research can foster decent work and, consequently, good health and well-being for people.

We expect an audience of around 50 people who mainly work as researchers. We think that Work and Organizational Psychology researchers will appreciate the importance of the topic. Additionally, we have held a similar demonstration at an EAWOP small group meeting and had a rich and interesting discussion there. This might inspire people to attend. There is no commercial aspect or interest associated with this submission and we expect a discussion of 45 minutes.

*Keywords: Conceptual precision, conceptual issues in work and organizational psychology, improving research quality*

## Demonstration D6

### **eRelate: supporting effective and sustainable leadership styles**

Philipp Otto & Judith Volmer, University of Bamberg

science&practice

Why this topic justifies inclusion in the programme - what are the takeaway benefits?

Leadership styles are adapting to a rapidly changing world. The mobile app eRelate helps to manage and maintain the relationship between leader and followers. Furthermore, specifically targeted resources and skills are supported within daily leadership situations. Included modules cover the tracking of employee emotions, relationship asymmetries, behavioral nudges, and various forms of leadership trainings with a specific focus on digital leadership skills. eRelate is a newly developed specific purpose app, still being in the developmental phase, and is building on scientific insights of new leadership requirements. In this regard it is highly innovative and brings together novel forms of leadership with a systematic scientific evaluation. As a new combination of relationship management and leadership trainings, it supports the development of leadership capabilities that are increasingly required in rapidly changing working environments. Demonstration participants benefit from the design to foster the employer-employee-relationship and from evaluating the various leadership competence training mechanisms – from coaching companionship till customized skills trainings. It serves as an illustrative example of how apps can help to manage relationships within an organization and support those leadership skills increasingly required in new work situations. A summary of the app usage and its evaluation provides further insights concerning the scope of improvements becoming possible through daily practice supporting apps.

Description of the session specifying interactive element

The session is an illustration of the app and will be implemented as in a classroom setting experiment. Participants need to divide into employers and employees and the set up will be in analogy to a real work situation. A trial version of eRelate will be installed on the mobile devices of the participants. After a broad general introduction, various evaluation cycles are to be simulated for the relationship tracking. Features and functions of the app are directly explicated during its usage. Various trainings contents can be tested and two to three specific training modules will be described in more detail. The session closes with a description of usages and an impact evaluation.

Implications for research and practice

Apps supporting organizational processes are continuously increasing. eRelate adds to this development by directly addressing the quality of the dyadic relationship between leaders and their followers. Also new trainings specifically based on new work requirements are provided. This kind of adaptive training provision is to be increasingly informed by the results of relationship assessment and its changes. By systematically integrating research and practice in the project supported by European Social Fund, eRelate is developed to be scientifically sound and easily applicable at the same time. Its testbed of SMEs in Bavaria is to be expanded for practitioners in general. The evaluation of the app usage allows to refine content and the functioning of the different modules. The demo session will be evaluated and valuable feedback of the audience is to be expected, which will inform the ongoing project and further app development. Besides the obvious advantage coming from the usage of the app, the theoretical understanding of new forms of organizational design with a focus on relationship management is to be fostered.

#### Expected audience size and why

The audience is restricted to a total of 24 participants, who are divided into groups of four players (one leader with three followers). This is expected to be the maximum feasible number to go through the program, to answer questions, and to gather feedback within the time frame of 45 minutes. The research team presenting the app has ample experiences with leadership coaching and specific leadership trainings. This knowledge is optimally transported through the app in the demonstration, but also requires detailed instructions.

*Keywords: e-leadership, digital training, relationship management*

## **Demonstration D8**

### **Motivational Interviewing for Organisations and Work Psychologists**

Florian Klonek, Curtin University

science&practice

This workshop aims to give a gentle demonstration of Motivational Interviewing (MI) and explore its use for research and practice in Work and Organizational Psychology.

MI is a client-centered form of counseling to elicit and strengthen motivation for change. MI is used by many health practitioners who work with clients that want to address behavior changes in their lives (e.g., dealing with addiction, changing nutrition/exercising, and mental wellbeing). MI integrates methods from person-centered communication with a particular technical focus on change-related language, yet research on its application in Work Psychology is still in its infancy. One reason for this is that this intervention is mostly taught to practitioners with a background in Clinical Psychology. However, there is a growing interest from IO psychologists working with organisations in this type of intervention.

In the first part, after a short icebreaker, we will talk about some basic elements of the MI approach, its evidence base, and the effectiveness of MI trainings. In the second part of the workshop, which partly draws on research from the facilitator, we will take a conversational dynamics perspective and get some key insights into the process ingredients that shape effective communication in MI. We will include practical exercises and a demonstration to give participants the chance to get a feel for conversations that incorporate MI elements and try out their learnings.

Expertise of the presenter: Florian Klonek is passionate about teaching and researching Motivational Interviewing (MI). In 2015, he completed the 'MI Training New Trainers' (MI TNT) of the MI Network. In 2016, he completed his PhD, in which he investigated applications of MI for change managers. He has provided numerous multi-day MI trainings for different types of populations, and contributed towards language translations of MI research instruments as well as software applications of MI quality assurance instruments. His research on MI has been published in numerous peer-reviewed journals, including top-tier outlets (e.g., Journal of Vocational Behavior ). He has developed MI training materials that are publicly available (i.e., open access) for the broader community, and he has been serving as a member of the scientific committee in the International Conference on Motivational Interviewing (ICMI 2022).

Why this topic justifies inclusion in the programme - what are the takeaway benefits?

MI is a highly relevant intervention from clinical psychology which has strong relevance for Occupational Health Psychology as well as Work and Organizational Psychology. Although there is an extensive line of research in clinical psychology, MI applications in Organisational and Work Psychology are heavily underused. Further, there is a lack of trainers and practitioners who are able to train others in MI and or show its potential value. In addition, new interest groups have been formed that aim to explore the application of MI in leadership and organisations (i.e., MILO – Motivational Interviewing in Leadership and Organizations, currently 230 members) or use it for career conversations. This also requires a close collaboration with researchers to better evaluate when and how MI interventions are useful for organisations.

Benefits: After the workshops, participants will i) be familiar with key concepts from Motivational Interviewing, ii) better understand the evidence-based behind MI and understand some of its main

mechanisms, iii) will know how to evaluate how MI changes conversational dynamics between MI practitioners and their clients, iv) will be able to evaluate whether an MI is a suitable intervention for their research and/or work with organisations.

Description of the session specifying interactive element

A brief introduction to MI

MI icebreaker: A room-scaling activity

A video (or live) demonstration

Summary and discussion of MI application for Organizational/Work Psychology

Implications for research and practice

MI is a highly suitable intervention when it comes to raising motivation, engagement and behaviour change. In contrast to other intervention methods from clinical psychology, trainings to learn MI (skillfully) are relatively short. Intervention studies focusing on changing health behaviours suggest that even brief interventions are impactful. While MI has been tested and evaluated in health /clinical psychology, there is much scope to apply it and contribute to a better understanding of MI interventions in the Work Psychology space. This could stimulate a rich line of research and there is a strong interest in upskilling trainers/practitioners in this intervention type and build a strong community of practice.

Expected audience size and why

Minimum of 10 to a max. of 45 participants for some of the interactive activities, which convey some of the techniques.

*Keywords: Motivation, Training, Interventions*

## Demonstration D9

### Robotic co-workers – how does collaborating with a robot really feel?

Markus Langer, Universität des Saarlandes; Barbara Kozusznik & Anita Pollak | University of Silesia in Katowice; Veronika Nathalie Lazar, Universität des Saarlandes

science&practice

Why this topic justifies inclusion in the programme - what are the takeaway benefits?

Collaborating with robots has become increasingly common in various domains such as production, logistics, as well as healthcare. Recent years have seen a surge of psychological research that examines the determinants of successful collaboration with robots. This session is a contribution by an international research project between Saarland University and the University of Silesia in Katowice. In this project, we will conduct a study investigating human-centered design of human-robot collaboration based on the principles of the work design framework (Morgeson et al., 2012; Parker & Grote, 2020, 2022).

Given that the IO-psychology perspective on human-robot collaboration has only been emerging over the last years, we believe it to be valuable for IO-psychologists to make this topic more tangible. We propose that this tangibility can come from actually experiencing how it feels to work with a robot. Therefore, in this session, we want to introduce participants to a real collaborative robot that we will be using within our project (the robot will be located in Katowice at the time of the conference because data collection will take place in Katowice). We will briefly introduce participants to our study idea, will demonstrate the collaboration with the robot, and will give participants the opportunity to accomplish a specific task with the robot themselves.

This session closely aligns with the overall theme of the EAWOP23 congress “The changing world of work”. Furthermore, the human-centered design of collaborations with robots supports the UN Sustainable Development Goal of “Decent work and economic growth”. Main takeaways of this session will include that participants will have a better idea of how it feels to closely work together with a robot and we hope that this session will inspire research ideas and connect IO researchers interested in human-robot collaboration.

Description of the session specifying interactive element

The session will start with a brief introduction to our international project collaboration. We will introduce participants to our research study that will be in the data collection phase in May 2023. We are optimistic that we will also be able to show first results. Afterwards, one of the presenters will demonstrate how working with the robot looks like in our study. In the end, participants will have the opportunity to interact with the robot themselves, thereby experiencing how it feels to work with a robot. Participants will be able to choose between different collaboration options (manual or autonomous mode) to demonstrate the versatility of the interaction with the robot.

Anita Pollak and Markus Langer have complementary expertise that come together in the international project collaboration and that will benefit this session. Specifically, Dr. Pollak is an expert in research on human-robot collaboration and has experience in conducting studies where participants interact with real robots. Dr. Langer is an expert in research on the collaboration between humans and artificial systems. In his research, he, for instance, examines human-centered work design in the interaction between humans and artificial systems.

Implications for research and practice

For research, this session will a) introduce participants to the topic of human-centered work design in the collaboration with robots, b) make the IO community aware the topic of human-robot collaboration as an important emerging topic within IO psychology, and c) will allow researchers a tangible experience when directly interacting with a robot. For practice, this session will a) highlight the importance of human-centered work design in human-robot interaction, and b) show possible levers to improve the design of jobs where the collaboration between humans and robots is central.

#### Expected audience size and why

It is challenging to anticipate exact numbers with respect to audience size. Audience size will be restricted by size of the available room and under consideration of the demonstration area (i.e., where the robot will be located). We expect significant interest by the EAWOP23 attendees since only a minority of them will already have experienced working with a robot. Furthermore, there is an emerging community within IO psychology that examines human-robot collaboration. Researchers and practitioners from this community will likely also attend this session.

*Keywords: work design, robots, collaboration*

## **Demonstration D10**

### **The Team Based Learning Approach for Lectures/Training – Experiential Introduction**

David O Hanlon, Munster Technological University; Caroline Conlon, Munster Technological University; Maeve O Riordan, University College Cork

practice

Team Based Learning (TBL) is a highly interactive pedagogical approach used, primarily, in higher education as well as within secondary education and professional training contexts. Recent meta-analytic research has demonstrated how it can result in higher student attainment when compared to more traditional approaches in higher education. TBL is argued to be effective in the development of interpersonal skills with research indicating that engaging in TBL results in more positive attitudes towards teamworking.

TBL has been used successfully with cohorts of various sizes in face-to-face, blended and online contexts. TBL can transform live online sessions from more passive learning experiences to a far more engaging, interactive approach. Case studies of its successful adoption in Industrial Psychology, Positive Psychology, Statistics, Research Methods and psychology-related modules in business and health sciences programmes are present in the literature.

What distinguishes TBL?

The TBL approach contrasts with other small group teaching paradigms (such as Problem-Based Learning, Enquiry-Based Learning, Challenge-Based Learning), as well as ad-hoc group learning approaches in several ways:

Diverse, teacher-selected teams work together for an entire module/semester. They engage in two or more rounds of peer assessment and peer feedback during their time together.

The course content is usually divided into between 4-6 TBL “units”; each unit having the same basic structure:

- o Step 1: A Readiness Assurance Phase consisting of pre-class assignments, individual tests and team tests coupled with clarification of any misunderstandings of key concepts.

- o Step 2: “ Application Phase ” where a series of challenging “4S” exercises await. The 4 S model emphasises that teams should work on the same, significant exercises which require them to make specific decisions

- o Step 3: A “ Whole Class Discussion” phase where inter-team discussion is facilitated, and lecturer feedback/consolidation of key learnings can be incorporated.

The approach also scales well to large classes of 150+, without the need for extra teaching support.

What can attendees expect?

Lecturers or practitioners who are searching for novel, evidence-based ways of supporting learning within universities or training programmes may be particularly interested in attending. The session help them to consider how this approach could be applied within a Work and Organisational Psychology teaching context. Attendees will experience TBL from the perspective of a student/trainee, providing a unique introduction to this innovative approach. Attendees will:

Work within diverse teams alongside fellow attendees to complete a “Team Readiness Assurance Test” as well as several “Team Application Exercises”.

Observe how a facilitator can identify areas to clarify based on the profile of iRAT and tRAT scores.

Experience how the “4S” application exercise structure can make for engaging, interactive whole class discussion.

Learn about the practicalities of facilitating a TBL approach within physical and online classrooms.

The session will be led by a Work and Organisational Psychologist and lecturer who has who has used TBL in the teaching of subjects such as Positive Psychology, User Experience Design and Management. The session leader has presented research and workshops on TBL at a number of national and international conferences. He has also co-facilitated TBL workshops within TBL training programmes for faculty in higher education, as well as teachers in secondary schools.

#### Research

Whilst empirical research on Team Based Learning in higher education is growing rapidly since the early 2000s, research on Team Based Learning as a workplace training approach is minimal. During the session, attendees will learn about how TBL was used in a recent teacher training programme and the associated preliminary findings.

#### Relevance to Conference Theme

Problem solving and interpersonal skills are frequently identified as key skills for the future, as teams of diverse professionals will tackle complex problems together. TBL is an approach that gives students/trainees the experiences which can help them to develop these skills with a diverse range of peers in a safe environment during their education/training.

#### SDG Goals

Adopting TBL can help to provide quality education in a variety of contexts, including the distance learning context. The potential for students or trainees to engage with an impactful and highly interactive pedagogy from their own homes can help to ensure that high quality small group learning can occur across borders and for people who may not have the opportunity to travel.

#### Expected Audience Size

20-30. As the focus is primarily on teaching in higher education, this may prove popular to the many attendees who teach. This session, however, may also be of interest to those with research interests in training and development, or who work in training and development roles.

*Keywords: Teaching, Training, Learning*

## **Demonstration D11**

### **Forming the Future Working Environment - A dialogue tool concerning the hybrid balances for all ages in working life**

Mads Kristoffer Lund, Lise Keller | The Danish Sector Working Environment Council for Welfare and Public Administration

science&practice

Presenters:

Mads Kristoffer Lund, mlu@bfa.dk, MA in Communication Studies and Educational Studies  
Project manager in psychosocial working environment  
The Danish Sector Working Environment Council for Welfare and Public Administration

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Psychologist Specialist in work and organizational psychology  
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The Danish Sector Working Environment Council for Welfare and Public Administration consists of unions and employers' organisations in sector, working together on disseminating knowledge to boost positive factors in the psychosocial working environment and to prevent and manage occupational health and safety risks. It is a non-profit organisation.

The facilitators are an experienced project manager and an experienced psychologist in psychosocial working environment, both from the council secretariat.

The demonstration

The hybrid work place emerged as a way of working that many people were exposed to during the Covid-19 period in Europe. For employees, managers and workplaces, it reshaped the habits, routines and expectancies of working, combining working from home as well as showing up at the workplace. At the same time, public and private workplaces in Denmark face challenges recruiting the personnel they need with the skills they need for solving the tasks at hand. In this situation, it becomes relevant that the workplaces discuss how they can attract new employees and hold on to those already there. As a means to the discussion, we have developed a dialogue tool that takes the workplace through the discussion of these subjects:

Life phases: Is it possible to work more or less hours than 'standard' in different life phases?

Young employees: How do we make the workplace a place young employees want to join and a place they want to stay? How do we do onboarding in the hybrid workplace?

Senior employees: How can the work tasks and the psychological contract between the employee and the workplace be adjusted?

Working in part-time positions: Which concerns are important in order for employees in part-time positions to become and stay part of the workplace working community?

The hybrid workplace: How do we make it work? How do we manage virtual and physical employees in a fair and balanced manner? How do we promote equal participation and equal access to attractive tasks? How do we facilitate the sense of strong collaboration towards a common goal?

The demonstration will concentrate on the dialogue about the hybrid workplace.

The dialogue questions will facilitate discussions about the balances and concerns in the hybrid workplace. The workshop facilitators will present knowledge from research and investigations about the working environment on hybrid workplaces. And we will present the dialogue questions and facilitate the dialogue about the hybrid workplace.

#### Purpose for dialogue questions

The dialogue questions help the workplace talk about the different concerns and balances that the hybrid workplace need to address while aiming to create a strong working community and attractive workplace on one hand – that at the same time offers flexibility for the individual employee on the other hand. This dialogue theme is one of more offered to the workplace (the other themes are mentioned earlier) in order for the workplace to form a strategy for being an attractive hybrid and flexible workplace.

#### Targeted attendees

All with interest in creating dialogue about the hybrid workplace, the future workplace and life phases.

#### Outcome

The attendees will get experience with dialogue questions designed to address work environment in the hybrid workplace and the opportunity to discuss different objectives, concerns and balances regarding the hybrid workplace.

Keywords: Hybrid workplace; Future workplace; Making the workplace flexible and attractive for all age groups

## Oral presentations

### Oral presentation OP310

#### **“Where’s my desk?”: A longitudinal approach to investigate personalisation and ownership at the workplace**

Maria Gaudiino, Marijke Verbruggen & Anja Van den Broeck | KU Leuven

science&practice

Workplaces have undertaken a process of flexibilization, with companies aiming at making their offices more efficient. To achieve this goal, the choice is often a desk-sharing environment, with a range of diversified workspaces and no longer assigned desk that employees can personalise (i.e., nonterritorial offices). However, research indicates that many employees dislike the impersonal features of new offices. In fact, to some extent employees always tend to personalise their space according to what they like and what makes them comfortable. Personalisation in turn impacts their sense of ownership of the workplace, organizational commitment, teamwork and workplace satisfaction. On the one hand, limiting employees’ personal expression can bring about a risk for their psychological ownership and can cause employees to prefer telework rather than go to the office, which is often at odds with the intention of many employers to convince their employees to come back to the office after the long period of telework of the latest years. On the other hand, in an increasingly sharable work environment, group-oriented forms of personalisation might still be possible (e.g., decoration of shared spaces with objects referring to the team).

Despite the important implications envisaged for the affective bond between employees and workplace, the consequences of personalisation and psychological ownership have barely been considered in research on new workplaces. We take a psychological perspective and set up this study to test whether psychological ownership at the workplace mediates the relationship between workspace personalisation and relevant individual and organizational outcomes (i.e., actual number of days at the office, preferable number of days at the office, affective commitment).

Personalisation is a form of territorial behaviour (i.e., identity-oriented marking) which implies decorating or changing some aspects of the space with the more or less intentional aim of making the space more familiar and expressing to others some personal characteristics. In light of the new features in flexible offices, we distinguish between self-oriented and group-oriented personalisation. Psychological ownership at the workplace concerns the thoughts and feelings of owning the workplace. We argue that in traditional offices employees can easily develop ownership feelings toward their personal workstation, while in nonterritorial offices people can still feel ownership towards the whole office. We therefore advance a distinction between desk-related and office-related psychological ownership and we also include collective psychological ownership. Additionally, whereas the previous conceptualizations on territorial behaviours and psychological ownership posited that the former follows the latter, we argue that ownership can also result from personalisation (territorial behaviour), as working in a space that displays objects symbolizing one’s identity can contribute to employees’ sense of ownership.

The study is based on a longitudinal design consisting of 3 waves, conducted between March (T1) and October (T3) 2022. The final sample with valid responses at T1 consisted in 341 participants, while valid responses at T2 were 95. Data from T3 are still to be analysed. The survey was available in

four languages and distributed in multiple countries among employees working in various office environments.

The cross-sectional data showed an initial support for the mediation of desk-related psychological ownership between self-oriented personalisation and the number of days at the office as well as the mediation of collective psychological ownership between group-oriented personalisation and affective commitment. The integration of T2 data only gave support to the mediation of desk-related ownership between self-oriented personalisation and the actual number of days at the office.

The study mainly relied on self-report measures. Also, due to a large dropout of respondents, the final number of participants with the correct survey completion at T1 and T2 consisted of a smaller sample than expected. This can impact the significance of our results and limit their generalisability.

Our research is the first to examine personalisation and psychological ownership in traditional and nonterritorial offices, providing original contributions at the theoretical and practical level. First, there is support for the impact of personalisation on psychological ownership at the workplace. Second, it can be relevant to distinguish self- and group-oriented personalisation, and desk- and office-related ownership, as differences were found in their relationships with the outcomes. Third, our findings suggest that personalisation is a relevant factor to foster employees' presence at the office and affective commitment.

By focusing on the currently changing physical work environment, our study contributes to the conference topic Work patterns and conditions .

*Keywords: Personalisation of workspace, Psychological ownership, Nonterritorial offices*

## Oral presentation OP595

### Happy and productive? Daily interruptions and daily strategy use while working from home during COVID-19.

Luisa Solms, University of Amsterdam

science

#### Research goals

In today's dynamic workplaces interruptions are inevitable. Importantly, interruptions, which are loosely categorized as external or internal, can have a negative impact on employee well-being and performance (Baethge et al., 2015). While prior research has predominantly focused on interruptions that originate from external stimuli (e.g., phone calls), we respond to the call by Puranik et al. (2020) to also examine outcomes of internal interruptions, that is interruptions originating from a person's own internal processes (e.g., thoughts). Also, in contrast to prior work that studied how outcomes of workplace interruptions differ between persons, we study how work interruptions fluctuate within persons from day to day, explaining fluctuations in a person's daily work experience. Therefore, in his study we used a within-person design to investigate how daily internal and external interruptions of ongoing work are related to daily employee well-being and productivity. Specifically, we examined how a) mind wandering, a process where attentions shifts away from a primary task toward internal information and b) interruptions triggered by external stimuli, such as emails or phone calls, are related to work pressure, positive and negative affect and perceived task accomplishment. Also, based on research showing the importance of planning strategies for employees facing interruptions (Parke et al., 2017), we studied the relation between time management and boundary management strategies and well-being and performance. Time management refers to short-term planning of daily work tasks, while boundary management refers to tactics that help individuals to manage work and family time such that both domains do not interfere with each other.

#### Theoretical background

The Job Demands-Resources theory (Bakker & Demerouti, 2001, 2017) provided the main theoretical basis for our study, describing how job demands (i.e., interruptions) and individual strategies (i.e., boundary management and time management) are related to well-being and performance. We hypothesized that daily internal and external interruptions would be associated with lower positive affect, higher negative affect, higher work pressure and lower task accomplishment at the day-level. We furthermore predicted that daily time management and boundary management would be associated with higher positive affect, lower negative affect, lower work pressure and higher task accomplishment at the day-level.

#### Design

A total of 162 doctoral students completed a general questionnaire and a daily survey over a period of five consecutive work days. Participants were 59% female, 50% Dutch, and had an average age of 29. Our final multilevel dataset consisted of 687 day-level cases nested in 162 persons. We used multilevel modeling to analyze the data using a maximum likelihood estimator in Mplus 7.31. We modeled the within-person slopes (effects) as fixed, and we group-mean centered all our predictor variables.

#### Results

Analyses revealed that internal interruptions were associated with lower positive affect, and higher negative affect, higher work pressure, and lower task accomplishment. External interruptions were associated with higher levels of work pressure and lower task accomplishment. With regard to the proactive strategies, we found that time management was associated with higher positive affect and higher task accomplishment. Boundary management was associated with higher positive affect, lower negative affect, lower work pressure and higher task accomplishment.

#### Limitations

The homogenous sample of our study limits the generalizability of our findings. Although we expect the underlying mechanisms to work similarly in other occupational groups, future research needs to test this. Another limitation relates to our analysis approach that does not allow for any causal conclusions.

#### Conclusions

While previous research has mainly focused on external interruptions, our study examined day-level relationships between both external and internal interruptions and employee well-being and performance. We found that both external and internal interruptions may jeopardize employee performance, however, with regard to well-being, internal interruptions seem to be more harmful. Importantly, employees can use protective strategies (i.e., time and boundary management strategies) to guard their well-being and performance. Given that boundary management was more beneficial compared to time management, employees may benefit from creating (temporal) boundaries between work and non-work to maintain their well-being and performance.

#### Relevance to the Congress Theme

To secure employee happiness and productivity in today's (remote) workplaces, it is important to understand the effects of different types of interruptions and to equip employees with strategies to prevent or minimize the negative impact thereof.

*Keywords: work interruptions, time management, boundary management*

## Oral presentation OP144

### **THRIVE@WORK - Training programme for well-being at work for HR managers that want their organisations to thrive**

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science&practice

Research goals and why the work was worth doing:

The aim of this study was to assess HR professionals' perceptions and viewpoints on the importance of implementing well-being practices in the workplace, challenges they face during these efforts, the needs they might have in implementing wellbeing programmes and their intentions in developing well-being programmes. This study was conducted in the framework of the THRIVE@WORK project, an Erasmus+ funded project that aims to promote well-being at work by encouraging HR professionals to dedicate resources and invest in programmes for the psychosocial well-being of their staff.

Theoretical background

Despite existing good practices, management of workplace well-being is generally not embedded in HR policies in organisations, nor supported by national policies, especially in SMEs. The EU supports and promotes the well-being approach; however, it lies in the power of each organisation in the Member States to adopt this notion and to create such policies (European Agency for Safety and Health at Work, 2013). These skills and strategies related to workplace well-being are not usually adopted by companies, thus it is important to develop a compact source of information to impart the knowledge of the HR community of Europe. In the present study, the definition of well-being in the workplace was based upon principles of Positive Psychology, and more specifically, Seligman's (2011) PERMA model was used.

Design/Methodology/Approach/Intervention

In the framework of the THRIVE@WORK project, each partner country in the consortium (Cyprus, Belgium, Italy, Greece, and Bulgaria) conducted primary research at the national level utilising an online survey to assess the perceptions and training needs of HR managers in setting up wellbeing programmes for the organisations they work for. By utilising the findings from this primary research, the consortium is designing and developing the THRIVE@Work training and mentoring programme that aims to equip HR Managers with the right knowledge and skills to develop comprehensive well-being programmes and educate and mentor their organisational leaders and co-workers in key well-being principles and practices.

Results obtained

A total of 156 participants from all 5 partner countries participated in the online study. More specifically, HR professionals were asked to rate on a scale from 1 (strongly disagree) to 5 (strongly agree) the extent to which items (e.g. "My organisation takes employees' well-being seriously") reflect their organisations' overall approach to well-being. Findings indicated that overall organisations in partner countries hold a positive approach towards well-being in terms of taking a positive action on health and well-being, taking employees' well-being seriously, committing resources to promote employee's well-being, and understanding the importance of employee well-being. HR professionals were also asked to rate perceived factors that influence well-being at work

(e.g. “Leadership commits resources and effort to promote well-being in this organisation”). Correlation analysis indicated that the overall organisational wellbeing was positively related to each individual's perceived factor (relationships, health and safety, work-life balance, workload, leadership commitment).

Participants were also asked about factors that hinder their efforts in implementing wellbeing programmes. Findings suggested that lack of leadership commitment and lack of resources were the most frequently reported hindering factors.

#### Limitations

Cross-sectional nature of study, self-reported data and relative small sample size.

#### Conclusions – research and or practical implications/Originality/Value

This study has brought to the surface needs and gaps in terms of workplace wellbeing practices and relevant policies. In light of these findings relevant workplace wellbeing policy recommendations that will be relevant to policy-makers and decision-makers at the government level (e.g. national and EU MPs), but could also be used by HR professionals who wish to apply such policies in their organisations, will be presented and discussed in the presentation.

#### Relevance to the Congress Theme

The study is relevant to the Congress Theme “The Future is Now: the changing world of work”, as employee well-being, especially following the pandemic, has expanded beyond physical well-being to focus on building a culture of holistic well-being including psychosocial wellbeing.

#### Relevant UN SDGs

The topic is relevant to the Sustainable Development Goals (SDGs) and especially to the goal for good health and wellbeing.

*Keywords: well-being, PERMA model, psychosocial wellbeing*

## Oral presentation OP227

### "On building employee inclusion: A Preliminary Validation of a measure for assessing the Social Drivers of Inclusive Workplaces (SDIW)"

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science&practice

Research goals. Firms are increasingly aware that people's diversity and inclusion are a source of competitive advantage. Although research on these issues is growing rapidly, a clear set of constructs is still lacking, which limits empirical testing (Jackson & Joshi, 2011). Based on Shore et al.'s (2018) model of inclusive workplaces and the Perceptions of Social Context framework (PoSC; Borgogni et al., 2010, 2022; Johns, 2006), this study aims to provide a preliminary validation of the SDIW scale, which simultaneously assesses the employee's perceptions of inclusive behaviours of the main social actors within organizations (i.e., management, leaders and co-workers).

Theoretical background. The benefits of a diverse workforce are unlikely without inclusion (Offerman & Basford, 2014). Workplace inclusion can be built by incorporating diversity into organizational priorities, making people feel safe to belong and contribute to their full potential (Jeronimo et al., 2021). Notably, a recent review suggested several social drivers of inclusion, including the workgroup and leadership (i.e., by shaping one's perceptions of the balance between belongingness and uniqueness) and top management (i.e., by implementing policies and practices; Shore et al., 2018). Based on the literature on the PoSC framework (Borgogni et al., 2010, 2022; Johns, 2006), we propose that the perceptions of workplace inclusiveness may be conceptualized through the inclusive behaviours of co-workers, leadership, and top management as perceived by the individual. Our proposal is in line with the contributions suggesting the need to investigate the comparative effects of different social influences on employee's health and job outcomes (Kim et al., 2017).

Design. A total of 1244 employees from a large Italian telecommunications company completed an anonymous online survey. The survey assessed: Inclusive Top Management (iTOM; 10 items), measuring the degree to which the top management implement policies and practices that provide representation, protect and value diversity and treat employees equally; Inclusive Leadership (iLEAD; 9 items) measuring the degree to which leaders commit themselves to problematize prejudices against diversity, nourish individual uniqueness and promote the integration of differences; Inclusive Co-workers (iCOW; 9 items), measuring the degree to which co-workers dialogue constructively, consider and integrate diversity as an added value to achieve common goals. The set of items was developed with a specific reference to diversity (i.e., cultural differences, ethnicity, gender, disability, sexual orientation, and age).

Additionally, we measured as correlates: negative regulatory emotional self-efficacy (RESE; Alessandri et al., 2018), affective commitment (AC; Allen & Meyer, 1999), interpersonal strain (ISW; Borgogni et al., 2012), the satisfaction of relatedness need (SRN; Van de Broeck et al., 2010), and mobbing (MOB; Nam et al., 2010). Participants were randomly divided into two groups to perform exploratory factor (EFA) and confirmatory factor (CFA) analyses. Reliabilities were estimated. Alternative models were tested through CFAs (1-factor, 2-factor, 3-factor, higher-order and bifactor models). Convergent and discriminant validity was explored. A series of ANOVAs were conducted on SDIW subscales.

Results . The EFA suggested a three-factor solution ( $\chi^2 = 765.83$ ,  $df = 297$ ,  $CFI = .97$ ,  $TLI = .96$ ,  $RMSEA = .05$ ,  $SRMR = .02$ ). The three subscales had good reliability (iTOM  $\alpha = .93$ ; iLEAD  $\alpha = .97$ ; iCOW

$\alpha=.91$ ). The three-factor structure was confirmed by the CFA ( $\chi^2 = 673.54$ ,  $df = 347$ ,  $CFI=.95$ ,  $TLI=.95$ ,  $RMSEA=.06$ ,  $SRMR=.04$ ). This model outperformed all alternative models, according to fit indices and  $D\chi^2$  test. As expected, the dimensions were positively related to RESE, AC, and SRN, and negatively associated with MOB and ISW. Women had lower perceptions of iCOW than men, while senior employees had lower iLEAD perceptions.

**Limitations.** This cross-sectional study was limited to a single Italian company and relied only on self-report measures.

**Conclusions.** The preliminary validation of the SDIW scales provided a comprehensive, valid, and reliable measure to advance research on workplace inclusion as perceived by employees through the behaviors of social organizational constituents. Notably, the proposed model may help practitioners map the social drivers of inclusion within workplaces to design ad-hoc interventions.

**Relevance to the Congress Theme.** As organizations become increasingly aware of the importance of placing people at the center of their processes, our study is helping to advance research and applications on diversity and inclusion.

**Relevant UN SDGs.** Diversity and inclusion.

**Audience.** Both practitioners and academics

*Keywords: diversity, inclusive workplaces, perceptions of social context*

## Oral presentation OP674

### "Self-lead your work, but with others!" -- The paradox of self-leadership while homeworking in a moderated moderation model

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science

Research goals and why the work was worth doing

This study aims to highlight, through the testing of a moderated moderation model, the booster effects of concordance of tasks to be performed, with the manager and colleagues, in the relationship between self-leadership and performance within a homeworking setting. This research emphasizes how promoting self-leadership behaviours to effectively manage remote work may not be enough to achieve good and that self-leadership behaviours, without coordination with others, may bring no relevant results.

Theoretical background

Scientific and popular literature agree that self-leadership is a key for remote work. Adopting self-leadership behaviours involves setting goals and monitoring oneself efficiently and is associated with good outcomes, especially in a homeworking context (Galanti et al., 2021).

However, literature on personal and group self-management behaviours suggests that self-leadership does not always pay off (Langfred, 2000). This is particularly true in the cases in which self-leadership is not accompanied by good coordination with others, and especially with supervisors and colleagues. The risk is indeed, to end up in a condition of self-estrangement, which literature already showed to be detrimental to performance (Golden & Veiga, 2018).

We test precisely the relationship between employee self-leadership behaviour and homeworking performance by evaluating the role of the two moderator variables of task agreement with supervisor and task agreement with colleagues in this relationship.

Methodology

135 Italian civil servants (69,4% F; 49.6% in the age group 46-55, 59% with tenure < 15), all engaged in remote working for at least three months at the data collection time, participated in this cross-sectional research. They answered an online questionnaire on Qualtrics, which was administered to them for research and for organisational diagnosis purposes, in a survey assessing the efficacy of a remote working programme.

To carry out this research, the following variables were investigated. Self-leadership: 4 items of the goal setting and self-monitoring dimensions of the scale by Houghton & Neck (2002) (7-point Likert responses, Fully Disagree-Fully Agree); Homeworking performance : 7 items of the scale validated by Toscano and Zappalà (2022) (7-point Likert responses, Very Poor-Excellent); Task concordance with supervisors and Task concordance with colleagues : for each, a single item stating „How much of the tasks you performed at home were agreed upon with your supervisor/manager?“ (5-point Likert response scale, Not at all-Very Much). The hypothesised relationships were computed by using the model 3 of the PROCESS macro for SPSS.

Results

The results confirmed, as expected, a direct positive relationship between self-leadership and homeworking performance. Nevertheless, they also revealed, through the different generated interactions, how homeworking performance does not increase as self-leadership behaviours increase in the cases they are not accompanied by adequate levels of task concordance with supervisors and colleagues. On the contrary, as one of this increases or, at best, both the task concordances are higher, as self-leadership behaviours increase, it is possible to observe a sharper increase in homeworking performance. This substantially confirms the reasoning according to which self-leadership alone is not enough to increase performance, and brings benefits for this purpose only when accompanied by a good concordance of the tasks with supervisors and colleagues.

#### Limitations

Among the limitations of the study, we point out the cross-sectional design of the study and the self-assessed nature of the variables. The homeworking period to which the data refer, relating to the first COVID-19 waves, could also represent a limitation and affect the data generalizability. In addition, we note the need in future studies to better investigate the task concordance measures, avoiding the use of single items.

#### Conclusions

This study reveals that the rhetoric of self-leadership as a key to homeworking may be misleading. Although the importance of these behaviours is recognized and confirmed, this research shows that the need to individualise the planning and accomplishment of work is accompanied by the need to agree punctually on the tasks to be carried out with supervisors and colleagues. Homeworking is a resource, but no homeworkeer is an island, thus a correct balance between self-leadership and coordination with others is essential to obtain the best results in terms of productivity.

#### Relevance to the Congress Theme

In accordance with the purposes of the congress, with a view to the progressive increase of homeworking, we provide information to optimize this way of working and provide employees with the possibilities to carry it out in a more productive way.

*Keywords: self-leadership, tasks concordance, homeworking*

## Oral presentation OP744

### **"You're a nobody when you're unemployed": Unemployed's labeling, through a social cognition perspective**

Charly Marie, Université de Lorraine (Metz, France); David Bourguignon, Université de Lorraine (Metz, France); Ginette Herman, Catholic University of Louvain (Belgium); Pierre Bouchat, Université de Lorraine (Metz, France)

science&practice

Research goals : Unemployed people are perceived in a very negative way (Norlander et al., 2020; Seghouat et al., 2021). This stereotype and the associated stigma have four main consequences for the unemployed, who:

Are discriminated against in access to employment (Kroft et al., 2013), depending on the length of time spent unemployed (Ghayad, 2013);

Exhibit poorer social inclusion, self-esteem and psychological well-being (Bourguignon et al., 2022; Brand, 2015; Wanberg, 2012);

Experience a deterioration of their physical and mental health, in part due to the effects of stigmatization (Andler et al., 2020; McKee-Ryan et al., 2005; Paul & Moser, 2009);

Do not take-up their unemployment insurance for 1 in every 3 eligible people in France (Hentzgen et al., 2022);

Why the work was worth doing: In view of these effects, it is crucial to better describe unemployed people's stereotype content, as well as its mediators and consequences, in order to relieve as many of its effects as possible.

Theoretical background: Social judgement is organised around the dimensions of warmth and competence, recently sharpened into the sub-dimensions of friendliness and morality, and ability and assertiveness (Abele et al., 2021; Fiske et al., 2002). These facets elicits various emotions (admiration, disgust, envy and compassion) that can be followed up through behaviour (Cuddy et al., 2007). Seghouat et al. (2021) show that French (study 1) and Belgian (study 2) workers judge the unemployed as less competent, perseverant and moral than employed people, with no difference on their friendliness.

Although this model is not strictly speaking a model of dehumanisation, some research has shown that groups perceived the lowest are often denied full humanity (eg. addicts and homeless people, Harris & Fiske, 2006; Haslam, 2006).

Methodology: As the group of 'workers' is diverse, we first investigate unemployed's stereotype content via two questionnaire studies considering a socially highly valued group (firemen) and highly devalued one (railwaymen). Those two groups were selected on the basis on a pre-study. Since the literature predicts that specific groups are subject to extreme devaluation, we also test this hypothesis through (1) mechanistic and animalistic dehumanization in which targeted individuals are respectively compared with machines or objects, or with animals and (2) the "ascent of man" (Kteily et al., 2015) scale. Finally, a third questionnaire study with job placement professionals tests mediators of social judgement .

The first two studies, with mostly female students, examine unemployed's stereotype content in comparison to firemen and railwaymen (n1 = 259; n2 = 200). A third study, currently underway (n

temporary = 96 respondents), assesses the effects of positive and negative contacts on the general attitude towards the unemployed through Kenworthy et al.'s (2005) mediators: (1) perspective-taking and empathy, (2) intergroup anxiety and (3) increased outgroup variability, using path analysis.

Results: First two studies found that the unemployed are judged the most negatively when compared to firemen and railwaymen, on the dimensions of morality, ability and assertiveness but also friendliness. They evoke more disgust and less admiration.

In Study 2, compared to firefighters, the unemployed have higher scores on animal infra-humanisation but no difference in their mechanical infra-humanisation score. They also score the lowest on the 'ascent of man' scale (Kteily et al., 2015), which is itself predicted by social judgment and emotions.

The third study, currently underway and carried out with job placement professionals, suggests (n temporary = 96 respondents,  $\approx$  200 are expected) that contact, especially positive ones, has direct effects on attitudes towards the unemployed, and indirect effects mediated by Kenworthy et al.'s (2005) mediators.

Limitations: Although the literature has demonstrated causal effects of the stereotype content, as well as of contact and its various mediators, our design does not manipulate any information and our path analysis cannot overcome this limitation.

Conclusions and practical implications : Unemployed people bear a highly toxic social identity, with numerous consequences on their social and professional integration, psychological well-being, physical and mental health. A better understanding of the stereotype content and its consequences, in relation to the international literature, offers avenues for future studies, as well as for actions aimed at improving their inclusion with job placement professionals.

Relevance to the Congress Theme : The representation of the unemployed, and its toxic consequences, leads to a set of highly negative consequences for them and for society at large. We believe that this stigma must change in order to build a more inclusive future for the 13 million of unemployed people in the European Union (EuroStat, 2022).

*Keywords: Stereotypes, Stigma, Discriminations*

## Oral presentation OP508

### **'Don't Push it': The Role of Psychological Safety in Push and Pull Mechanisms towards Turnover of Elementary School Teachers**

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science&practic

Elementary school teachers play a crucial role in our society. In their signification position, they aid and facilitate children's early development and growth, fundamentally contributing to the future. Despite this rewarding job, the responsibility and role of elementary school teachers bring along many challenges. In class, these challenges range from addressing individual students' difficulties and potential, to managing different children at the same time. Outside of the classroom, teachers are likely to experience contradictory or conflicting requests or aims from children, their parents, colleagues, the principal, and the surrounding community. Facing these different stakeholders is likely to be translated into emotional labor and increased frustrations with the job or school. These frustrations may lie both in the domain of autonomy and in the domain of competence. Here lies a risk for hampering the job motivation of elementary school teachers and increasing turnover. Against the backdrop of the Self-Determination theory, both a push and pull mechanism toward turnover are identified.

Feelings of being pushed out of this job may stem from the following dynamic: Elementary school teachers may feel that their job is no longer appropriate for them – in light of frustrations about autonomy and feeling competent –, they may also believe that their organisation, or school, is no longer the environment they fit in because it is unable to address the issues they face. At the same time, teachers have several employment alternatives available since this profession faces shortages, especially in cities. Perceived better employment alternatives elsewhere can pull teachers out of their current job, putting potential turnover as a real threat to the continuity of the school and education. This study aims to test the combination of these push and pull mechanisms of the Unfolding Theory of Turnover among elementary school teachers.

We collected data from a Dutch Educational Foundation of elementary schools in one city in The Netherlands. In total, 119 elementary school teachers from 15 schools filled out the questionnaire consisting of validated and widely used scales. The survey also consisted of an open-ended question about reasons for leaving the school. The mediation model was tested through HLM.

Preliminary results indicate different levels of turnover intention between schools and different associated mechanisms on a job-, organisational-, and career level. Between schools, differences appeared concerning the impact of organisational career management and person-organisation fit (both with the Foundation as the referent), and schools' psychological safety, on turnover intention. Within-group differences found job-level push mechanisms and revealed associations of emotional labor, autonomy and competence thwarting, and person-job fit with turnover intentions. For the pull mechanism, perceived quantitative and qualitative employability was curvilinearly associated with turnover intention, partially mediated by individual career management. Different types of events were identified from the open-ended response field question, like personal development opportunities that ultimately pull and push them towards exit.

The limitations of this study lie in its cross-sectional test and the limited amount of respondents. However, the multi-level and multi-method approach adds value to this research and practical domain. The role of psychological safety, the differences between the groups of each principal, and the struggles with emotional labour and frustrations uncover more specific practical implications.

The combination of the push and pulls mechanisms depicts a teacher's turnover route. These insights allow us to establish alternative actions and avoid valuable teachers leaving a school or profession. This study suggests advising schools to invest in developing teachers' coping skills, addressing frustrations, and safeguarding psychological safety through interventions like sharing experiences. Because ultimately, elementary education teachers plant seeds for becoming adults and our future.

This study taps into different elements of the Congress Theme 'The future is now.?!'. Firstly, it addresses the optimal functioning of elementary school teaching professionals and sheds light on job-related, organisation-related, and career-related elements when considering leaving this job. The 'contribution' focus of the Congress Theme within this study lies in the crucial future-oriented and -relevant role of educators. The 'urgency' focus lies in the context of children in schools. Children are our future and the educator is preparing them for the future. And the 'delivery' focus especially lies in the psychological safety aspect and comparisons with the other elements and mechanisms, and the applied nature of this study, in short: which route to prioritize for this target group in the future.

*Keywords: Turnover, Psychological Safety, Teachers*

## Oral presentation OP790

### **'Goal setting your way through a pandemic': Assessing the impact of a Reflective Goal Setting (RGS) approach on the development of personal resources**

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science&practice

Research goals and why this work was worth doing

“The RGS model has helped me become a better version of myself during this pandemic. When the whole world shut down and staying home meant that unproductivity was officially an approved solution, I was able to work on myself and well-being. This is a precious experience.”

When Covid-19 hit, remote working became the norm – and study for higher education students. Research has explored the change in demands of enforced remote learning and subsequent effects on mental health and wellbeing, cognitive functioning, and coping. We go further and examine the impact of a 3-month goal setting intervention - when learning was predominantly remote during lockdown in the UK. Finalists embarked on a personal development goal setting programme in a UK Business School, providing a unique viewing window on their pandemic experiences. We show how goal setting during such an adverse and changing scenario built crucial skills and personal resources. Students self-set personal development goals utilising the five-stage RGS process and ongoing written reflective diaries provided unique insights on their 'lived' pandemic experiences and the impact of RGS.

Theoretical background

RGS is based on several key theoretical approaches and constructs: Goal Setting Theory, Pennebaker's Trauma Narration, Gibb's Reflective Model, and the JDR model.

Design/Method/Approach/

Findings are based on thematic analysis of written reflective documents of a randomly selected subset of 50/117 cases. We specifically explore how RGS impacted on managing pandemic challenges.

Results attained and expected

Covid-19 introduced a range of demands for our goal setters, impacting on goals such as mastery in sport and anything requiring face to face contact. But goal setters created ways to seek out practice grounds, becoming highly resourceful. Many acknowledged how the lack of usual distractions due to restrictions, made it easier to achieve their goals - especially those related to academic growth. They reported the impact of many negative stimuli (such as family/parents' isolation and fear of and catching covid), on developing resilience not usually offered in their usual student experience. “I still feel I have improved, and I feel very capable to deal with resilience building situations in the future.”

Reflective goal setters reported that RGS and its features helped diminish the negative aspects of Covid-19. Some acknowledged the impact of several months of lockdown on their work ethic and motivation and reported that goals helped them focus and gave hope and purpose at a time when “It is easy to feel unproductive and like you're not contributing towards anything.”

Reflective Goal Setting helped them establish routines in a highly unstructured time, full of many unknowns – especially well-being and fitness related goals made difficult with the closure of gyms etc.

Goals became essential for 'now' as opposed to future orientated. Goal-specific tools and skills led to the development of personal resources to help cope with studying remotely and the wider Covid scenario. For example, goals around stress-management, self-regulation and work-life balance enabled much needed balance in the remote working experience.

Also, ongoing written reflection led to sensemaking related to their current situation and a new focus on values and priorities as resources. For example, many saw the value in better contact with my friends and family, e.g., "Time in lockdown has meant I have had more time to sit back and think about my situation more and realise what is important, being stripped of the luxuries, I now know that all I need is exercise and friends, and I should not stress myself out when things go back to normal and more stressful situations arise."

Further, some saw the diary as a way of having crucial 'conversations', not possible with friends due to self-isolation. "As a people person who gets their energy and therapy from people-contact, the extreme isolation in COVID lockdown would have resulted in mental health deterioration if I didn't have this reflective journal to unload on and talk to. And in this way, it has been a very valuable resilience and stress management tool as well as crucial to my reflective goal setting."

#### Limitations

RGS is only with students here, but we will argue for the transferability of the framework to leaders and managers and a range of occupational settings and challenging/adverse scenarios.

#### Research/Practical implications

Benefits of using ongoing written reflections and RGS as a framework for research. Shows that the framework can help people cope, adapt and transfer skills into adverse experiences.

#### Originality/value

Unique opportunity to study 'lived' experiences for a substantial period during the pandemic. Able to examine the impact of goal setting during adverse and changing times and prefer ways to support the building of personal resources to meet demands by setting personal development goals.

*Keywords: Reflective Goal Setting, Covid-19, Personal Resources*

## Oral presentation OP535

### **“Black Holes” in the Inter-Organizational Network in Mental Health Care of Forced Migrants: The Cultural Mediators' Point of View**

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science&practice

Taking of caring of forced migrants with mental health issues is undoubtedly a very delicate and complex task. The diversity of needs of this population creates complex and persistent problems of service coordination, which is well established in many healthcare systems. One obvious solution is to create a network of regular links for coordinated care planning, referrals and exchange of information on migrants between the providers involved, with the aim of facilitating beneficiaries' transitions between one service and another that often fall into “black holes” of the network. This complexity creates the need to activate cultural mediation interventions, since dialogue between migrants and providers does not develop automatically but needs to be effectively supported and stimulated. Knowing the other person, his or her history, culture and religion is certainly one of the fundamental aspects in set up interventions aimed at the mental health care of forced migrants. Luatti defines mediation as 'mosaic professionalism' to indicate the variety of roles and activities associated with this profession. The main role of the cultural mediator is to act as a 'bridge' between cultural and linguistic differences in the relationship between foreign users and professionals. Cultural mediators are, in fact, in both 'camps' at the same time, they often belong to the same migrant population, as well as being members of the professional team. These alliances can influence the quality of the collaboration. As cultural mediators adapt intelligently to the context the quality of their interventions is often most visible especially in relation to networking between services. This professional has, in fact, a privileged view of the services, because he is in contact with several different operators at the same time, and a deeper and more continuous contact with the users. Most of the studies present in the literature on service networks highlight the need to activate inter-organizational networks for the important issues facing societies (poverty, crime, health promotion, economic development, natural disaster, education, health care reform) but rarely consider networks for the mental health care of forced migrants and still less consider the cultural mediators' perspective. For this reason, our research aims to explore, the strengths and weaknesses that cultural mediators identify in the inter-institutional and inter-organizational network responsible for the mental health care of forced migrants. The study is part of a broader research project that involved the institutional actors of the network of services for the care and reception of forced migrants in northern Italy, including the territorial psychiatry, the reception services, the prefecture and the municipality.

In the following qualitative study, we will only report the results of the 10 semi-structured interviews conducted with cultural mediators from different backgrounds and with different professional experiences. To grasp the deeper elements of their relationship with the users and with the other professionals; a symbolic graphic tool using 15 different pictorial images was proposed during the data collection. Data analysis was conducted within a constructivist paradigm; a paper-pencil content analysis was carried out following the lines of the IPA. From the interviews, emerged a very strong relationship between aspects of ineffectiveness of the network of reception services and the malaise and difficulties in the work of cultural mediators. Although mediators recognize that there are very effective parts of the network and that in recent years there has been a strong improvement in the work effectiveness and competence of individual professionals, the difficulty of communication and the gap of standardization in the passage of information from services of the network make the work

of the cultural mediator very complex. The malaise, shared with the beneficiaries who is often subjected to too much information and little concrete support from professionals in moving between services, is strongly linked to the fragmented nature of services. In a logic of future improvement, it would therefore be necessary to ensure that the network of services is structured more in a logic of centralized and institutional management. This improvement would make it possible not only to speed up and improve the care of users but also the wellbeing of cultural mediators. The main limitation of this study relates to the difficulty of having an exhaustive representation of the cultural mediators' nationalities who are very difficult to recruit. We believe that this contribution is relevant to the theme of the congress because we cannot solve the problem of migration without strengthening the network of mental health care services for migrants and without putting the professionals who care for them in the most favorable conditions to do their work.

*Keywords: inter-organizational networks; mental health care; forced migrants; cultural mediators*

## Oral presentation OP660

### **“Craft your overload.” When autonomy becomes a demand.**

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science&practice

#### Research goals

Before the COVID-19 pandemic caused many disruptions, it was already clear that labour shortages, market competition, and technological transformations had redefined the work design and the conditions for workers (Hanelt et al., 2021) in knowledge-intensive work. With the acceleration of the work pace, it is more challenging to maintain the adequacy between the business goals, objectives, and work demands, in particular the technological demands (Day et al., 2021) to which workers must answer (e.g., effort level) and the resources available to them (e.g., time, control or support). Faced with more complex work demands and fewer resources, workers must, therefore, “always do more with less” with the risk of harming their psychological health at work. The main objective of this study is to outline the current understandings of the increasing overload in the context of unprecedented times to modify the work organization.

#### Theoretical background

Although the JD-R model (Bakker, 2011; Bakker and Demerouti, 2007) supports a link between workload (demands) and effects on stress and mental health, the specific dimensions of demands and resources are incomplete and imprecise as knowledge workers may experience the same work-related or organizational issue as both an opportunity and a source of stress (Ipsen and Jensen, 2012). In addition, it fails to capture recent and current work transformations (e.g., the increase in the information needed to be processed to complete the task and growing expectations of availability; Medzo-M'engone, 2021), as well as the new context for performing the task (e.g., digital connection that makes psychological detachment more difficult; Hu et al., 2021).

#### Method

We conduct a scoping review to give a recent portrait of the work (over)load in knowledge-intensive work post-pandemic. The review 1) considers the current and unprecedented context of changes in work and their effects on workload and well-being at work; 2) takes a mixed exploratory and multidisciplinary methodological approach to ensure a better understanding of the complexity of the work (over)load and the causes; and 3) a collaborative approach to consider workplace changes and support evidence-based action. The scoping study follows the six steps by Levac et al., (2010). The key inclusion criteria are empirical studies published in English or French, carried out among knowledge workers, and published from 2017 (before and during the pandemic and the "new normal"). The review builds on journal articles indexed in 111 databases (e.g., APA PsycInfo, ABI/INFORM) or Publishers & Content Providers (e.g., ProQuest, EBSCO).

#### Results expected

The scoping study's results will offer an overview of the work (over)load regarding the literature and stakeholders' perspective. The preliminary results show the importance of the interdependency between the workload and the autonomy (or control), especially for knowledge workers. If autonomy represents a resource for workers dealing with high demands, then autonomy (flexibility)

can also represent a risk when the worker has to perform in this « new context » (e.g., synchronous vs non-synchronous work). The multiple changes in job design before and as a consequence of the COVID-19 pandemic have made work organization obsolete and changed the responsibility for organizing and managing the tasks and working time. They do not just have to perform the task in the context of overload; they also have to do their job design to craft their job. If unsupported, people will look for individual strategies to manage the overload. In conclusion, these strategies will become insufficient and harmful to health and performance. Consequently, the organizational design needs to be aligned to avoid an unsolicited effect on performance and well-being (Ipsen and Jensen, 2012).

#### Limitations

This study has started in May 2022, and the complete results will be collected and analysed during the winter

#### Research and practical implications

From a theoretical perspective, this study will offer a systematic portrait of current scientific knowledge on unprecedented transformations in the world of work and their effects on workload, in addition to integrating immediate knowledge about "the new normality". It will contribute to a better understanding of the relationship between resources and the demands for knowledge workers in this new context. For practical implications, this project will provide organizations with a first frame of reference for managing (over)workload.

*Keywords: workload, knowledge workers, work patterns and conditions*

## Oral presentation OP187

### **“Diversity is a mix and inclusion is making the mix work”: the impact of diversity communication on diversity choices and inclusion**

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science&practice

#### Research goals

Our research investigates whether short diversity communications (e.g., diversity statements on websites) foster choice of diverse teams across a variety of settings, as well as whether they promote the inclusion of diverse team members. Our results demonstrate the effectiveness as well as the limits of such diversity communications. We found that short diversity communications targeted at age were effective and significantly increased the selection of age diverse individuals into teams. However, similar diversity communications targeted at gender had no impact on the selection of women into teams nor on other inclusive behaviors. Thus, our research highlights that diversity communications and policies must be tailored to the targeted group, to change the representation and inclusion of disadvantaged employees in the organization.

#### Theoretical background

To foster work in diverse teams, linked to more creative decision making and increased innovation, firms often use diversity communications. According to social information processing theory, these diversity initiatives carry information about desirable behaviors that individuals then process through a central or peripheral route, further impacting their attitudes and behavior. However, it is unclear whether diversity initiatives such as diversity communications result in a positive impact on the selection and inclusion of diverse teammates.

#### Design

We conduct five online experiments (N\_Study1=122; N\_Study2=183; N\_Study3= 107; N\_Study4= 114; N\_Study5= 121), where participants have to select other people to join their team, from a set of different candidates varying in age, gender and/or personality. Participants in each study are randomly allocated to one experimental condition, either including a diversity communication encouraging work with targeted individuals (older individuals or women, depending on the study) or not. We investigate how frequently people choose the diverse individual targeted by the communication as their teammate and how inclusive they successively are. We further test whether their behavior can be accounted for by the presence of the diversity communication.

#### Results obtained

In our studies investigating the impact of age diversity communications, we find that participants are 51% more likely to choose the older person into their team when there is a diversity policy. Moreover, the communication only increased the inclusion of older individuals specifically, as it had no effect on selection rates of women or individuals with certain personality traits. Yet in our studies on gender, we find no significant effect of the diversity communication on choosing a woman as teammate. In addition, diversity policy had no impact on inclusion, as people were not significantly more inclusive after they were exposed to a diversity policy.

#### Limitations

Participants were exposed to a diversity communication encouraging work in diverse teams right before selecting their teammates. It would now be interesting to test whether the effects we find replicate in a different setting, where participants are exposed to a diversity policy but make diversity-related decisions with a time delay. Moreover, future research could use additional measures of inclusion. We measured inclusion with a behavioral measure (choosing teammates) and behavioral intentions, using a modified version of the Organizational Citizenship Behavior scale. Further research could broaden the scope and include additional behavioral measures of inclusion (e.g., helping).

#### Conclusion

Our research highlights that organizations striving to encourage work in diverse teams should choose the diversity initiative they implement with caution. In fact, while we find consistent evidence for the positive impact of age diversity communications, we find no such impact for gender diversity communications. To our knowledge, our research is the first of its kind to integrate perspectives on the impact of diversity policies targeted at gender and age, while quantifying their effect on inclusive behaviors.

#### Relevance to Congress Theme

As remote work has become increasingly common in recent years following from the pandemic, it is of tantamount importance to investigate whether short online diversity communications can increase diversity in virtual teams.

#### Relevance to UN SDGs

The UN has made explicit that it wishes to put at the forefront the reduction of inequalities and gender equality. Hence this research is particularly relevant as it investigates which policies can be put in place to reduce age and gender inequality in the workplace.

*Keywords: diversity, inclusion, gender*

## Oral presentation OP91

### **“I am a refugee, but...”: Career Experiences of Afghan Ex-Elites in the United States**

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science

#### Research Purpose and Motivation

In August 2021, nearly 3.5 million Afghan people were forced to flee their country within a matter of few days upon The Taliban takeover of Afghanistan. The United States has accepted many Afghan evacuees, and the U.S. Department of Justice has issued them employment authorization. Many Afghans who arrived in the United States were considered elites in the context of their home country, specifically because the United States prioritized accepting those belonging to a select group deploying superior qualifications and work experience. In this study, we focus on career stories of Afghan ex-elites in the United States as an extreme case that enables us to examine the nuances of transitioning from an elite status and finding new pathways.

Previous studies suggest that refugees bring significant benefits to national economies and societies upon integration into the host country's workforce (Hirst et al., 2021). Those categorized as skilled with higher levels of education and work experience can fill industry demands for a skilled labor force, boost economic growth, and improve native-born populations' earnings (Ratha et al., 2011). Host countries can benefit from economic advantages if skilled refugees and immigrants fill jobs matching their qualification levels (Desiderio, 2016).

Most of the existing research has examined refugees as a general population, treating them as a homogeneous group rather than addressing the experiences of specific sub-groups, such as skilled or professional workers. Nor did they address the competencies that refugees deploy to transition from elite status to new employment statuses. We address the gaps in past studies by focusing on ex-elite refugees transitioning to new employment status in the host country.

#### Theoretical Background

Our review of the extant literature suggests that refugee status can be an important source of inequality in employment outcomes among refugees. For example, refugees tend to experience systematic employment discrimination (Lamba, 2003) as their qualifications and experiences, gained in their home country, may be disregarded by recruiters and employers (Bloch, 2002; Lamba, 2003). Such devaluation and denigration of prior education and professional experiences may restrict refugees' ability to join and continue their professional careers in the host country (Krahn et al., 2000).

We adopt the intelligent careers framework to examine our participants' career experiences. It proposes that in taking career ownership, individuals seek opportunities, activities, and experiences that help them develop competencies that facilitate the transition between employment statuses (DeFillippi & Arthur, 1994).

#### Methods

This study adopts a qualitative interpretive methodology informed by a constructivist epistemology (Crotty, 1998). Using both criterion-based and snowball sampling procedures (Patton, 2002), we recruit 20 Afghan evacuees who (1) have arrived in the United States after August 2021, (2) held elite

status defined as educated, white-collar, high status, or professional positions in Afghanistan, and (3) have obtained employment or are actively seeking jobs in the United States. The research team collects data by conducting semi-structured interviews upon receiving research ethics approval. With the participants' consent, interviews will be audio-recorded and transcribed. The constant comparative method will be used as the primary data analysis technique (Erlandson, 1993; Lincoln & Guba, 1985). In addition, we will use the member-checking technique to ensure the rigor of analysis and ask participants to provide feedback on the findings (Lincoln & Guba, 1985).

#### Expected Results

We expect the results before the conference in May 2023. We anticipate outlining competencies that describe why, how, and with whom Afghan refugees worked to integrate into the labor market in the host country.

#### Limitations

One of the limitations of our study is that we conducted one round of interviews, which limits capturing participants' career experiences over a more extended period.

#### Practical implications

Our findings inform organizations that depend on foreign-born talent and are interested in benefiting from refugees as a potential pool of qualified candidates. This study also provides a direction for policy development in facilitating refugees' employment transitions.

#### Relevance to the Congress Theme

We reach beyond the careers and labor market research to a wider community of organizational scholars interested in interdisciplinary views of work and employment in general. In that sense, our work contributes to understanding the changing population of workers becoming increasingly diverse. Also, scholars and practitioners in European countries receiving refugees find our findings relevant.

#### Relevant UN SDGs

SDG8 Decent work and economic growth

SDG10 Reduce inequalities

*Keywords: Careers, refugee, employment*

## Oral presentation OP25

### **“If you want me to be great... get me a coach”: The personal transformational value of the coaching process.**

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science

#### Research goals

The value of coaching lies in achieving its aim, which is to facilitate intra- and interpersonal change. Objective measurement of personal transformation is inadequate to reveal the depth and personal meaning thereof and research lacks in-depth explorative and descriptive studies on how transformation manifests from the experience and perspective of the coachee. The study aimed to establish the personal transformational value of coaching by exploring and describing how personal transformation manifests during the coaching process for the coachee.

#### Theoretical background

Coaching has transformational purpose and is described as a human development process which involves a purposeful and structured interaction between the coach and coachee (client) to promote and sustain change. It ultimately entails a process-driven intervention that brings forth behavioural change in clients which extends to change on an individual, team and organisational level. Coaching as a process further emphasises coaching as a sense-making process where the client engages in understanding and integrating change and new experiences. It is intended to maximise potential and alter people's way of doing and being, which is ultimately a transformational process that brings about change.

#### Research design, methodology, approach and intervention

The study followed a qualitative methodology informed by a hermeneutic phenomenological approach to achieve the explorative and descriptive purpose of the study. Hermeneutic phenomenology accounts for the study of lived experience and renders a co-constructed understanding thereof based on the integrated application of interpretive lenses of participants and of the researcher. Data came from semi-structured interviews with 7 senior leaders after having engaged in an integral coaching programme of at least 6 sessions. Interpretative phenomenological analysis framed the data analysis strategy.

#### Results

Findings are described according to three themes: (1) Coaching initiates a process of critical self-reflection, (2) Coaching facilitates an evolving processing of the self; (3) Coaching establishes continued intrapersonal processing and the development of an internal processing competency. The findings indicate that coaching entails a process of critically engaging with the self that begins 'before' coaching sessions start and continues into processing of the self 'during' the coaching programme. Ultimately, the personal transformational value of coaching is relayed in the sense that coaching facilitates the development of self-reflective competence by establishing a sustained continuous processing of the self 'after' coaching has ended.

#### Limitations

The effect of receiving coaching was not explored over a longer period and the study was limited in that it could not provide longitudinal data. Interviews took place after having concluded the coaching programme for two of the participants, which may have influenced the richness of their memory. However, it did seem that these two participants had a clear sense of their lived experiences of being coached. Coachees were exposed to aspects of a particular coaching model (integral coaching) and findings may therefore not be applicable to other coaching models.

#### Research/Practical implications

The value of coaching can be described as an intervention that places 'working with the self' at centre stage and that its value is reflected in not only the evolving transformation of the self, but in developing a self-reflective competence that maintains personal transformation. Such transformation is not always conscious in the moment but experienced before, during and after coaching. Coaches can use the three staged transformation process of initiate ( before ), facilitate ( during ) and establish ( after ), to gauge the client's transformation readiness and progress. The findings enhance coaches' self-confidence to trust the process of coaching.

#### Relevance to the congress theme

Coaching facilitates personal transformation to enable adjustment and optimal functioning in the changing world of work. Coaching as a process facilitates personal and professional growth and development on a deeper level to reach self-actualisation and fulfilment in the midst of change.

#### Relevant UN SDGs

The research is meaningful in its value as it contributes to the 2030 agenda for sustainable development, with the sustainable development goal of good health and wellbeing regarding how coaching contributes to health and well-being and more specifically, psychological well-being.

*Keywords: coaching; personal transformation; self-reflective competence; psychological well-being*

## Oral presentation OP201

### **“Should I Stay or Should I Go?” Unraveling top-tier university graduates’ motivations to pursue or not pursue an international Career**

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science

#### Research goals

The goal of this study was to investigate in depth and from a phenomenological approach the main motivators of international graduates to pursue, or not, an international career after earning their degrees.

This goal is pertinent because this specific population is heavily under researched, although the number of international students increases year after year, having tripled between 1980 and 2009, from 1.1 million to 3.4 million (United Nations Educational, Scientific, and Cultural Organization Institute for Statistics, 2011) and is estimated to reach 8 millions by 2025 (OECD, 2013). This population is an important part of the global migrant community and is often a source of dispute between home and host countries as both compete for their definitive residence after graduation. Research has shown that about 15-30% of international students decide to stay in the host country (OECD, 2013), while others choose different destinations, and many others go back to their home countries. Still, the phenomenological motivations underlying these decisions are under researched.

#### Theoretical background

International Student Migration (ISM) theory is a line of research integrated in the Human Capital and the Global Migration theories. It lies in the middle of the continuum between education and general migration and interconnects with the needs and demands of the labor market. ISM takes into consideration the factors that enable or constrain students’ mobility agency, also called push-pull factors (e.g., Mazzarol & Soutar, 2002).

In the current investigation we follow the Murphy-Lejeune’s (2002) postulation that international students are a new migratory elite. She identified a set of distinctive characteristics, including the absence of economic difficulties as reasons to migrate, a young age and still being in the process of evolution to independence or adulthood (e.g., McManus et al., 2014).

#### Methodology

We conducted in-depth interviews to 63 international alumni who had completed a masters’ degree in the academic year 2020-21, 73% of which were male. Ages ranged from 24 to 31 years old ( $M=25.76$ ,  $SD=1.37$ ). Of the 63 participants, 47% decided to pursue an international career, 16% chose to stay in the host country (Spain). The other 33 participants decided to not pursue an international career.

We applied the maximum variation selection criteria in order to diversify our sample in terms of nationality, migration behavior and educational background. We conducted semi-structured interviews that were recorded with the authorization of each participant, and then transcribed verbatim. Each interview had an average duration of 45 minutes.

#### Results

We identified 113 themes, 70 from the group who decided to migrate and 43 from the group who returned to their home country, thus resulting in a 2x2 model of motivating factors for migration decisions.

Main highlights:

16% of participants who decided to migrate stayed in the host country, which is concurrent with the statistics provided by OECD (e.g., 2013). Two of the common aspects of this sub-sample are 1) seeing career opportunities in the host country, and 2) having completed a Masters' degree in Innovation and Entrepreneurship. In this specific program students actively collaborated with local start-ups and family businesses since the beginning of the studies. This connection with the local business ecosystem may be instrumental in shaping participants perceptions of career opportunities in the host country.

From the entire sample that decided to migrate, only two saw salary as a motivator. This finding is in line with one of the characteristics of the new migration elite concept proposed by Murphy-Lejeune (2002): the absence of financial worries.

The motivators ideal company and ideal country were mostly mentioned by European participants who migrated to other Schengen countries, which reflects how not having travel restrictions promotes migration intentions.

The category global identity , which was reported by nearly half of all participants who decided to migrate, was never identified in previous ISM investigations. Having a global identity means that individuals perceive themselves as being part of the world as opposed to a single nation.

Limitations:

Gender proportion bias and the context are the main limitations of the research.

Conclusion:

Our results helps professionals like career advisors or human resource managers to better understand this population and to develop adequate support policies. It also adds to the literature by advancing knowledge on the motivations of this specific population, who continues to grow exponentially and plays a vital role both for univarsities and for the global economy.

*Keywords: International students; migration; qualitative research; thematic analysis*

## Oral presentation OP377

### **“To Say or Not to Say”: Privacy Behaviors in a Platform Prototype for Job-Seeking. How Designing for Transparency Affects Disclosure in E-Recruitment.**

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science&practice

#### Theoretical Background

The growing use of technology in the domain of work has transformed HR vital activities such as training, learning and especially recruitment (Baykal, 2020), so that, a variety of web-based technologies are now used by recruiters to attract and select candidates (McKinsey, 2012). Digital tools surely bring a number of advantages to both organizations and candidates (Faliagka et al., 2012; Sylva & Mol, 2009) but they may also entail some detrimental effects. One of the most relevant issues is that of privacy, which might compromise the experience of job-seekers. As literature showed, people who perceive that their personal information might be disclosed without their control are more likely to abandon the application and drop out of the selection process (Cober et al., 2003). This phenomenon may pose a reputational risk for the organization and may jeopardize the acquisition of new talents.

We thus need to understand how to contain such adverse effects for technology to be at the service of people and organizations. A first step towards this direction can be done by first considering the ergonomics factors involved in the web-based selection process. This implies an inquire into the interaction between users and platforms, as this has a tremendous impact on the quality of e-recruitment (Pfiefflmann et al., 2010). As a matter of fact, the perception of privacy was found to be capable of influencing self-disclosure and trust in an experimental study by Nickel & Schaumburg (2004). Moreover e-recruitment sites that guarantee transparency in the way data are collected and processed are perceived as more trustful and reduce users' privacy concerns (Bowyer et al., 2022). In a nutshell, a better interaction with web applications may support individuals who search for a job and employers who look for prospective candidates.

#### Research Goal

Grounding on this perspective, our research goal is to understand how people perceive job platforms when searching for a job, how they react to their specific design features and how then behave correspondingly. The objective of this study is twofold: first, to understand how single features aimed at improving the transparency of data usage in e-recruitment affect the user experience of prospect candidates and orient their decisions towards the privacy settings, i.e., to share or not certain pieces of information; then, to capture sense-making processes underlying privacy behaviors, i.e., what meanings people ascribe to personal data as well as their disclosure behaviors.

#### Tools

We employed a web job board, aimed at investigating which design features may support compliance with GDPR regulations and transparency in the context of job seeking: the board has been implemented as a prototype for research purposes only. The design of the platform integrates design recommendations drawn from Human-Computer Interaction literature, which have been proven to positively affect users' sensation of control on their data and trust towards the technology.

## Method

A sample of 20 Italian individuals of age was recruited (female = 10). Participants were required to explore the prototype board and decide whether sharing or not personal information with a number of stakeholders that were i) the platform itself, ii) recruiters, and iii) partners of the platform. A member of the research group observed how users interacted with the platform, audio-recorded their comments, using a Thinking aloud protocol, and took notes about relevant interaction events. A semi-structured interview followed: grounding on the observational notes, the researcher delved into the experience of use of the platform, asked participants about their privacy behaviors, and explored the meaning that the shared information had for them.

## Results

At present, we have collected all the qualitative data and we are about to start their analysis. We expect to present the results at the Conference.

## Limitations

Possible limitations arise from the size of the sample, which hinders the generalizability of the results. However, we believe that the richness of qualitative data we have gathered would contribute to the understanding of the phenomenon under examination.

## Contribution and Relevance

Hopefully, we might use this knowledge to inform the design of platforms and provide suggestions to organizations that use this kind of instrument to expand their workforce. Our study might be of interest for both academics in the Work and Organizational Psychology field and practitioners who take care of personal recruitment, assessment and selection in organizations. The study contributes to UN SDGs goals by supporting workers in enacting their right to privacy.

*Keywords: e-recruitment; privacy; job-seeking*

## Oral presentation OP718

### **“Why should I even consider that?” Understanding challenges and opportunities for prospective work design from the viewpoint of technology developers**

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science&practice

**Research goals:** This study aims to expand existing knowledge of how prospective work design can be fostered among technology developers by applying a human-centred work design lens. Our research goal is to explore how exposure to interdisciplinary collaboration impacts technology developers’ readiness to engage in prospective work design through broader design mindsets and professional identities.

**Theoretical background:** Emerging technologies will significantly impact the future of human work; if for good or bad is still under debate. The application of a holistic socio-technical innovation approach that leverages the intricate interaction between technological and human capabilities to promote effective performance and human well-being can help to ensure the realization of positive technological change. Special attention should be paid to proactively ensure high-quality jobs in new work systems, i.e., prospective work design. Most of the efforts that steer in this direction lack success in practice. Increasing our understanding of technology developers’ perspectives on their own work by assessing their professional identities and design mindsets may open fresh opportunities for prospective work design. In our study, we, therefore, address the following research question: How does technology developers’ experience of interdisciplinary collaboration influence their professional identity and readiness for the integration of prospective work design in the development process of emerging technologies?

**Methods:** We conducted a longitudinal semi-structured interview field study (N=32) with researchers of a large interdisciplinary centre for the development of new technologies in architecture, engineering and construction applying an inductive research strategy. In the second round of interviews, participants completed the multidisciplinary-identification task (developed based on Shamir & Kark, 2004), a graphic visualization task in which circles representing different disciplines (e.g., architecture, computer science) are placed to depict their professional identity, their project, and the research context. Following a thematic analysis approach (Braun & Clarke, 2006), we traced the development of researchers’ design mindsets and examined potential drivers.

**Results:** Our analyses indicate that technology developers lack awareness of their work’s impact on the jobs of practicing professionals, even in their own disciplines. This finding highlights the need to explicitly encourage developers to reflect on similarities between their own work and the new work systems they create for others. In this regard, we further identify enabling factors for prospective work design by demonstrating how actively reflecting on one’s multidisciplinary professional identity and experience of interdisciplinarity supports the development of more holistic and impact-aware design mindsets. By illuminating the relevance of psychological and social processes in technology development, we corroborate and expand on earlier evidence regarding the necessary prerequisites for the successful use of prospective work design methods.

**Limitations:** Our findings stem from one research context in one country, which limits its generalizability. Future research could use quantitative data collection methods in larger samples to validate our main conclusions concerning the importance of shaping broader interdisciplinary

professional identities as prerequisites for establishing shared holistic and impact-aware design mindsets in research teams.

**Conclusions and Originality/Value:** Our results emphasize that the integration of work design considerations into early technology development remains challenging. We hope that our approach of studying people's conception of themselves in relation to the technological innovations they aim for may prove useful in devising better methods and contexts for prospective work design. The newly developed multidisciplinary-identification task serves as a visualization tool and conversation opener for interdisciplinary teams, on individual, team, and project levels in research and practice. Broader design mindsets and increased interdisciplinary professional identities can pave the way for prospective work design. Our study expands research on interdisciplinary collaboration towards promoting impact awareness and thus helps holistic socio-technical innovation gain ground.

**Relevance to the Congress Theme:** Our insight on the readiness for engagement of prospective work design can contribute to the current development of emerging technologies, actively shaping the future of work for the deliberate combination of high-quality work and technological advancements.

**Relevant UN SDGs:** Decent work and economic growth; Responsible consumption and production; Quality education

*Keywords: prospective work design, emerging technologies, design-mindset*

## Oral presentation OP130

### **A cross-cultural comparison of the Psychological Capital impact on employee's engagement and performance : A Systematic Literature Review**

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science

This paper aims to contribute to the study of Psychological Capital, by looking at the impact of cultural differences on the relationship between PsyCap and employee performance and engagement. While there is a broad range of literature looking at those relationships, the results are frequently inconsistent. One of the reasons for this inconsistency may be due to cultural/regional differences. A systematic literature review was conducted to shed light on those cultural/regional differences. The concept of PsyCap refers to an individual's positive psychological state of development characterized by four main components: hope, self-efficacy, resilience, and optimism (Luthans et al., 2015).

Literature has shown that engagement and performance are important antecedents of different work-related outcomes such as productivity, well-being, innovation, and organisational change (Christian et al., 2011). Nevertheless, there is consistent instability of engagement levels among employees (Avolio & Luthans, 2006), which can compromise the performance and productivity of numerous organisations. To achieve effective organisational success modern companies should not only focus on negative-based strategies to minimize weaknesses and problems (Luthans et al., 2015) but also promote resources of investment in the face of adversities and organisational changes through the development of positive psychological states and capabilities (PsyCap). PsyCap became a central topic of discussion in positive psychology as the combination of its components supports the individual development and improvement of foundational resources for managing and adapting over adversities (Luthans et al., 2010), increasing various work-related outcomes including but not limited to performance, engagement (Simons & Buitendach, 2013). However, research about the impact of PsyCap on engagement and performance is globally sparse with contradictory findings depending on the geographical location of the studies.

This systematic literature review followed the Preferred Reporting Items for Systematic reviews and Meta-Analysis (PRISMA) Statement (Moher et al., 2015). Twenty-two study including primary (quantitative) and secondary (meta-analysis) was included. ProQuest, Academic Research Complete, PsycINFO, PsycARTICLES, Business Source Complete, and CINAHL were used as sources of information for the systematic literature review. The keywords selected in the search strategy were PsyCap, engagement, and performance. The screening process accounts for relevant studies including English language, full-text, reference list, peer-reviewed, and based on employees working across different geographical areas (West, Europe, East, Latino America, and Africa). Studies showing unclear findings, no demographic information, student-based research, remote workers, and variables unrelated to employees' engagement and performance were excluded from the screening process. In addition, the AXIS tool was administered to assess the quality of qualitative, cross-sectional, and longitudinal research design, while the Joanna Briggs Institute tool was adopted to provide a rigorous process for critical appraisal and synthesis.

The analysis shows a positive impact of PsyCap on engagement and performance in USA, China, Italy, and Zimbabwe. However, there are cultural differences between some African regions that affect the PsyCap impact on employee engagement overtime, compared to other geographical areas including West, East, and Europe, where high levels of PsyCap predicted was shown to be a good predictor

employee engagement. Besides, looking at the PsyCap dimensions, hope, self-efficacy, and optimism are the main drivers of engagement in the West and Africa, while in the East, particularly in India, hope and resilience seem to be more important.

One of the main findings of this systematic review is the lack of qualitative research which does not capture the full complexity of the topic in consideration. In addition, it was found limited research in some geographical regions such as Latin America, which does not allow us to treat these relationships as a global phenomenon.

Despite some regional differences, this systematic review provides some evidence of the significant positive relationship between PsyCap, engagement, and performance across different regions. The regional differences we found, stress the importance of tailoring PsyCap intervention to regional and cultural idiosyncrasies. Moving forward, more attention should be given to shed light on how exactly how we can adapt PsyCap interventions to cultural differences in order to maximise its impact on employee performance and engagement.

*Keywords: Psychological Capital, engagement, performance, employee*

## Oral presentation OP115

### **A diary study of leader intellectual stimulation and employee growth mindset as predictors of daily strengths use and performance**

Zselyke Pap, Andrei Rusu, Laurențiu Maricuțoiu, Delia Vîrgă & Luca Tisu | West University of Timișoara

science&practice

**Research goal:** The present research has adopted a multi-level perspective in predicting employee performance. In this perspective, we bring together workplace resources (leader intellectual stimulation), employee characteristics (growth mindset), and daily proactive behaviors (strengths use) as predictors of daily performance.

**Theoretical background:** Based on the combination of bottom-up and top-down dynamics discussed in the Job Demands-Resources Theory (JD-R), we hypothesized that employees who perceive a higher degree of intellectual stimulation from their leader would report higher growth orientation. Furthermore, we expected that employees with such growth-oriented mindsets would more frequently employ their strengths, which would raise their performance.

**Methodology:** The study adopted a daily diary design, which allowed testing of both top-down and bottom-up effects. Participants were recruited in collaboration with a company specializing in online data collection and market research in Romania. A total of two-hundred and nine (N L2 = 209) employees have participated in both the general survey (measuring mindset and perceived intellectual stimulation) and the daily survey across 12 consecutive working days (measuring strength use and performance). Overall, this design yielded a multi-level dataset with over two-thousand daily responses (N L1 = 2223).

**Results:** The model was tested through a 2-2-1-1 multi-level structural equation modeling procedure, which included testing the multi-level factor structure (MCFA) and comparing alternative structural models (MSEM). The results supported the proposed factor structure. Perceived intellectual stimulation and growth mindset defined employee-level (L2) factors, while daily measures of strength use and performance each loaded on a factor at the within-person level (L1) and one at the between-person level (L2).

The structural model showed that perceived intellectual stimulation from a leader had a positive and significant direct association with employees' growth mindset and strength use. Furthermore, we found a positive relationship between employees' growth mindset and their strength use. The data also revealed that the link between strength use and perceived intellectual stimulation was indirect, mediated by employees' growth mindset. Moreover, a growth mindset and strength use significantly and positively predicted self-reported performance. Here we found another indirect effect from mindset to performance, mediated by daily strength use.

**Limitations:** This study had the main limitation of using self-reports to assess leadership style and employee performance. These limitations are balanced by the strengths of the design and the sample size at both levels. Given that obtaining third-party reports for 12 days for over 200 employees would have been ideal but hardly realistic, we urge future researchers to further probe and develop our findings with different methods and multiple sources of information. Another limitation resides in the cross-sectional relationship between intellectual stimulation and employee mindset at the employee level and between strengths use and performance at the day level. Given that these were reported together, it is possible that employees with a growth mindset were more inclined to see

and appreciate leadership behaviors that lean towards intellectual stimulation because these are the aspects that the employee values. Given the positive associations we have found here, the next step for this literature is to probe the temporal order and causality of these relationships.

Conclusions and relevance to congress theme: Overall, this study contributes to our view of the modern world of work by exploring the relationships between factors that ultimately empower the employee and his/her characteristics and behaviors to develop high performance. In the new era of remote work and independent contracting, understanding what sustains performance beyond job characteristics is paramount. Our model recognizes that performance is a factor with daily variability, which also has a stable component and is determined by a combination of bottom-up and top-down effects between job characteristics, employee characteristics, and proactive employee behaviors.

Alignment with UN SDGs: One sustainable development goal defined by the UN resides in the promotion of inclusive and sustainable economic growth, with full and productive employment and decent work for all. Our approach could contribute to this goal by being centered around employees' mindsets. Rather than investigating what external factors can drive employee behaviors, we explore how leaders can encourage healthy and growth-oriented mindsets that can serve as an enduring characteristic of the employee that fuels employee-initiated work behaviors and higher performance.

*Keywords: intellectual stimulation, growth mindset, strength use*

## Oral presentation OP322

### **A Digital Onboarding-Tool: Conceptual Paper of Content Development and Technical Implementation**

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science&practice

Research Goal: To date, the scientific literature on digital onboarding-tools is very sparse, as they are not yet widely used especially not in the context of higher education (Schilling et al., 2022). Studies on onboarding-tools focus mainly on the design of the digital spaces (Lochrie et al., 2016). Accordingly, conceptual and content factors of a digital onboarding tool as well as the technical implementation have not yet been thoroughly researched. To fill this gap, our contribution is dedicated to these factors of a digital onboarding tool. Theoretical Background: The start of university holds challenges for incoming students like exemplary establishing a new learning identity (Briggs et al., 2012). To help new students overcome these challenges and to learn about the demands of a degree program universities rely on onboarding interventions (Jenkins et al., 2020). These onboarding interventions are usually delivered face-to-face on campus (Motycki & Murphy, 2021). The COVID-19 pandemic as well as the increasing numbers of online and blended learning courses led to a switch from the face-to-face onboarding processes to digital and virtual settings over the last few years (De Boer et al., 2022; Thompson, 2016). Digital solutions such as onboarding-tools present a sustainable way for this switch into the digital and virtual setting (Schilling et al., 2022). According to Pepping et al. (2017), onboarding processes can be divided into three phases. In a higher education context, it includes the pre-boarding phase (before beginning the university program), onboarding phase (first weeks of the university program), and post-boarding phase (first months of the university program). Based on this, content aspects of the onboarding interventions either need to be adapted to the three phases, or the individual contents could be offered in individual phases. Further theoretical derivations for content and conceptual aspects of a digital onboarding tool can be drawn from research on digital onboarding interventions in universities. In these, four content dimensions of onboarding interventions could be identified: information dimension, socialization dimension, self-study dimension, and counseling dimension (Schilling et al., 2022). Approach: Adapted to an economical, simple, digital implementation in a university context and the results of a previously prepared review (Schilling et al., 2022), an onboarding tool for students was created as follows: the tool was developed as a website application and is usable for mobile devices. This simple digital realization saves costs on expensive technological implementations. Furthermore, students can access onboarding interventions through their mobile device regardless of location. Universities can set the start time and end time of the onboarding process in the onboarding tool and tailor onboarding interventions to specific student groups. The content of the onboarding interventions is oriented on the four content dimensions identified. The information content group deals with onboarding interventions that ensure information transfer between universities and new students, e.g., announcements of first-semester events or campus overviews. The task content group are micro-interventions based on Walton's (2014) wise interventions. This content group provides new students with small 10-20 minutes tasks in which they deal with their strengths and weaknesses, their study goals, and study life in general. The video content group contains video messages from study-related people or onboarding experts who, for example, warmly welcome the new students. The diary content group contains a digital diary in which students can take notes on their insights and reflect on their onboarding process. Results: N=40 students evaluated the tool in an initial pilot phase. Currently, more than 330 students are

using the tool to start the winter semester 2022. A detailed analysis of the effects of the tool should be possible by the end of march. Limitations: Limitations of this study are the currently missing quantitative evaluation of the tool and the strong anchorage to a single review. Conclusions: The onboarding-tool can be applied broadly to guarantee personalized onboarding processes in a wide range of study programs. A detailed evaluation of the onboarding-tool also opens up the possibility for application in a company environment. The described onboarding-tool can function as an example for the development of other onboarding-tools in other contexts besides higher education. Relevance to the Congress Theme: The onboarding-tool offers the possibility for a standardized, digitalized and generalized, cross-university onboarding process facilitating and changing the work of many higher education professionals. Relevant UN SDGs: This onboarding-tool can foster quality education as determined by the Sustainable Development Goals (Rodríguez-Abitia et al., 2020).

*Keywords: Onboarding-Tool, Higher Education, Students*

## Oral presentation OP505

### **A Dual-Pathway Model of Cyber Incivility and Sleep via Emotions: A weekly diary study.**

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science

Research Goals: Working life and personal life are commonly treated as two separated domains. However, the boundaries between one and the other are often blurred (Boswell & Olson-Buchanan, 2007; Carlson & Kacmar, 2000). This research seeks to (a) establish a pathway model between cyber incivility and sleeping problems, (b) test the mediating role of emotional reactivity and emotional regulation in this dual pathway.

Theoretical background: The interactive nature of working environments may induce rude and disrespectful attitudes. Or, in other words, promote uncivil behaviours (Andersson & Pearson, 1999). Cyber incivility is defined as a “communicative behavior exhibited in computer mediated interactions that violate workplace norms of mutual respect” (Lim & Teo, 2009, p. 419). This can mean, using online channels to say negative things about other people, or for instance using online channels for discussions that would require face-to-face dialogue (Lim & Teo, 2009).

Being a job stressor, workplace incivility can induce very negative emotional reactions (e.g. anger, sadness) that, if not regulated, can become too hard to cope. Throughout time, targets of this type of mistreatment may be faced with regular, extreme, and long-lasting responses (Nock et al., 2008) that stand long enough to affect one’s own private time. Thus, tempting to advance knowledge on these spill-over effects and their underlying processes, we examine whether incivility induce reactive emotional responses that stand long enough to affect someone’s night-time.

Sleeping problems, in turn, might affect employees’ self-regulation abilities (Christian & Ellis, 2011). The failed attempts on emotional self-regulation can lead to further distress and a higher chance of having unpremeditated behaviours towards others (Wagner & Heatherton, 2014). For this reason, sleeping problems via the lack of emotional regulation might lead to the perpetuation of workplace incivility.

Design: A weekly diary study over the course of four weeks with individuals from different private companies is being employed. For cyber incivility, four items from Lim and Teo (2009) were selected. Emotional Reactivity is being measured through nine items from Preece et al. (2018), and emotional regulation through ten items from Gross and John (2003). To assess sleeping problems, we are employing five items from Soldatos et al. (2000).

Results Expected: Data collection with more than 70 employees has started in and is still in progress. Due to the study timeframe, and the fact that the collection of data is being carried through several companies at different points in time, we plan to have all data collected and analysed by the end of December/beginning of January.

Limitations: Self-report measures might be subject to same-source bias that may influence our results (Podsakoff et al., 2012).

Conclusions: The present paper can shed some light on how incivility affects and is affected within both personal and work life domains by providing a more consolidated framework of this type of mistreatment. Focusing on emotional reactivity and regulation – two understudied variables within incivility literature- we attempt to explain the mechanisms behind these associations. At a practical

level, the dual pathway model provides opportunities to tailor potential interventions. Either by tackling incivility - e.g. creating norms (Porath & Gerbasi, 2015); or, for instance, giving training on how to regulate emotions in a healthy way.

Relevance to the Congress Theme: “The future is now”, but we are yet unknowledgeable of how to coexist in the virtual world. Our research topic revolves around cyber behaviours, which became more prominent to explore since the outburst of telecommuting ways of work, and that will require further investigation since the ICT’s are here to stay.

Relevant UN SDGs: Good health and wellbeing.

*Keywords: cyber incivility, emotions, sleeping problems*

## Oral presentation OP32

### **A field study of internal job recovery amongst shift-duty officers: Does the JD-R model fit?**

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science&practice

In a rare study of the on-the-job recovery experiences of shift workers, the energy levels of 243 law enforcement officers were studied during their 12-hr night shifts. Leveraging on an expanded Job Demands-Resources model, the study attempted to uncover the relationships amongst the factors that influence on-the-job recovery, via a mix of survey and Experience Sampling Method. Latent Curve Growth Modelling and Repeated Measures ANOVA were utilised to analyse the data.

Preliminary results suggested that the impact of Work Demands and Work Resources on the change in energy levels across the shift differed depending on the specific types of demands and resources experienced. Certain demands and resources had unexpected impact on the energy levels due to the unique context of shift duty and policing. The impact of recovery experiences during official breaks influenced fatigue levels but not vigour levels. In particular, the recovery experience of control mediated the impact of certain work demands on the change in fatigue levels across the shift. Amongst the personal factors, Resilience was found to positively influence the changes in energy levels across the shift.

In summary, while the JD-R model appeared to be applicable to the internal recovery processes amongst shift-duty workers, the specific factors that influence officers' energy levels need further study due to the unique context of the nature of their jobs and their shift duty work conditions, such as the rather structured timeframes for recovery to take place during shift duties. Scientific implications on the study of internal recovery amongst shift workers, and practical implications on the energy management strategies contributing towards the health and well-being of shift duty law enforcement officers will be discussed.

Due to the field study nature of this research, there was limitation in terms of the need to balance data collection without interfering with actual policing operations. Further, the generalisability of this study may be limited to populations involved in frontline emergency shift duties.

The study contributed to the scientific understanding of internal recovery experiences for non-office hour workers through a field study with strong ecological validity, while comprehensively examining the impact of both individual and job related factors on energy management and internal recovery.

*Keywords: Job demand resources model, Recovery experiences, Shift work*

## Oral presentation OP537

### A gender research perspective on destructive leadership, employee well-being and performance

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science

Research goals and why the work was worth doing

The aim of the present study is to investigate followers' outcomes of destructive leadership from a gender research perspective. Consequences of a destructive leadership, for both organisations and employees, are well-documented (Mackey et al., 2021; Schyns & Schilling, 2013; Tepper, 2007;) with negative effects such as increased costs for reduced productivity, counterproductive work behaviour, lower personal well-being and job satisfaction, burnout, absenteeism, and the risk of leaving the organisation (Zhang & Bednall, 2015; Schyns & Schilling, 2013). In addition, studies in recent years have shown that destructive leadership is a more common phenomenon than previously known (Schyns & Schilling, 2013). Despite a growing number of studies investigating consequences of destructive leadership there are almost no research done with a feminist research perspective, combining theories from both gender studies and psychology. This is surprising, given that we know from research on constructive leadership and gender that gender plays an important role in how different leadership styles are perceived and how it effects employees.

Theoretical background

To implement a gender research perspective, this study uses Ackers theory of gendered organisations (2012, 1990). Gender inequalities are produced in organisations as work processes are carried out, both formally and informally. Ackers perspectives on gendered substructures such as power, hierarchies and assumptions about women and men as well as femininity and masculinity help us to point out and to understand often-invisible processes in organisations that create, reproduce, and perpetuate gender inequalities. In addition, we use Hobfolls (1989) Conservation of Resources (COR) Theory to explain destructive leadership's effect on employees' well-being and performance. Destructive leadership put strain on employees, leading to either threat of loss, actual loss, or failure to gain resources, leading to poorer well-being and performance.

Design and Methodology

For this study we used a two-wave survey design, collecting data on two occasions with 6 months apart. To get a sample that was stratified and randomly selected to represent the Swedish labour market demography, we took help from Statistic Sweden to send out surveys. Out of 3000, 1100 participants were included in the analysis. s. The analysis was done by moderated regression analysis using structural equation modelling.

Results obtained or expected

We found no significant support for gender as a moderator when investigating destructive leadership's effects on employees' well-being and performance. We found partial support that the gender composition of the leader-employee dyad affects employees' intention to leave the organisation. Employees showed a higher intention to leave the organisation if the leader was the same gender and used destructive leadership.

Limitations

It is hard to distinguish if the time span of six month for this two-wave study is suitable to capture the effect of destructive leadership on employees' well-being and performance. Destructive leadership could be conceptualised differently.

Conclusions - Research/Practical Implications/Originality/Value

With this study, we deepen the gender research perspective in destructive leadership studies by implementing theories from gender studies to understand the roll of gender and gender-match in an employee-leader dyad. We also help to further understand employees' well-being and performance due to destructive leadership.

Relevant to the Congress Theme and UN SDGs

The prevalence of destructive leadership is much higher than what is previously known and is still causing damage to both employees and organisations. To allow organisations to take action to prevent further damage, this is an important issue to understand further. This study is relevant in relation to SDGs due to wellbeing and good health in working life. It also contributes with a gender perspective on destructive leadership research to strengthen gender equality.

*Keywords: Destructive leadership, gender, employee outcomes*

## Oral presentation OP394

### A Hostile Work Climate and Workplace Bullying: Reciprocal Effects and Gender Differences

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science

**Research goals:** In this presentation we argue that organizational climate and workplace bullying are connected, intertwined and affect each other. More precisely, the aim of this study was to analyze how a hostile climate at work is related to workplace bullying. A hostile work climate is defined as an affective organizational climate permeated by distrust, suspicion, aggression and conflicts.

Workplace bullying, in turn, is defined as a systematic prolonged mistreatment of an employee in situations that gradually become more difficult to defend against. In our study we tested four hypotheses about the reciprocal effects between a hostile work climate and bullying and possible gender differences. Our study is motivated by previous findings demonstrating that workplace bullying can have very severe health effects for targets. Therefore, it is important to increase our understanding of risk factors and processes leading up to bullying.

**Theoretical background:** Studies on mistreatment point to the fact that bullying and related phenomena, such as incivility, are typically escalating processes, where conflicts and experiences of mistreatment may lead both to normalization of such behaviour and further perpetration. Our hypotheses thus draw from findings about ripple effects and incivility spirals.

**Design/methodology:** The data used in the study are from a longitudinal national probability sample drawn from the whole working population of Sweden ( $n=1095$ ). Bullying was measured with the Short Negative Acts Questionnaire (SNAQ, Notelaers et al., 2019) and a hostile work climate was measured with five items from the Psychosocial Work Environment Questionnaire (PSYWEQ, Rosander & Blomberg, 2018). Controlling for age, we used structural equation modelling and cross-lagged structural regression models to assess the reciprocal effects of a hostile work climate on workplace bullying. Gender was added as a moderator to test two of the hypotheses.

**Results:** The results showed a strong reciprocal effect meaning there were significant associations between a hostile work climate and subsequent bullying,  $\beta = 0.12$ ,  $p = .007$ , and between baseline bullying and a subsequent hostile work environment,  $\beta = 0.15$ ,  $p = .002$ . The forward association between a hostile work climate and bullying depended on gender,  $\beta = -0.23$ ,  $p < .001$ .

**Limitations:** The measures of a hostile work climate and exposure to bullying behaviours were self-report measures that are susceptible to social desirability and common method variance. However, in the present study we used an 18-month time-lag as separating measures in time has been argued to alleviate the risk of common method variance. Moreover, we used a new measure of a hostile work climate in the study, which means it had not previously been validated. However, for this reason we started by investigating and testing the validity of the measure and concluded that all results in these analyses indicated that this measure behaved as expected.

**Conclusions:** We investigated the reciprocal association between a hostile work climate and workplace bullying. The results support the notion that the organizational climate and bullying affect each other. The findings point to a possible vicious circle where a hostile work climate increases the risk of bullying, which in turn risks creating an even more hostile work climate. This was especially true for men, for whom the relationship between a hostile work climate and subsequent bullying was stronger. Breaking a vicious circle typically becomes harder and harder with time, so early measures against bullying and hostile work climates are of utmost importance—a stitch in time saves nine.

Relevance to congress themes: Ensuring a safe and sound psychosocial environment is of great importance in the changing world of work. Thus, this paper fits well with the overall congress theme and, in particular, with the topics of stress and dysfunction and well-being.

Relevant UN SDGs: This study is related to the UN sustainable development goal of decent work and economic growth, as reducing the risk of bullying is largely about promoting a safe and secure working environment for workers.

*Keywords: bullying, organizational climate, gender*

## Oral presentation OP455

### **A longitudinal panel study on the reciprocal effects of self-perceived status and voice in self-organizing teams**

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science

#### Goals of the study

Voice is crucial in teams where members need to share ideas and insights with each other because they are collectively responsible for organizing their activities and making decisions. Although lowering formal organizational hierarchies has been suggested to make it easier for team members to voice, studies have so far overlooked the role of informal hierarchies that may influence how team members participate in group decision making processes. This study examines reciprocal relations between team members' self-perceived status and promotive and prohibitive voice in newly founded self-managing teams. Thus, it will extend knowledge on how informal hierarchies in teams influence voice but also how status is gained and maintained in teams.

#### Theory

We build on expectation states theory (EST) and literature conformity to examine how self-perceived status and voice influence each other over the first six months of new self-organizing teams. Specifically, we will develop an argument that high status group members first display behaviors that are expected of them to legitimate their status, and later deviate from these expectations by displaying more dissenting behavior and consequently gain more status. We expect that during the first three months of self-organizing teams, self-perceived status will increase promotive voice, as this type of voice is expected from high-status members. At the later three-month period of the teams, in turn, we expect status to increase prohibitive voice, because this type of voice can be considered as more dissenting. Even though displaying expected behaviors, such as promotive voice, may enable group members to legitimize their status, gaining higher status may require them to display more dissent. Because prohibitive voice is more dissenting than promotive voice, this reasoning suggests that prohibitive voice should be more status enhancing. Based on the literature on conformity, we expect these effects to manifest during the later three-month period into new teams.

#### Method

Participants were 585 employees working in newly formed self-organizing teams in a large financial organization in the Netherlands. The survey was administered three times in 3-month intervals. Promotive and prohibitive voice and self-perceived status were measured at all three time points. Gender and organizational tenure were included as control variables. We used a three-wave panel design in SEM framework and employed the "complex" command in MPlus to account for the non-independence of observations.

#### Results

Our hypotheses were partly supported. Specifically, self-perceived status positively predicted promotive voice during the first three months of teams, between T1 and T2. As expected, prohibitive voice positively predicted self-perceived status at a later phase, between T2 and T3.

## Limitations

We used self-report data to measure voice, which may bias the responses, although the repeated measurements of the longitudinal design ameliorate this effect. While three-month time lags between waves aligns with previous studies on voice and status emergence in field settings, it may be that a shorter interval could have uncovered relationships that were not observed in this study. More research is needed on the temporal framework of these dynamics in teams.

## Conclusions

Our study indicates that voice can act as a mechanism that both marks and maintains the status hierarchy in self-organizing teams. Our findings also point towards a sequential pattern in how voice unfolds in the context of the first six months of self-organizing teams. Our results support the status legitimation process proposed by EST where the emergence of status perceptions occurs as the groups start forming, whereafter status hierarchies become legitimized and maintained via displaying expected behaviors, such as promotive voice. Prohibitive voice, in turn, emerged as a driver of status attainment. Our study implies that team members held back prohibitive voice in the beginning when teams were only starting to work in a self-organized way. At least in the context of our study, promotive voice may be a way to enact higher self-perceived status whereas prohibitive voice was found to increase it.

## Relevance for the congress theme

This study focuses on self-organizing teams, which represents an increasingly popular way to organize work in the ever-turbulent world where organizations need to be able to quickly adapt to changes. This way of organizing is suggested to encourage team members to take initiative, including voice, that is crucial for organizations to successfully navigate various challenges that they face in this changing world of work. Our study scrutinizes this assumption by shedding light on the informal status hierarchies that emerge to guide voice and how different types of voice maintain these hierarchies, as perceived by team members themselves.

*Keywords: Voice, self-perceived status, longitudinal*

## Oral presentation OP443

### **A meta-analysis of: Multi-level multi-dimensional workplace risks to Psycho-Social Health and Well-Being**

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science&practice

Research goals and why the research is worth doing:

The work environment can be a setting of both opportunity and risk for worker mental health. The goal of this research is to identify how the work environment contributes to psychological losses/gains in workers. This research is required due to the increasing evidence that worker stress and occupational burnout is on the rise, resulting in the World Health Organisation recommending that psychological risks are treated on a parity with physical risks in the occupational health and safety management system.

Theoretical background:

Psycho-social hazards describe any aspect of the work environment, working conditions or work design that could potentially harm the psychological health and well-being of workers (Leka et al., 2010). Factors such as automation of processes, the acceleration of hybrid working, increased integration of work-life boundaries and the changing demographics of the workforce are contributing to more demanding work environments, which means that organisations need to adopt a more systematic and risk-based approach to ensure the health and safety of workers. The management of workplace health and safety is changing. The World Health Organisation (WHO) have highlighted psycho-social well-being as a key risk area in their Global Monitoring Report 2000-2016 (World Health Organisation and International Labour Organisation, 2021) and burn-out has been reclassified from a phenomenon to an occupational phenomenon in the International Classification of Diseases (ICD-11) (WHO, 2019).

However, physical hazards are far more tangible than psycho-social hazards, making risk assessment and subsequent elimination/mitigation easier. Recognising this, the International Standards Organisations developed and released the ISO 45003 (ISO, 2021), which is the first internationally agreed standard on workplace psychological health and safety. This is a sub-standard of the ISO 45001 which is the standard for Occupational Health and Safety Management Systems. This signals that psycho-social well-being is a systematic endeavour involving Occupational Health and Safety, HR and Management that needs to be understood from an inter-disciplinary risk perspective where organisations proactively identify, assess, eliminate and mitigate psycho-social risks at source. The ISO 45003 identifies some key psycho-social hazards and outlines the steps involved for organisations to pro-actively manage psycho-social risk. However, it provides less detail in terms of the antecedents and interactions in a work environment that create a potential source of psycho-social risk. In order for employers to adopt the guidelines set out in the ISO 45003 standard and pro-actively conduct a robust risk assessment, an investigation to thoroughly understand the impact of the work environment on worker psychological health is required.

Design and methodology:

This research will conduct a systematic review and meta-analysis of research to date on the antecedents of various types of psycho-social risks. A multi-disciplinary approach will be utilised that

draws from Organisational Psychology, Management, HRM, Occupational H&S, Ergonomics and Safety Science literatures.

**Expected Results:** From preliminary searches of past research, I expect that antecedents of psycho-social risks will be multi-level (e.g. industry type, organisation, interpersonal/team and individual) and multi-dimensional in nature. The outcome of the meta-analysis will be the development of a framework to represent these multi-level, multi-dimensional psycho-social risks.

**Limitations:** Limitations include the secondary nature of the data that is typical of all meta-analyses. Future research using primary data will be required to validate the framework.

**Conclusions:** This research is the first step in providing organisations and consultants with an invaluable diagnostic tool which is aligned to the recommendations of the ISO 45003. This can be used to pro-actively assess the work environment for psycho-social risk and provide guidance on where to intervene to reduce such risks.

**Relevance to the Congress Theme:** This research seeks to make challenging psycho-social factors more tangible in terms of diagnosis and subsequent (re-)design of the work environment to eliminate, mitigate or buffer these risks at source. This aligns to the EAWOP theme of Stress and dysfunction (hazardous environments, job demands).

**Relevance to UN SDGs:** A goal of this research is to elevate psycho-social risks to the same level as physical risks in the organisational health and safety management system. With the development of this diagnostic tool, the work environment is systematically and pro-actively assessed for psycho-social risks and based on the outcome, an organisation level intervention is identified and implemented. This aligns with the SDG theme of Good Health and Wellbeing.

*Keywords: meta-analysis, psycho-social, risk*

## Oral presentation OP163

### A Model of Circular Work: Well-being, Performance, and Resource Regeneration

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science&practice

Research goals and why the work was worth doing:

We are currently facing unprecedented and long-term unresolved challenges for both the well-being and productivity of the workforce (see United Nations SDGs), with a host of adverse outcomes at both individual (e.g., stress, burnout, reduced motivation, absenteeism) and organisational (e.g., reduced productivity, shortage of skills, staff turnover) levels. They also reflect a linear system where the individual resources applied to producing work outputs are depleted and exhausted through the process of work. We develop the notion of circular work as an alternative view that places emphasis on the regeneration of individual work resources and, in this way, aims to protect both the health and productivity of the workforce (Karanika-Murray & Ipsen, in preparation).

Theoretical background:

With this paper we propose a systems model of circular work to describe how individual work resources related to well-being and performance are used, depleted, and regenerated. We draw from the concept of circular economy (Pearce & Turner, 1990) and question the value of a linear understanding of work where workplaces treat individuals and resources as finite and present evidence that resource depletion and irreversible loss are costly in the short term and unsustainable in the long term, for both individuals and organisations.

Design/Methodology/Approach/Intervention:

This is a conceptual work model based on a critical evaluation of the evidence and insights from psychology, management, engineering, and systems theory. The approach is integrative rather than empirical. We start by describing the resources that individuals bring into the work process to produce agreed work outputs, as those that are related to well-being and mental health at work (psychosocial resources) and those that are related to work performance (capability resources), both of which are essential for productivity. We then examine how, through their use, these resources can be depleted (e.g. burnout, stress) or exhausted (e.g., sickness absence, staff turnover).

Results obtained or expected (if not available, it must be made clear when they will be):

We propose circular work as a regenerative systems-wide solution to preventing the irreparable loss of individual work resources. The starting point is a person-centred approach that acknowledges the interrelatedness of the two types of individual resources (well-being and performance-related) (Ipsen, Karanika-Murray, & Nardelli, 2020) and views these as renewable rather than finite. However, the organisational context is also integral in this process, for supporting the use/regeneration of resources and the work process. Through this analysis, we propose three principles of circular work: (1) individual work resources (well-being and performance-related) are renewable and mutually reinforcing, (2) the work process can lead to resource depletion, and (3) regeneration of resources is at the heart of circularity. We identify a range of mechanisms that can support resource regeneration, at both individual and organisational levels. By returning work resources back into the work process, work is circular and regenerative, and therefore sustainable for both the individual and the organisation. Limitations: This is a preliminary model that has yet to be tested empirically.

#### Research/Practical Implications:

The model has implications for reframing the role of management of well-being and performance at work and offering a solution towards developing management tools that integrate both the focus on well-being and the priority of performance in tandem. It also offers a novel perspective for integrating research into well-being/mental health and performance/productivity, supporting the growing area of sustainable work, and developing integrative theory. It can help to support the practice of well-being and performance by identifying methods to regenerate resources such as management practices, job redesign, and organisational level interventions. By better understanding how well-being and performance are dynamically interlinked in the work process, we can guide more sustainable work design and organisational practice.

#### Originality/Value:

The current disjointed approach to well-being and performance is a product of a prevailing either-or focus and a linear view of work. This has resulted in substantial losses in well-being, in various guises, and an unresolved productivity paradox, in the UK and elsewhere. Therefore, by providing a descriptive model of how individual resources can be regenerated to minimise waste and support sustainable work, the value of the circular work model lies in its potential for unifying diverse fields of theorising, research, and practice by closing the loop between the use and exhaustion of work resources. It also offers a feasible solution to the consensus that well-being and performance are interlinked but also a failure to address both in tandem.

*Keywords: well-being, performance, sustainable work*

## Oral presentation OP527

### A multimodal approach to detection of faking in a selection interview

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#### Research goals and why the work was worth doing

The selection interview is one of the most frequently used methods of personnel assessment for various jobs, despite its susceptibility to response distortion. Existing research indicates that experts in personnel selection are no better than chance in their detection of response distortion, irrespective of an interviewing experience. Some authors have proposed investigating the behavioural indicators of faking during the interview as one of the potential solutions for this challenge. However, the existing research on this topic is still scarce. Therefore, the aim of this study was to explore the possibility of detection of faking in a selection interview through a multimodal approach, based on paraverbal, verbal and nonverbal cues and facial expressions. Additionally, it was examined whether it is possible to detect response distortion with two different algorithms: one based on logistic regression and the other on artificial neural networks.

#### Theoretical background

According to various authors, differences in behavioural cues should mirror the differences in psychological processes between honesty and deception. More precisely, according to some theories (i.e., Buller & Burgoon, 1996; DePaulo et al, 2003; Walczyk et al, 2014; Ekman, 2002), deception should, at least under some circumstances, be more cognitively taxing, accompanied by more rigid behaviour and by less authentic facial expressions.

#### Design/Methodology/Approach/Intervention

In total, a convenience sample of 102 students/recent graduates (71% female, M age =24.2, SD age =3.08) participated in a videorecorded mock structured selection interview for the position of call centre manager. The interview consisted of two randomly ordered blocks: in one block participants had to answer honestly, while in another their task was to present themselves as an ideal candidate for the position. As an incentive to distort their answers effectively, participants were told that 10% of those with the most convincing self-presentations in faking condition would receive an award coupon of approximately 70 euros. At the end of the interview, some control variables and variables related to the experimental manipulation check were measured. Two independent coders analysed cues from every behavioural category. Additionally, facial expressions were analysed with the OpenFace application.

#### Results obtained

The manipulation check indicated that participants answered less honestly, used more faking strategies, experienced more cognitive load and fear of detection, and controlled their behaviour more when presenting themselves as ideal candidates. They achieved higher scores on extraversion and honesty/humility while faking as well. Interestingly, participants reported higher levels of motivation to present themselves convincingly in the honest condition.

Regarding the differences in behavioural cues between honest vs. ideal candidate conditions, significant multivariate effects were obtained for paraverbal, verbal and facial expressions (both for human coders and OpenFace) categories. Same levels of performance in classifying interview

conditions were achieved both with logistic regression and artificial neural networks, with 65% overall accuracy rates.

#### Limitations

Although statistically large effect sizes were obtained for various measures of the experimental manipulation, in an absolute and practical sense the psychological differences between conditions could have been more pronounced. Also, the convenience sample of highly educated participants was used.

#### Conclusions – research and or practical implications/Originality/Value

Although it was demonstrated in this study that response distortion in selection interview could be detected by its unique behavioural signature, not all modalities and their cues are equally useful. Additionally, when investigating different algorithms, future researchers should remember that more powerful models are not necessarily more successful in classifying candidate responses during the interview.

#### Relevance to the Congress Theme

This study demonstrates the possibilities of an interdisciplinary approach in solving the longstanding problem of faking in selection interviews by combining psychological insights and research design expertise with statistical algorithms and applications based on machine learning and AI.

*Keywords: Selection interview, faking, behavioural cues*

## Oral presentation OP697

### A network approach to the burnout-engagement relationship: A new perspective

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science

Theoretical background and research goals

The dialectical theory of burnout and engagement (Leon et al., 2015; Schaufeli & De Witte, 2017) has been proposed as the solution to the longstanding jingle-jangle debate about the relationship between burnout and work engagement. The dialectical perspective propose that burnout and engagement are two distinct, i.e., real, and simultaneously overlapping, i.e., redundant, constructs (Leon et al., 2015; Schaufeli & De Witte, 2017).

However, we believe the conclusion and support for a dialectical perspective (Schaufeli & De Witte, 2017) on the burnout-engagement relationship is premature for several reasons. First, previous studies have examined and compared the psychometric properties of burnout and engagement by utilizing the two most common measurements, namely Maslach Burnout Inventory (Maslach & Jackson, 1981) and Utrecht Work Engagement Scale (Schaufeli et al., 2002). As such, preliminary evidence speaks more of a dialectical relationship between the two measurement scales. Arguably it is important to use other instruments because the field of psychology struggle to measure phenomena (Flake & Fried, 2020; Fried & Flake, 2018) and measurement can influence constructs (Edwards & Bagozzi, 2000). For example, in personality psychology, the relationship between extraversion and loneliness was moderated by the particular loneliness scale that was used (Buecker et al., 2020). In fact, correlation coefficients ranged from -.44 to -.19 depending on the scale.

Second, the empirical evidence that support a dialectical perspective has largely utilized a factor analytical approach to examine the relationship. Consequently, the similar analytical approach may account for a similar interpretation of results. In the latest examination, Trógolo et al. (2020) use the bifactor model to support the dialectical theory approach. They find that cynicism (burnout) and dedication (engagement) share a parent construct, while exhaustion (burnout) and vigor (engagement) do not. However, the bifactor model is known for numerous concerns including evidence of overfitting, unstable parameter estimates, and statistical bias in favor of bifactor models, even when other simpler models fit similarly well (Morgan et al., 2015; Murray & Johnson, 2013; Watts et al., 2019).

We believe that the empirical evidence so far suggests that burnout and engagement should be examined using network theory. Thus, the aim of this presentation is to introduce the network approach to burnout and engagement. While we agree that “considering burnout and engagement complete opposites (or a single construct) is inadequate” and an “incomplete view” (Leon et al., 2015, p. 92), we suggest to view them in light of network theory and as a network system that assumes dynamic and reciprocal relationships between variables. The approach allows for detailed examination of measurement and can reveal relationships between constructs (or communities) that answer authors calls for new theories and methodologies in the examination of burnout and engagement (Cole et al., 2012).

Design/Methodology

We examine the relationship between burnout and engagement in two different datasets. We answer the call for open science using one open online dataset by Gottenborg et al. (2022) with 2469

employees from two companies in Norway. The second dataset is a cross-sectional study of more than 800 employees from UK and the US.

#### Results obtained

Preliminary results suggest that while engagement and burnout are separated, the items share different relationships (both positive and negative) with different items. At the center of the network is the exhaustion items, indicating that exhaustion is an important shared characteristic between engagement and burnout.

#### Limitations

We have two limitations. First, all data was collected by surveys, making it prone to common method variance. Second, we use cross-sectional design which makes it difficult to draw inferences about the direction of relationships in this study.

#### Conclusions

In this study, we show that engagement and burnout share a complex relationship where there are, albeit mostly negative correlations, positive and negative correlations between items. We uncover exhaustion as the center of the network, providing reason to believe that employees can become burned out if they are highly engaged over time. Consequently, a network approach to understanding engagement and burnout can increase our understanding of the relationship between engagement and burnout and provide avenues for future research on interventions.

#### Relevance to the congress theme and SDG

The changing world of work demands that we understand these two highly researched and well-applied individual constructs. Furthermore, this topic covers decent work and economic growth and good health and well-being.

*Keywords: Burnout, Engagement, Network analysis*

## Oral presentation OP635

### A simulation tool for prospective work analysis and work design

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science&practice

#### Goal

The aim of our work is to develop a simulation tool for the analysis of demands for future work systems. It shall be used (A) as a tool for the planning and design of work places and production systems in industry to include aspects like mental health and qualification right from the start of the design of organisations and workplaces and (B) as core of simulation games for training and qualification.

#### Originality

Until now simulation tools for the assessment of human work exist mainly on the fields of anthropometry and production planning and control where the performance and qualification level of working persons are included in the planning process.

#### Theory

Starting point was an analysis of empirical research on the consequences of digital transformation on the demands of industrial work and classical results of the analysis of socio-technical systems and action regulation theory.

#### Method

Several models were derived which allow to perform simulation runs depending on the quality of available data in the design process. They were applied on the data of an empirical study for testing and calibrating the simulation model (n=41) and develop the simulation tool. This study was conducted in an Internet-of-Things-Testbed which allows to configure different kinds of work systems in a highly automated laboratory environment with state of the art production technology. The complexity of tasks and therefore the intellectual demands for the subjects was varied as well as the level of experience with this kind of work. Questionnaires, behaviour observation and process data were generated to create data for calibrating the model by comparing individual work processes with simulated processes generated by the application of the model on so called theoretical agents. These are configurations of demographic and questionnaire data in terms of the model. Their behaviour should fit to the data of real work persons of the same type. The results of the study serve as a validation and calibration of the model. After that it was tested in the practical context of a design process for a new work place in semi-conductor industry and assessed by the users.

#### Results

The simulation was transformed into a software tool, which allows to derive prototypical work processes for different simulated work persons described by variables like qualification level, work experience, self-efficacy, sense of coherence and attitude to the task for specific work places which are developed during a design process. The simulation tool is used for simulating psychological consequences of different possible solutions for the design of a work system which shall be implemented in a production system. During the planning process of new production facilities different solutions can be assessed on a conceptual level and conclusions about the consequences

for mental health and qualification demands can be drawn. This process is supervised by the research team to ensure an adequate use of the simulation tool and to develop a guideline for future use cases in this context. In a parallel use case the model is the base for a computer simulated game for the additional qualification of safety engineers and managers in a module developed for the german social accident insurance (DGUV). The participants have the chance to test the consequences of different designs of work places and work tasks on different types of work persons to optimise the use of new technology in a concrete game setting of a course for safety managers. This can be done in a simulated warehouse of a notional little company were different variants of new technology can be implemented and the consequences for the work persons can be studied.

#### Limitations and Implications

Besides the general approach of the simulation model, now the tool is developed and used only in the field of industrial work on the shopfloor level. More features have to be included for workplaces in other sectors and such with higher intellectual demands. Moreover guidelines and qualification courses for an effective and efficient use of the simulation tool in planning processes and training shall be developed.

The research has been funded by grants of the programme Ecsel-Horizon (project iDev4.0, EU, BMBF, Free State of Saxony) and the german social accident insurance (DGUV).

*Keywords: Digitalisation, Work design, Simulation*

## Oral presentation OP135

### A study to determine the Antecedents of Interpersonal Trust in Hybrid Working Conditions

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science&practice

Theoretical background: The outbreak of COVID-19 saw a varying range of repercussions, with one of them being the extensive implementation of virtual mode of working. In particular, a large number of organisations, which predominantly relied on in-person work were forced to adopt virtual work. After state measures on virtual work eased, a large portion of the organisations transitioned to a hybrid work mode, whereby staff worked on site for part of their working hours. Currently, hybrid work remains common in a range of organisations. It is associated with benefits for both employees and employers such as, improved work-life balance, the provision to work with fewer distractions, saving time and cost for commuting, saving office spaces, reduced absenteeism, and increased job satisfaction (CIPD, 2022).

After exploring the existing research, trust when working in a hybrid mode stands out as an area of concern. This is because, trust is known to play a major role in employee-employer relations (Grzegorzczak et al., 2021) and little is known about how trust develops in hybrid work settings.

Upon looking into the different types of trust, there is one category of trust that emerges as being the driving force in ensuring the long-term stability of an organisation while also incorporating the well-being of its members. This category of trust is termed as Interpersonal Trust (Mayer, Davis, Schoorman, 1995) is expected to be impacted in post-pandemic workplaces as both managers and employees have developed concerns over each other's trustworthiness. Managers believe that hybrid working results in a loss of control and co-ordination (Grzegorzczak et al., 2021), whereas employees believe hybrid working style has increased the difficulty of sharing evidence of their trustworthiness in working conditions that have lowered their visibility (Mortensen & Haas, 2021). Despite its widespread adoption, hybrid work practices are typically new to most organisations, with interpersonal trust potentially playing a central role in the successful implementation of hybrid work arrangements. Therefore, this study focuses on determining which antecedents impact the development of interpersonal trust in hybrid working.

Methodology: To ensure that this study extensively explored all the possible antecedents of interpersonal trust in hybrid working conditions, while also considering that trust is dyadic in nature, a qualitative methodological approach was chosen.

Employees and managers were interviewed from an organisation belonging to the third sector, to understand both perspectives regarding how their interpersonal trust towards one another has developed in hybrid work setting. The interviews were semi-structured in nature to ensure that the participants had the opportunity to reflect on their hybrid working experience without being constrained by our pre-prepared questions. Reflexive thematic analysis (Braun & Clarke, 2022) was used to analyse the content of the interviews. Nvivo Version 20.7.1 was used for coding.

Results: This study highlights the key antecedents of interpersonal trust for individuals working in hybrid work setting, such as communication quality and vision and values. Communication quality includes aspects like clarity of communication, and having freedom to have difficult conversations as it helps build trust. Communication also emerged as a strong factor that led to the development of interpersonal relationships, thereby maintaining and building trust, once the individuals have gone

past the initial phases of trust building. Shared vision and values were also shown to have an impact in the development of interpersonal trust in hybrid work.

**Limitations:** The main limitation is that this study investigated the antecedents of interpersonal trust at the individual level between an employee and their manager and did not consider how the interpersonal trust was developed in teams. Also, as we considered participants who were presently working in the UK, the study failed to account for any cultural variations that might have an impact on how interpersonal trust is developed.

**Conclusions:** This study sheds light on different antecedents of interpersonal trust in hybrid work settings, such as communication quality, interpersonal relationship, and shared vision and values. As such, our findings extend the current theory on interpersonal trust by adding evidence on how this type of trust is developed in a unique context that has been under-theorised to date. These findings have the potential to drive quantitative studies that will establish the strength of the associations between different antecedents and interpersonal trust in hybrid work settings. In terms of practical implications, organizations can utilise our findings to shape the context in a way that fosters the development of Interpersonal Trust. For example, by using different digital or co-working tools (Cho & Lee, 2022) to enhance the Communication Quality.

*Keywords: Interpersonal Trust, Hybrid Work, Flexible Work*

## Oral presentation OP456

### **A Support to Agency: the Associations between Support from Teaching Staff, Career Engagement, and Movement Capital among Italian University Students**

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science

#### Research goals

The entrance to the world of work is a challenging stage for young people, especially for their career development. Career behaviours are essential to counteract the complexity of the transition to the labour market. Accordingly, this study delved into career self-management behaviours encapsulated in the Career Engagement (CE) variable. In particular, we investigated the relationship between CE and Movement Capital. We also aimed to examine the predicting role of Support from teaching staff (STS) and online interaction during online learning. This study's value lies in enriching literature about the role of career behaviours among labour market entrants. Also, we shed light on the contextual meso-level factors which, in Higher Education, can facilitate career self-management behaviours and processes.

#### Theoretical background

According to the Conservation of Resources (COR) and Career self-management (CSM) theoretical frameworks, career behaviours tapped by CE represent an investment to enhance caravans of resources, represented here by Movement capital (i.e., Career Identity, Social Capital, and Self-efficacy). Moreover, STS – a form of social support reflecting work-based, career-oriented, and emotional-supportive teaching to prepare students for the world of work– is a social resource reflecting a resource caravan passageway, which may encourage students to be concerned with their career development. Arguably, STS may enhance students' CE and, in turn, Movement Capital development. Therefore, we hypothesised a mediation model where CE mediates the relationship between STS and Movement Capital (Hypothesis 1). Moreover, the pandemic directed scholarly attention to the role of interaction on online learning platforms in influencing learning experiences. Therefore, we explored whether and how online interaction between students and teachers moderates the relationship between STS and CE and, then, the mediation hypothesised (Research Question 1).

#### Methodology

Data collection started in March 2020. We invited last-year university students from several Italian universities to complete an online questionnaire. Participants have been assured confidentiality and acknowledged the right to participate upon informed consent. The final sample comprised 276 participants with a mean age of 25.63 years (SD = 5.84) and mostly Women (86.1%).

#### Results

We used the macro PROCESS of the SPSS package to test the hypothesis and answer the research question. Consistent with our expectations, we observed that CE mediates between STS and Movement Capital (Hypothesis 1 supported). In response to Research Question 1, we observed that the positive indirect effect between STS and Movement capital is significant and stronger at medium and high levels of Online Interaction.

## Limitations

As most participants were women and with a Humanities background, a more representative sample may be required to test these relationships. Moreover, our empirical work may be replicated with a longitudinal design to produce more robust results and conclusions. Also, future studies may add or use items that measure the most recent experiences of teacher-student interaction in the online learning environment.

## Conclusions

Our study provides evidence of CE's role in fostering Movement capital, which integrates existing research that sees career resources as inputs of career management behaviours instead. Future research should consider that entrants will need to rely on multiple behaviours to facilitate their transition. Also, we identified STS as one of the contextual Meso-level facilitators of career self-management, inviting future research to investigate these aspects further. We also highlight that in an online learning environment, the level of interaction is key to sustaining STS's role in fostering career development. Future studies may better articulate online learning factors and their impact. In a practical sense, our findings suggest devoting efforts to preparing teachers for their role of sustaining students' career progress and managing online activities. Also, targeted interventions should be aimed at motivating students' CE.

## Relevance to the Congress Theme

Our study remarks on the need for Higher Education to embark on the social responsibility of supporting labour market entrants' career development. We call for integrating meso-level factors inside (e.g. teaching staff, career services), and outside (e.g. alumni, graduate recruiters) Universities to incorporate career education and career self-management themes into didactical activities.

## Relevant UN SDGs

Decent work and economic growth; Partnerships for the goals

*Keywords: Movement Capital, Career Engagement, Transition to Work*

## Oral presentation OP334

### A systematic review of the effectiveness of peer mentoring in the study entry phase.

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science

According to Heublein and Schmelzer (2018) student dropout (25% of all Bachelor students), especially during the freshman year, is an issue facing universities today which can have longer-term consequences on an individual level (Klein et al., 2021), as well as for universities (Madner, 2015).

To address the problem, there are numerous interventions to support students in the early stages of their studies. One of the commonly used interventions is peer mentoring. It is defined as "an intervention strategy in which one or more students (i.e., mentees) are paired with a more experienced student (i.e., peer mentor) who provides both practical guidance and social support to the mentee(s)" (Yomtov et al., 2017, p.26). " It is designed to help promote academic and social integration of first-year students (Flores & Estudillo, 2018). According to Tinto (1993), academic and social integration are crucial factors that determine the decision to stay in university. In this context, academic integration is formally defined by students' academic performance and informally by interactions with faculty and perceptions of positive experiences. For social integration, extracurricular activities and peer support play a critical role. In general, students who feel more integrated into the university are more likely to graduate. Thus, peer mentoring plays a critical role, particularly in social integration. Furthermore Young and Perrewé (2000) present gender as an antecedent in their mentoring model. So Kalbfleisch and Keyton (2012) were able to show that women, in contrast to men, develop a friendly relationship more quickly in the mentoring relationship. Overall, women draw more social support from peer mentoring compared to men (O'Brien et al., 2010).

Comprehensive student support services are used by higher education institutions, but there is little substantiated evidence on the effectiveness of these interventions (Schubarth et al., 2018). The aim of this review is a systematic analysis of previous studies with regard to the effectiveness of peer mentoring as a support measure in the study entry phase. In doing so, effectiveness will be measured on the key variables of intention to drop out, sense of belonging to the university, and academic performance. In addition, since women experience e.g. more stress during the transition from school to university (Conley et al., 2014), it will be considered whether the effectiveness of peer mentoring differs between genders. In addition, particularly due to the COVID-19 pandemic, all services had to be digitally adapted (Breitenbach, 2021), so another research question looks at possible differences in the effectiveness of digital vs. non-digital peer mentoring.

The PRISMA guidelines were followed in conducting the systematic review (Page et al., 2021). To begin the search process, a search was conducted on Google-Scholar to identify existing reviews and key search terms and then a search string was developed at SCOPUS. The search string was then used to search three different databases: SCOPUS, Web of Science, and Ebscohost. The search results only included articles after 1990, as peer mentoring as we understand it today became established in the 1990s (Management Consulting, 2009). The search yielded a total of 17 801 articles. Their abstracts were rated by two independent individuals for inclusion criteria. A total of approximately 55 studies are included. Initial results show that peer mentoring is an effective support measure for first-year students. In particular, the social component of peer mentoring was found to be highly effective, predominantly among women. In general peer mentoring has an positive impact on emotional

needs, physical environment and social and academic integration. It was found that digital peer mentoring is indeed an effective alternative to non-digital peer mentoring. However, it was found that both psychological support and self-efficacy were rated lower in digital peer mentoring compared to non-digital peer mentoring. Further results are expected in March 2023. Peer mentoring is thus an effective support service that, due to its diversity and different components, can be adapted and used to meet different needs, e.g., increasingly for female students. Many implementation options are available for digital peer mentoring, which should be evaluated in the future in order to further establish the digital offering.

The issue is now of high relevance and urgency. Especially due to the Covid-19 pandemic and the resulting limited face-to-face teaching, it became apparent that it is much more difficult for students to arrive at the university and to establish contacts. Thus, it is important to highlight the importance of peer mentoring as a support measure in the study entry phase and also to shed light on the effectiveness and development of online formats for future crises.

*Keywords: review, peer-mentoring, freshman*

## Oral presentation OP150

### **A thematic analysis of how responsibility attribution and justice perceptions shape the impact of interpersonal emotion regulation on job well-being**

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science

#### Research goals and relevance

Employees across many sectors, particularly those who are in customer or client facing roles, are expected to manage the feelings of those they serve, a process termed 'interpersonal emotion regulation' (IER). While research has conceptualized IER as a job demand that can affect employees' well-being, the goal of this research is to explore whether employees assign different meaning to this demand, depending, for example, on how fair they believe it is, and if the meaning they assign shapes the impact of IER on their well-being.

#### Theoretical background

Previous research has shown that employees' IER at work is related to their own well-being. Most studies have focused on the psychological effort required and the resources available to meet IER demands as the main predictors of the kind (i.e., positive or negative) and intensity of effects of IER on employees' well-being. However, employees' interpretations of IER demands and their consequences for employees' assessment of social exchange conditions during the interactions with others (clients, colleagues, subordinates, etc.) have received considerably less attention.

Recent studies have shown that the negative effects of intrapersonal and interpersonal emotion regulation at work partly depend on employees' attributions for the associated emotional demands. In particular, attributions of responsibility for the organizational behaviors that lead to regulatory demands moderate the effects of emotion regulation on employees' well-being. Results also shown that employees' perceptions of distributive justice mediate the effects of responsibility attributions on well-being. In other words, when service workers attribute responsibility to the client, they perceive the situation to be less fair, and the intrapersonal emotion regulation they perform is associated with poorer well-being. However, it is not yet known whether employees make similar attributions and whether those attributions have similar consequences when it comes to IER.

#### Methodology

We conducted six group interviews (N=24) in our qualitative study. Participants were employees dealing with clients claims or complaints as their main activity during the working day. Participants were asked to describe different "typologies" of interaction with clients with regard to their impact on well-being. They also discussed the reasons to consider a particular kind on interaction relevant, its relationship with the quality of the service delivery, its impact on their exhaustion and its consequences for subsequent interactions. Transcriptions of the interview were thematically analyzed by three independent coders.

#### Results

Thematic analysis revealed a considerable consensus among participants identifying the classification of the client as responsible for the claim demanding employees' regulation of the

client's emotions as a relevant category, together with the client's attitude (aggressive vs. cooperative) and the client's power (e. g., their influence on social network or the size of their turnover). Moreover, participants agreed upon the role of responsibility in the definition of the interaction as unfair ("demanding an undeserved effort"). Both attribution and fairness were associated with the effort that participants put into regulating the client's emotion. When the client was perceived as responsible for the emotional demands (e.g., to calm down a client who is angry because the product, that they have improperly operated, has not been replaced), employees reported putting less effort into service delivery. Paradoxically, they also considered this kind of interaction more exhausting, despite putting in less effort. This less-effort/more exhaustion paradox suggests that the meaning that employees ascribe to emotional demands shapes the impact of these demands on their well-being, over and above the amount of effort that they invest.

#### Limitations

Although the present results are promising, we acknowledge that this exploratory study has some limitations, including a relatively small sample size. Further studies using different methodological approaches will be needed to confirm the validity of the relationships established between the variables and to assess the extent to which the findings can be generalized.

#### Conclusion

Overall, the study confirms the relevance of employees' interpretations of emotional demands to explain the effect IER on well-being beyond the employees' effort to meet them. Employees' attributions on the interpersonal emotional demands from their job roles/organizations can help to clarify their perceptions of client interactions clients as (un)fair and consequent effects on employees' perception of their working conditions as decent work.

#### Relevance to Congress theme

Understanding how the demands of emotional regulation affect well-being at work is an issue that needs to be urgently addressed in order to improve the working conditions of a wide range of workers.

*Keywords: Interpersonal emotion regulation, responsibility attribution, well-being*

## Oral presentation OP727

### **A workforce health and wellbeing performance measurement and management system – a novel approach to health data collection and reporting in GB rail**

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practice

The British railway employs 115,000 people, supports a further 250,000 through its supply chain and contributes a £36bn annually to the economy. Its safety culture, through cross-industry data collection, monitoring, and public reporting, is well established, which has resulted in dramatic reductions in safety-related incident. The aim of this research is to support the industry in establishing an equally strong culture of data collection and sharing in the health and wellbeing (HWB) of the workforce. The rail workforce is regularly exposed to physical (e.g. vibration), ergonomic (e.g. flawed design of driver cabins) and psychological (e.g. witnessing suicide) hazards leading to poor health.

You cannot manage what you cannot measure. Data is becoming increasingly important in many fields including healthcare and HWB management in organisations, and there is growing interest from rail companies in HWB systems, and many are developing their own, presenting an opportunity for the industry, as a whole, to mature. With the support of cross-industry HWB groups, this work has built and is trialling a HWB performance measurement and management system (the dashboard) for GB rail.

The new dashboard provides rail organisations with a comprehensive measure of the health and wellbeing of employees. Currently at pilot stage, the dashboard is designed specifically for the rail sector. It measures 24 key performance indicators (KPIs), which were developed in collaboration with organisations across the industry. KPIs include long term sickness absence, lost time rate, reasons for sickness absence, health surveillance indicators as well as indicators on Covid-29, employee assistance programmes and drug and alcohol testing. Eight of the 24 health KPIs are converted to a single score – the Health and Wellbeing Index (HWI). The intention was to produce an equivalent of the Fatalities and Weighted Injuries Index (FWI) for health and wellbeing. The two indexes are compatible: the HWI value can be compared directly with the FWI, and both can be monetised to inform investment priorities.

Using data over a 3-year period from 16 rail organisations (including train operating and infrastructure and supply chain companies) as a start, this research through the implementation of its measurement and management system have shown that the rail industry's average cost of sickness absence is £3,341 annually per employee, which is £2.3k (or 8.5 days) more than the national average. Previous research showed that sickness absence and presenteeism costs in the rail sector are estimated to be £889m annually. These figures suggest that for every £15 lost to sickness absence, only £1 is spent on supporting employee health. In addition, data shows that the most common reasons for sickness absence are mental ill-health problems (16%), followed by musculoskeletal disorders (MSD) (14%). A high proportion of absence is recorded as other or unknown and data is self-reported, and therefore may be prone to inaccuracies related to diagnosis or categorisation. Furthermore, 60.56% of employees undertake safety critical work. Within that group, 98.87% passed drug testing as negative. It is the first time that GB rail, the Department for Transport and the regulator have a pool of HWB indicators for strategic decision-making. However, the data consistency and quality are poor, not allowing to report on all indicators.

For the first time, organisations can access shared, aggregated data to assess and monitor health risks, and benchmark against others. It drives behaviour change in HWB interventions, informs policies and helps build business cases. Benchmarking groups, taking place twice a year, have been established as a part of the project, where participants discuss their data in a confidential forum, debate common issues and share best practice. In addition, a major benefit of the whole system is that it encourages continuous improvement through quarterly recommendations tailored to participants and disseminated at an industry level. This two-pronged approach includes a data quality heat map to ensure that the data can be relied upon when maturity improves while also providing actionable insights on ways to support employees' HWB.

*Keywords: health, data, management*

## Oral presentation OP734

### Abstract not Concrete Rumination Explains Reduced Well-Being: Two Experience Sampling Studies

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science

Nowadays, employees are confronted with a growing number of stressors, such as long workdays and technological advances in communication. Despite a great body of research that help to understand the origins and mechanisms of stress and its consequences, burnout rates further increase, negatively impacting well-being of the workforce.

Experiencing daily stressor, especially related to social contacts, results in negative outcomes. The long-term accumulation of being exposed to daily stressors can lead to a decline of one's well-being and can increase the risk of chronic diseases. Coping is an important mechanism involved in dealing with daily stressors. Problem-focused strategies can be more effective and beneficial for the individual than avoidant strategies. Previous research has demonstrated that the coping strategies is, to a certain extent, dependent on personality. Interestingly, relatively little attention has been paid to content-specific traits like perfectionism. This is surprising, considering that perfectionism is more prevalent in the workplace than in other life domains.

Maladaptive forms of perfectionism have been linked to increased stress levels, depression and anxiety. In addition, maladaptive perfectionists are more likely to experience burnout, and have lowered evaluation of their professional competence. Studies on rumination delivered promising results to better understand the mechanism behind the negative outcomes of daily stressor and certain personality-related tendencies such as perfectionism. While rumination is generally considered a form of repetitive thinking and it is viewed as maladaptive, repetitive, prolonged, and recurrent negative thinking about oneself, feelings, personal concerns and upsetting experiences. Rumination is a way of responding to and coping with stressor and varies depending on the situation; state rumination refers therefore to the level of rumination experienced at a certain moment in time. Concrete rumination are thoughts about the concrete experience at hand, and the process of handling it appropriately. These thoughts can therefore be constructive or adaptive. Abstract rumination, on the other hand, is defined as a conceptual-evaluative self-focus, and it does not improve problem-solving abilities and has been found to be associated with intrusions about failure, as well as negative mood.

In the Study 1 ( N = 109), we tested the prediction that abstract (not concrete) rumination mediates the positive relationship between daily (social) stressors and decreased well-being, whereas in Study 2 ( N = 110), we tested the prediction that abstract (not concrete) rumination mediates the positive relationship between maladaptive perfectionistic tendencies and decreased well-being. We conducted the studies with samples of working individuals, using an experience sampling method (ESM). In 5-day long procedures, we collected data for 15 beeps. Each beep was sent randomly between 8 a.m. and 6 p.m., three beeps were sent every day. All the focal variables were tested at the beep-level, while controlling for mood and demographics. The main results supported the prediction for Study 1: the indirect effect for abstract rumination on decreased well-being was positive and statistically significant,  $B = 0.21$ ,  $SE = .10$ , 95% CI [0.04; 0.44], but for concrete rumination was statistically non-significant:  $B = -0.05$ ,  $SE = .05$ , 95% CI [-0.12; 0.02]. Similarly, in Study 2, the indirect effect for abstract rumination on decreased well-being was positive and statistically

significant:  $B = 0.13$ ,  $SE = .04$ , 95% CI [0.06; 0.20], but for concrete rumination was statistically non-significant:  $B = 0.01$ ,  $SE = .01$ , 95% CI [-0.02; 0.02].

The findings suggest that abstract rumination disrupts the recovery process related to mental health by reactivating and prolonging negative responses, and this identifies rumination as a core-mechanism between daily stressors, perfectionistic tendencies, and well-being. Previous research has shown that ruminations in general act as a maladaptive coping mechanism for uncontrollable work stressors. In these studies, we showed that this effect is specific for abstract not concrete rumination. Thus, the current research is aligned with processing mode theory that differentiates between maladaptive and adaptive types of rumination.

In previous research it was shown that mindfulness training can be an effective method reducing maladaptive rumination, and thus, can improve well-being of the workforce. We recommend organizations offering mindfulness trainings to their employees and encourage their team leaders to support such programs. Importantly, creating an office space specifically helping to reduce rumination can contribute to organizational culture that appreciates well-being of employees.

*Keywords: rumination, stressors, well-being*

## Oral presentation OP368

### **Abusive Supervision and the loss spiral: A study on the role of negative leadership in the JD-R model**

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science

Research goals and why the work was worth doing:

Drawing upon the Conservation of Resources (COR) theory (Hobfoll, 1989) and the Job Demands-Resources (JD-R) theory (Bakker & Demerouti, 2017), this study aims to investigate the role of a negative leadership style in impoverishing resources and increasing the negative consequences of demands for people at work. Furthermore, the role of leadership in the JD-R model is an aspect that needs to be developed and further explained; previous empirical studies (Schaufeli, 2015; Tummers & Bakker, 2021) attempted to clarify its position and role in the JD-R model. Considering the latest study about JD-R theory (Bakker et al., 2023) and the influence of leaders in shaping followers' wellbeing (Caputo et al., 2023), the role of leadership within the JD-R model needs further investigation to be clarified and test if leadership could be a resource (or a demand) itself.

Theoretical background

Abusive supervision is a negative leadership style according to which people perceive that their leader is engaging in "the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact" (Tepper, 2000, p. 178). Considering that the central tenet of COR theory is that "individuals strive to retain, protect, and build resources" (Hobfoll, 1989, p. 516) and that abusive supervision consists of leaders ridiculing and undermining their followers, this leadership style could imply a decrease in resources among individuals, and trigger the subsequent resource loss spiral (Hobfoll, 1989). Abusive Supervision could, therefore, on the one hand, negatively affect followers' work engagement (Barnes et al., 2015; Li et al., 2021; Scheuer et al., 2019) by weakening personal resources such as self-efficacy (Xu et al., 2015), and on the other hand increase employees' emotional exhaustion (Xu et al., 2015) due to augmented perception of job demands, such as workload.

Design/Methodology/Approach/Intervention

A sample of 1505 nurses completed a self-report questionnaire. A full-model SEM approach was used for data analysis.

Results obtained or expected

The model shows a good fit:  $\chi^2(797) = 2733.403$ ;  $p < .001$ ; CFI = .91; TLI = .90; RMSEA = .04 (.039, .042); SRMR = .06. Results confirm that, on the one hand, Abusive Supervision has a negative direct impact on Work Engagement (standardized beta = -.15) also through a weak mediation of Occupational Self-Efficacy (standardized beta = -.01); on the other hand, Abusive Supervision increases followers' Emotional Exhaustion (standardized beta = .20) also through the mediation of perception of Workload (standardized beta = .03). Direct and indirect effects are presented.

Limitations

Limitations include the cross-sectional nature of the study, which could only give starting insights about the loss spiral, and the lack of differentiation of effects based on the specific characteristics of the medical units.

Conclusions – research and or practical implications/Originality/Value

Theoretical implications of the present study are twofold: 1) deepening the role of leadership in the JD-R model, in this case as a contextual factor (a predictor of resources and demands); 2) giving suggestions about the functioning of the loss spiral. Longitudinal analysis is required to better explore the dynamics of the loss spiral. Practical suggestions concern tips for nurse managers about the crucial role of leadership in improving followers' resources (against the impact of negative leadership styles which determine a resource loss).

Relevance to the Congress Theme

In the work of the future, health care leaders need to be more aware of their role and their "power" to improve the resources of their subordinates. This resource enhancement is especially important in the health care sector, considering that nurses' workload will become increasingly heavier in the times to come.

*Keywords: Abusive supervision, Job Demand-Resource, Conservation of Resources*

## Oral presentation OP609

### Acceptance and Commitment Training (ACT) for work stress recovery

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science&practice

#### Research goals

A modern way of working challenges individual well-being in many ways, and work-related stress causes not only individual suffering but also, creates a considerable economic burden both for the organisations and society as a whole. Previous research has suggested that recovery can minimise the negative effects of work stress and therefore, called for more recovery intervention research. In response, this research aimed to 1) examine to what extent Acceptance and Commitment Therapy (ACT)-based recovery intervention affects work stress recovery and 2) investigate the mechanisms of this change. The proposed hypotheses were:

H1: ACT-based stress recovery training produces a positive change in recovery-related variables compared to the waitlist control group

H2: The intervention leads to post-intervention improvements also in occupational outcomes

H3: The expected post-intervention improvements in outcome variables will be mediated through improvements in psychological flexibility (i.e. change in participants' relation to their unwanted inner experiences such as undesirable thoughts, emotions and sensations)

H4: The intervention effect will be moderated by participants' level of stress, psycho-/physiological strain, work demands, social integration and support and/or job autonomy

#### Theoretical background

Strain, change, uncertainty, stress, growing demands and diminishing resources, long working hours and difficulties in organising work–leisure balance paint the picture of contemporary working life. While working can provide individuals with several positive resources, such as the potential for development and personal growth, and a sense of accomplishment and meaning (Christensen et al. 2009), it is also a significant source of stress. Consequently, recovery – that is, the opposite of the strain and stress process – is perhaps more important than ever. Successful recovery can neutralise the negative effects of stress, and arguably, the key is not how much one experiences stress, but how well one recovers from stressful periods (Lindholm, 2013; Kinnunen & Rusko, 2009; Feldt et al., 2007). Previous research has provided indicative evidence that recovery can be improved through training interventions and identified a few different effective intervention approaches. However, Acceptance and Commitment Therapy (ACT) – a third-wave cognitive-behavioural approach – has not, to the best of author's knowledge, been studied in relation to work stress recovery. This is the research gap this research aims to address.

#### Methodology

The 58 participants of the study were assigned either to an ACT-based recovery training group or a waitlist control group. The participants received 12 hours of ACT-based recovery intervention that included psychological flexibility (i.e. mindfulness- and value-) exercises and an introduction to recovery from work stress. The data was collected at pre-, post- and 6-month follow-up, and analysed with appropriate statistical methods.

## Results

Based on the initial analysis of the data, the ACT-based recovery intervention significantly increased work-related psychological flexibility, recovery experience, occupational self-efficacy and decreased need for recovery with small to medium effect sizes from pre- to post-intervention. However, the analyses of the control group, long-term and mediation-moderation effect are still in progress, but the results will be available by March 2023.

## Limitations

The number of research participants is somewhat limited and this must be taken into account, both when analysing and interpreting the results. In addition, only half of the participants were randomised into intervention/waitlist groups. It, also, bears noting that, one intervention group was organised online (due to the pandemic), whereas the other three groups were arranged face-to-face.

## Conclusions

By bringing together ACT and recovery research, this research contributes to and extends the previous research done in both disciplines. Firstly, this research answers the theory-development calls requesting more rigorous recovery intervention research (Sonnentag et al. 2017) and provides empirical support to the suggestion that recovery is, at least to some extent, malleable and trainable (Sonnentag et al. 2022). Secondly, this research provides evidence for ACT's feasibility for the working population and its ability to increase recovery experience and decrease the need for recovery, results exceeding those previously studied. Lastly, the research also contributes to our understanding of mechanisms of change by investigating the mediation-moderation effect of the intervention. From a more practical point of view, the final outcome of this study is to provide occupational health care and organisational wellbeing units with a scientifically-tested, ACT-based training that can help their employees to tackle work stress and recovery challenges.

*Keywords: stress, recovery, ACT*

## Oral presentation OP93

### **Adapting or losing it? How time pressure and emotional exhaustion relate over time**

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Research goals and why the work was worth doing. Two prominent theories make predictions about how workplace stressors and well-being of employees might develop over time. First, the Adaptation theory suggests that people undergo a change in well-being after experiencing a critical life event or stressor, while also returning to their individual set point of well-being over time. Second, Conservation of Resources theory posits loss spirals, where the loss of a resource relates to a further subsequent loss of resources. Building on these two theoretical models the present study follows the numerous calls to closer investigate variation of both job stressors and well-being over time. Specifically, using data from an intensive longitudinal study, we examine the well-known relationship between time pressure and emotional exhaustion in its development over time. We aim at examining (1) if both time pressure and emotional exhaustion show adaptation over time, (2) if adaptation of one variable can be disrupted or enhanced by the (chronic) level of the other variable, and (3) how resource loss spirals occur in the interrelationship between time pressure and emotional exhaustion. The present study sheds new lights on existing theories on stressor-strain relationships by investigating the dynamic development of stressor-strain relationships over time.

Theoretical background. Although diary studies and thereby the study of within-person effects have become quite common in recent years, the focus has been on within-person effects, mainly neglecting temporal dynamics of workplace characteristics and well-being. The Adaptation theory and the Conservation of Resources theory make predictions about temporal developments of stressors and strains over time. Little is known about what enables and prevents the adaptational process. Relatedly, it remains unknown how loss spirals develop over time in the interrelationship between time pressure and emotional exhaustion. The present study aims at providing a deeper understanding of the development of stressor-strain relationships over time. Additionally, as empirical and theoretical evidence suggests that not only stressors relate to strain over time, but also strain relates to stressors (reverse causation effects), we systematically investigate both directions of effects.

Study design and methods. We conducted a weekly measurements study across eight consecutive weeks. Every Friday participants answered questions regarding time pressure and emotional exhaustion of the previous week. In total, N = 259 employees responded to our questionnaires. Sixty-two per cent of the participants were female, and the mean age was M = 40 years (ranging from 21 to 68 years). Participants came from a variety of occupations, with the majority working in the health care and social sector (17.4 %), followed by public administration (11.6 %) and industry (10 %). In order to investigate the development over time of time pressure and emotional exhaustion, as well as the relationship between these two variables, we use structural equation modelling and investigate cross-lagged relationships within our eight measurement points. Furthermore, we consider the relationship between a change in time pressure with a change in emotional exhaustion. In all analyses, we investigate the causal relationship from time pressure on emotional exhaustion as well as the reverse causation effect.

Results. Initial analyses support a reciprocal relationship between time pressure and emotional exhaustion. Results for analysing adaptation and resource loss spirals will be presented.

Limitations. The study design is limited to a weekly measurement of workplace characteristics and well-being to examine their adaptational effects when facing temporal dynamics across time. Thus, it is not possible to draw any conclusions on short- or long-term dynamics (e.g., on a daily, monthly, or yearly basis).

Research and practical implications. By focusing on adaptation processes in both workplace characteristics and well-being, we extend literature on adaptation and resource loss and gain spirals in the work context and offer practical implications with regard to resource spirals and working conditions.

Originality and value. In line with the UN SDGs targeting good health and well-being, it is important to understand the interplay between temporal dynamics of both workplace characteristics and well-being in the occupational health and stress context as well as their adaptational processes. This will help to refine current stress and resource theories. Also, deeper knowledge on the effects of dynamics of workplace characteristics and well-being over time will aid to provide evidence-based recommendations on job design in the changing world of work.

*Keywords: stress, well-being, development over time*

## **Oral presentation OP814**

### **Deciphering Disengagement in Managers**

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#### Research goals and why the work was worth doing

Employee engagement has received much attention from academics, practitioners and organisations alike owing in no small measure to the plethora of benefits it boasts. Employee disengagement, however, remains relatively neglected and the concept is not well defined in management research. The experiences of disengagement of those who hold managerial positions may differ from those in non-managerial roles and may be highly consequential. This research explores the qualitative experience of employee disengagement, specifically in managers.

A reappraisal of disengagement is appropriate and timely. The disengagement literature is extremely limited. Existing literature tends to focus on engagement and to position it on a continuum with disengagement, or as a narrowly defined subconstruct of another construct, such as burnout. The world of work has undergone unprecedented change in the c.30 years since Kahn defined engagement and disengagement back in 1990; employees of 2022 operate in a very different world. Existing conceptualisations don't accommodate for potential variation in disengagement experiences between managers and non-managerial employees. Fundamental differences inherent in the dynamics of managerial roles such as different demands and resources make it possible that their experience of disengagement has distinct characteristics compared to those they manage. Consideration of disengagement in managers is important, not least given their influence on the engagement and disengagement outcomes of the entire workforce. This research aims to contribute towards a conceptualisation true to the experiences of today's employees and inclusive of managers.

#### Theoretical background

Kahn's theoretical framework for engagement and disengagement was built on motivation and job design. As a starting point, Kahn's consideration of personal disengagement is a functionable perspective pertinent to this paper. A key characteristic of disengagement in managers may be the leaving out from role performance elements of one's authentic self. The current research also draws on Crawford, LePine & Rich's (2010) work focusing on challenge and hindrance demands. Their theoretical framework functions as a useful lens through which to examine individual experiences of disengagement through exploration of appraisals of work conditions perceived as relevant. Social Exchange Theory views employees' decision to disengage in contractual terms as a result of perceived unfavourable return from their organisation on investment of their personal resources. This is based on the idea that individuals perform a cost-benefit analysis when making social decisions (Cropanzano & Mitchell, 2005). The dearth in the research on disengagement also necessitates some consultation of the engagement and burnout literature.

#### Design/method

Semi-structured interviews were conducted to gather insights into how disengagement is understood, its key characteristics, manifestations and outcomes.

Reflexive thematic analysis was performed to analyse this data. This latest articulation of thematic analysis operates with acute awareness of the researchers influence and gives primacy to the

importance of ensuring data interpretation remains as close to the intended original meaning as possible.

Results expected - December 2022.

#### Limitations

This study represents the first of a two-part programme of research. Results shall be transferable to similar contexts as opposed to being generalisable. Further research should focus on understanding disengagement in managers in different contexts. The root causes of disengagement in this group also warrants focus in future research.

#### Conclusions

This research informs research and practice. There are implications for how disengagement should be defined, measured, and ultimately addressed in interventions. This research is intended primarily for an academic audience but was designed with bridging the management research and practice gap in mind. It aims to produce insightful information that is relevant and accessible to academics which can be harnessed by practitioners to inform successful evidence-based interventions.

Very little academic attention has been dedicated to employee disengagement prior to this research. Disengagement specifically in managers is entirely overlooked. This research represents an empirically founded first step towards a revised conceptualisation of disengagement and the basis of an evidenced-based approach towards remedying it.

#### Relevance to Congress Theme

Recent global events have brought unprecedented change, not least to working lives. Disengagement persists, and its associated costs represent an increasingly unaffordable waste of potential. Deciphering disengagement is a matter of priority.

#### Relevant UN SDGs

UN SDG 3 (good health and well-being)

UN SDG 8 (decent work and economic growth)

## Oral presentation OP589

### **Addressing negative acts and bullying at work – and uphill battle? Results from an intervention study in two industrial workplaces.**

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science&practice

Research goals and why the work was worth doing:

The overall goals were to 1) design and implement multi-level interventions targeting negative acts and bullying at work, 2) explore their effects, and 3) explore context factors affecting the interventions. The study shows how context factors act as obstructing factors when conducting interventions targeting negative acts and bullying.

Theoretical background

Research has demonstrated severe individual and organisational consequences (Mikkelsen et al., 2020; Salin & Hoel, 2020) of negative acts and bullying at work. However, there is limited state-of-art research on how such phenomena may be addressed at group and organizational level (Gillen et al., 2017). Yet, research (Hoel et al., 2020; Ng et al., 2021) has pointed to factors in the work environment (conflicts, work pressure, role conflict, poor leadership), and group and organisational culture (poor psychological safety climate, passive bystander behaviour) that may contribute to the development and maintenance of these negative social phenomena, and which must be addressed for interventions to have an effect and seen as relevant by organisational stakeholders. Also, intervention research (Murray et al., 2019; Nielsen & Miraglia, 2017) highlights the importance of addressing stimulating and obstructing factors.

Methodology

Two medium-sized companies from the industrial production sector and passenger handling and service sector participated in the research project. We aimed to apply interventions that were comprehensive, context-appropriate, participatory, and adaptive in accordance with state-of-the-art guiding principles for workplace interventions: The intervention aimed to be comprehensive by targeting various organizational levels; context-appropriate by delivering intervention activities tailored to specific groups; participatory by involving management and employee representatives in planning the content of the activities; and adaptive as baseline results and process evaluation data were used when planning the content and process of activities. Data on negative acts, bullying and harassment, bystander behavior, psychological safety, use of ethical infrastructure elements, conflict management climate, work environment, and contextual factors were collected at baseline and follow-up via questionnaires and group and individual interviews with managers, employees, and employee representatives. Process evaluation data in the form of observations and participant evaluations were collected during and immediately after the interventions, which included workshops, training courses and lectures tailored to specific groups in the companies.

Results

The presentation focuses on discussing context factors that influenced the intervention process. The following obstructive factors were observed; insufficient planning and follow-up on interventions on the part of participating companies, low identification with stressor, lack of structural framework

within the occupational health and safety organisation impairing cooperation regarding work environment matters, a high focus on production goals and a culture of mistrust between management and certain work groups. On part of the researchers, we failed to adequately tailor interventions in company 1, and in company 2, we did not secure a timely involvement of line managers.

#### Limitations

The study only includes two organizations which limits generalizability. Strengths of the study include the a priori developed program theory, the implementation of organization-specific, theory-based interventions that generally fitted the identified challenges and the extensive collection of baseline, process evaluation and follow-up data.

#### Conclusions

The study confirms previous research documenting the challenges associated with organizational interventions targeting complex psychosocial work environment issues. Our results highlight the importance of; 1) researchers/practitioners and participating organizations sharing expectations regarding co-ownership of the interventions and their goals, 2) collecting and thoroughly analyzing qualitative baseline data to design intervention activities, and 3) using process evaluation data to continually monitor the implementation process, including addressing obstructing factors.

#### Relevance to the congress theme

The paper relates to the congress theme as the ultimate goal of the intervention study is to acquire knowledge that organizations may use to create inclusive and respectful work environments.

Relevance to UN SDGs: The paper and project is highly related to the 'UN Strategic Development Goal 8: Decent Work and Economic Growth' in so far as the research addresses interventions aimed at reducing and preventing workplace bullying and sexual harassment which will help to create safe and secure working environments.

Intended audience: Both academic and practitioner

*Keywords: Workplace bullying, negative acts, interventions,*

## Oral presentation OP71

### Affective and behavioural consequences of boredom at work: the moderating role of autonomy

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science

#### 1. Research goals and why the work was worth doing + 2. Theoretical background

It is relatively common for employees to experience boredom at work. Previous research has shown positive associations between this task-related negative emotion and both high arousal (e.g., frustration) and low arousal (e.g., depressed affect) negative affective consequences as well as adverse behavioural outcomes (e.g., counterproductive work behaviour). However, at least two issues regarding boredom's consequences have remained unsolved so far. First, there is limited knowledge about the conditions under which boredom differentially relates to high and low arousal affective outcomes. Scarce previous research (Van Hooft & Van Hooff, 2018) has proposed and found that among students autonomy explains when boredom relates to each of these affective states. Specifically, higher levels of autonomy strengthened the association between boredom and depressed mood, and weakened the relationship between boredom and frustration. Because these findings were based on cross-sectional and experimental studies in student populations, their generalizability to the work situation remains unclear. Second, there is limited knowledge about the mechanisms that explain why boredom results in adverse behavioural outcomes.

Therefore, in this study, we aim to build upon and extend previous research on the affective and behavioural consequences of boredom. That is, first, this study aims to test the ecological validity of the previously examined moderating role of autonomy in the relationship between work-related boredom and high vs. low arousal affective outcomes, by examining this effect in a work setting. Frustration and depressed affect are included as indicators of high and low arousal affective states respectively. Second, based on affective events theory (Weiss & Cropanzano, 1996) and the emotion-focused model of voluntary work behavior (Spector & Fox, 2002) this study strives to examine whether these low and high arousal affective outcomes act as mediators in the relationship between boredom and work-related behavioural outcomes, namely counterproductive work behaviour and procrastination. We hypothesize:

H1: The positive association between work-related boredom and depressed mood is moderated by autonomy in such a way that this association is stronger (weaker) in case of high (low) levels of job control

H2: The positive association between work-related boredom and frustration is moderated by autonomy in such a way that this association is stronger (weaker) in case of low (high) job control.

H3: There is a positive association between work-related boredom and subsequent counterproductive work behaviour that is mediated by frustration

H4: There is a positive association between work-related boredom and subsequent procrastination behaviour that is mediated by depressed affect.

#### 3. Design/Methodology/Approach/Intervention

These hypotheses will be tested in a daily diary study conducted among a sample of 94 participants from various occupations (52.9% female). Participants completed a one-time 'general' questionnaire in which they reported their levels of autonomy, and subsequently participated in an experience

sampling study which involved completing two questionnaires daily (i.e., during the lunchbreak and at the end of the workday) for the period of one workweek. Work-related boredom, frustration, depressed affect, procrastination and counterproductive work behaviour were assessed in these daily questionnaires.

#### 4. Results obtained or expected (if not available, it must be made clear when they will be)

Data will be analyzed by means of multilevel path-analysis in Mplus before the conference. Results will be further discussed in the presentation.

#### 5. Limitations

Due to the non-experimental nature of the study, no conclusions can be drawn regarding the causality of the examined associations. Also, the study relies on self-reports. This may not be so problematic for the affective constructs that are included, as these can best be reported by those who experience them, but may limit the validity of the behavioural outcomes of our study.

#### 6. Conclusions – research and or practical implications/Originality/Value

The study's findings will increase insight in conditions under which work-related boredom is associated with differential affective outcomes, and sheds light on the mechanisms underlying the relationship between boredom and behavioural outcomes. As such, it gives starting points for interventions to reduce the negative consequences associated with work-related boredom.

#### 7. Relevance to the congress theme

This study fits with the theme of the changing world of work, because new technology, for example in the form of algorithmic management, may affect work characteristics in such a way that it increases the likelihood that employees experience boredom at work.

*Keywords: boredom, well-being, behaviour*

## Oral presentation OP812

### [www.mymigration.academy](http://www.mymigration.academy) research dashboard with instant feedback to respondents as a tool which unlocks human potential

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science&practice

As a result of the escalation of Russian aggression in Ukraine, many millions of people had to leave their homes and seek shelter in neighboring countries. According to UNCHR 7.5 million refugees crossed Ukrainian-Polish border by December 2022, nearly 5.5 million returned to Ukraine. It is estimated that 2/3 of refugees are or will be looking for a job. What Poland can do with these human resources? Firstly, we should get to know them, and secondly, we should find a place for them on our labor market.

The aim of this paper is twofold – methodological and empirical. Firstly, our aim is methodological. We would like to present [www.mymigration.academy](http://www.mymigration.academy) which is a research dashboard that measures four psychosocial capitals - human, psychological, social and economic. After completing professional research tools, the respondent receives an instant feedback. The dashboard is both for people who have experienced migration in their lives (going abroad for at least 3 months) and for people who do not have such experience (a reference population, a comparative analysis). The portal is available in three language versions - Polish, Ukrainian and English. On the one hand, the dashboard provides people with information about their resources, and on the other hand, it can be a source of knowledge for companies about the capitals embedded in organizations.

Secondly, our aim is empirical. We want to present what psychosocial resources refugees from Ukraine have and bring into the labor market. Referring to Stevan Hobfoll's conservation of resources theory (1989, 2006) people with bigger amount of resources cope better with stress and are more satisfied. My Migration enables people to discover themselves. If a person has large resources, the portal will provide information about what resources a person has. If a person has small resources, the portal will provide information on how and where the resources can be enriched

From a psychological perspective, the experience of migration is an event that enriches humans and increases people's capitals. The previous interdisciplinary research and analyzes (Grabowska and Jastrzębowska, 2019, 2022) show that the experience of migration enriches informal human capital, i.e. competences possessed by a person. As a result, people with migration experience show a higher level of competencies, earn on average more than people without such an experience, and more often set up their own businesses.

SDGs: Goal 10 – Reduced inequalities

*Keywords: migration, human capitals, research tool*

## Oral presentation OP658

### **Afghan Refugees in the Netherlands: Perceptions of Economic Downgrading and Commitment System Dynamics**

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science

The amount of Afghan refugees in the Netherlands has increased drastically in the last few years. However, research has shown that Afghans struggle with their economic integration in the Netherlands (Bakker et al., 2014). For this reason, the current study has researched the occupational downgrading of Afghan refugees that arrived in the Netherlands between 1980 and 2000 and the effect this had on the commitment system dynamic of an under researched group.

Meaningful and sustainable employment are increasingly recognized as significant outcomes for a positive refugee settlement (Loosemore et al., 2021). However, difficulties arise when refugees attempt to draw upon their home country's human capital to obtain employment. Typical employment barriers for refugees include the devaluation of their foreign credentials and work experience by institutional validation processes or employers (Verwiebe et al., 2018). To avoid consequential unemployment, refugees are often 'downgraded' in the host country, meaning that their position does not align with their qualifications (Dustmann et al., 2016), and is lower than the position of the host country's citizens who have similar education and work experience (Reitz, 2007). As a result, refugees often find themselves overqualified (Kalfa & Piracha, 2017).

Occupational downgrading and corresponding feelings of overqualification are evidenced to have a number of negative implications for employee "feelings toward, beliefs about, and attachment to" one's current position, occupation, or employer (Judge & Kammeyer-Mueller, 2012, p. 434) but research has yet to delve deeper into how the perceptions of economic downgrading and overqualification affect commitment of refugees (Bakker, 2015). Moreover, while employee commitment to the current organization has been studied most widely, employees can also be committed to other targets outside the organization such as their family (Cohen, 2004; Meyer & Allen, 1997). This study seeks to unpack the effect of occupational downgrading among first-generation Afghan refugees in the Netherlands. Drawing on relative deprivation (Crosby, 1984) and commitment system theory (Klein et al., 2020b), we gain insight into how first-generation Afghan refugees perceive their occupational downgrading in the Netherlands and how this influences their commitment bonds towards their work and core family.

This study is based on an interpretive narrative study which researched how Afghan refugees ascribed meaning to the career-trajectories that they went through, and how those meanings have influenced their commitment systems. The study followed a non-linear abductive logic of enquiry (Schwartz-Shea & Yanow, 2012). Five students from the Radboud University executed twenty-nine semi-structured interviews. The story driven methodology allowed for in-depth conversations with the interviewees. The data was analyzed with a two-phase thematic content analysis in which salient themes were allowed to emerge from the data (Bengtsson, 2020). Three typical commitment systems were identified in reaction to economic downgrading, labeled (1) "Given Up Work", (2) "Hindered to Work", and (3) "Focused on Work".

The study has the following limitations. First of all, narrative interviews are influenced by memories of both the past and the present, influencing the relativity of the story (Squire et al., 2014) and the perception of the change in commitments. Secondly, the stories are told at a specific moment in the

lives of the refugees, and careers may still be developed after the interviews. Thirdly, the interviewees were from the same context but were widely diverse in age, resulting in differences in career-stages, influencing the severance of occupational downgrading. Lastly, the current study focused specifically on work and family in the commitment systems, but commitment systems can consist of much more commitments that were now disregarded.

The specific contribution of this study is that it offers a first discussion on the influence of occupational downgrading on commitment systems, and specifically the dynamics of commitment to the family and commitment to work. The findings of this study support the value of interpretive abductive approaches in progressing commitment system theory, as recommended by Rossenberg et.al. (2022). In addition, the study shows the value of studying commitment system dynamics through lifestories, which provides unique insights into changes of commitment over time. Finally, the study integrates relative deprivation theory with commitment system theory, and thereby bridges the fields of Migration, Careers and Work and Organisational Psychology.

*Keywords: Refugees, Commitment System Theory, Overqualification*

## Oral presentation OP172

### Agency-Communion Tensions among Female Leaders: An Empirical Examination of Cognitive Implications

Stefanie Krauth & Dieter Frey | Ludwig-Maximilians-Universität München; Martin Fladerer, Technical University of Munich; Melissa Hehnen, Ludwig-Maximilians-Universität München

science

#### Research Aim

Women leaders are still underrepresented compared to men, despite diversity actions and intended equality norms. If they make it to the leadership level still, they are often confronted with gender stereotypes and conflicting expectations (Zheng et al., 2018). Despite progressive social rethinking, women are still expected to behave communal, while the typical image of leaders is still one of stereotypically male agentic behaviour (Koenig et al., 2011). Thus, many women experience incongruity between their gender and leadership role (Eagly & Karau, 2002).

The study's aim is to examine in what situations these agency-communion tensions appear and how women leaders cope with them on a cognitive level. In doing so, we will empirically test the core theses of the theoretical process model by Zheng et al. (2018) with the study at hand. Later, we will further expand the model.

#### Theoretical Background

The model by Zheng et al. (2018) is first to see agency-communion tensions from a paradox perspective and to distinguish between a dilemma and paradox mindset as results of these tensions. This important contribution answers Billing's call (2011) to investigate the issue more integrative, which a paradox lens can auspiciously provide. She argues that the mere focus on conflicts between agency and communion – and disregard of potential synergies – portrays women solely as victims and does not do justice to women's experiences.

As per the authors, women leaders have internalised a dilemma mindset, when they see agency and communion as incompatible requirements that are mutually exclusive (Zheng et al., 2018). In contrast, a paradox mindset allows for the existence of both, which may even be combined.

We argue that in situations in which women leaders are told that agency is expected, they will more likely experience role incongruity between their role as a woman and as a leader. In contrast, in situations in which women leaders are told that communion is okay, such role incongruity will be less present. This is important for the generation of the agency-communion tension inducing vignettes.

H1: In organisations, in which the desirability of agency (communion) is openly communicated, women leaders are more (less) likely to experience agency-communion tensions.

The model also postulates a moderating effect of organisational learning orientation on the relation between present agency-communion tensions and paradox/dilemma mindsets. Learning orientation is defined as "a set of organi[s]ational values that are related to the propensity of organi[s]ations to create and use knowledge" (Zheng et al., 2018, p.6). A high organisational learning orientation encourages its members to question and rethink existing, to generate new ideas, incorporate multiple perspectives, and think diverse (Sinkula et al., 1997).

H2: The higher (lower) the organisational learning orientation, the more likely women leaders are to adapt a paradox (dilemma) mindset when experiencing agency-communion tensions.

## Design

In the pre-study of our work we will test our self-designed written vignettes that manipulate agency-communion tensions (high, low). In the main study, we manipulate both agency-community tensions (high, low) and organisational learning orientation (high, low) in a 2x1 between-subject design with a sample of female leaders.

Agency-communion tensions will be assessed via manipulation check, organisational learning orientation with a scale by Sinkula et al. (1997) and internalisation of the mindsets with a scale by Miron-Spektor et al. (2017). The study design will be pre-registered.

## Results

Data collection will be completed early next year and results will be ready to be presented at the congress.

## Limits

Our study is within a binary thinking scheme regarding gender. Also, it is not (enough) concerned with how to ensure that agency-communion tensions no longer arise at all, but examines how to deal with them. Still, we think that research takes place within a realistic frame and thus at least aids women on how to deal with these tensions.

## Implications

We want to test and refine theory – a practice often overlooked (e.g., Kacmar & Whitfield, 2000). In an experimental setting, we seek to establish the causal relation between agency-communion tensions and female leaders' cognitive response. Practically, we aim to show that women leaders are still confronted with injustices/challenges based on their gender. The internalisation of a paradox compared to a dilemma mindset seems to be a good coping mechanism, since it is linked with advantages like better resilience or mental health (Zheng et al., 2018). Our study aims to show how organisations can support women to internalise this mindset and deal with the conflicting demands they cope with as leaders.

## Relevance to the Congress

Our research is actively contributing with turning attention to the fact that sexism is present, and that we must use our voice to do better in the future –which is now .

*Keywords: Agency-communion tensions, paradox mindset, dilemma mindset*

## Oral presentation OP811

### Motivated Trust in AI: An Integrative Model Considering Multiple Stakeholder Views in HRM

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#### Research goals and why the work was worth doing

Artificial intelligence (AI) applications have the potential to dramatically change the world of work. AI systems are particularly prevalent in Human Resource Management (HRM), such as leadership or personnel recruiting and selection. However, a core precondition for successful usage of AI-based technologies is that involved persons place sufficient trust in these technologies, for example, by following recommendations of an AI-system, by allowing AI-technologies to use their personal data, or by deciding to implement an AI system in HRM. Extant models on trust in technology and information systems fall short to consider the black box character and autonomous self-improving features of AI systems, and focus nearly exclusively on cognitive processes while neglecting motivational perspectives. The latter are particularly important for a conclusive understanding of trust in AI, and to explain differences in trust between different stakeholder groups (e.g., employer, manager, HR professional). The current paper introduces a new integrative model of trust in AI that considers both cognitive and motivational processes, and applies these to different stakeholder perspectives in HRM.

#### Theoretical background

Our integrative model of trust in AI builds on cognitive trust conceptualizations (e.g., Mayer et al., 1995) that have been specified for technology (e.g., McKnight et al., 2011) and AI systems (Solberg et al., 2022). However, we extend these conceptualizations with motivational and dynamic perspectives derived from research on interpersonal trust (van der Werff et al., 2019, Baer et al., 2022) based on control theory, self-determination theory, and motivated reasoning theory. More precisely, we specify three motivational drivers of trustors that lead to biased trustworthiness assessments of AI systems, and to changes in risk propensities of the trustor. This conceptualization of motivated trust in AI enables specific predictions for different stakeholder groups of AI systems across different levels of analysis (society, organization, team, individual, time).

#### New Perspectives/Contributions

Our new model of trust in AI provides a conclusive research framework, integrating various research lines that have been partly developed in isolation and/or not been applied for trust in technology. In addition to dispositional factors and cognitive assessments, we introduce motivational processes of trust in AI that enable a more complete understanding of trust from different stakeholder perspectives. Notably, we do not assume direct linkages between system features and trust motivation but argue that the impact of system features depends on the gains and losses that stakeholders expect as a consequence of AI usage. For example, managers and HR professionals receive and seek different information about the reliability of an AI-based recruiting system as compared to job applicants, affecting trustworthiness assessments of the AI system. Moreover, stakeholders hold different motives to use an AI system, leading to different propensities to place risk in the AI system. This consideration may also help to advance understanding of how trustors develop overreliance (trusting too much) and underreliance (trusting too little) with respect to AI systems. A focus on gains should lead to overreliance, while a focus on losses should result in underreliance. Our model suggests, for example, that stakeholders coming from the employer and decision maker perspectives may be more susceptible to overreliance, whereas stakeholders coming from the decision target perspective may be more susceptible to underreliance.

#### Conclusions – research and or practical implications

While empirical research on the derived predictions is pending, our model provides a promising framework and roadmap for future research. Moreover, the integrative model provides practical implications for building and maintaining trust in AI systems, separately for different stakeholder

groups. Finally, our model is not restricted to HRM but might also be relevant for other application fields of AI at work, such as customer relationship management or managerial decision making.

#### Relevance to the Congress Theme

This paper strongly relates to the congress theme “The Future is Now: the changing world of work”, addressing the implications of new technology (AI) in the world of work. Specifically, we address trust as precondition for the successful implementation of AI systems at work. Moreover, we derive implications for the design of AI interfaces based on different stakeholder perspectives and motives, supporting a human-centered engineering of new technologies. Finally, we also address excessive (blind) trust in AI systems that can lead to suboptimal and potentially harmful decisions.

#### Relevant UN SDGs

The submission relates to several UN SDGs. AI systems can support *economic growth and decent work*, for example, by relieving HR professionals from monotonous work routines. Moreover, AI systems can *reduce inequalities* and support *gender equality* due to highly standardized processes, e.g., in personnel selection. Trust in AI is a core precondition for the realization of these potentials.

*Keywords: trust, artificial intelligence, stakeholder perspectives*

## Oral presentation OP564

### The Development of Prosocial Work Characteristics: Examining Educational Experiences

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science

How do the trait antecedents of prosocial work behaviour develop through pre-employment experiences? Prosocial behaviour has been defined generally as voluntary and desirable actions that benefit others (Kanacri et al., 2021; Eisenberg et al., 2015). There are many ways in which behaviour at work can be considered prosocial, reflecting a general emphasis on behaving in ways that benefit others, who may be close coworkers, more distal members of the organization, leaders and managers, customers or service users, or members of society as a whole. The most widely researched behaviours encompassed by the concept of prosocial organizational behaviour (Brief & Motowidlo, 1986) are captured in dimensions of OCB, and more general descriptions of prosocial helping (Bolino & Grant, 2016). This paper advances a broader concept of prosocial organizational behaviour. This includes behaviour that may not directly be focused on benefiting organizational functioning, but rather may nevertheless benefit others, for example by supporting specific people and their well-being, inclusion or career progress, supporting others at work in general, for example by taking steps to improve things proactively or people in society through behaving in ways that are more pro-environmental, contributing to tackling the climate crisis.

Personality antecedents of prosocial organizational behaviour may be understood through trait activation theory (Tett & Burnett, 2003), which frames effects of personality traits on prosocial behaviour. Studies (including meta-analyses) of the effects of traits have confirmed associations of personality with OCB, proactivity, voice, and pro-environmental behaviour and with respect to inclusivity, pro-diversity attitudes. Models of personality trait development (e.g. Woods et al., 2013) propose that traits develop through activation and practice of behaviour through activity and experiences. Accordingly, the present study sought to establish developmental predictors of prosocial traits.

In the present study, twenty-two antecedent personality trait dimensions identified as relevant to forms of prosocial work behaviour were examined in relation to eleven categories of developmental experiences encountered by people in late-stage education. The purpose of the study was to observe the links between these developmental experiences and subsequent personality traits.

#### Method

918 early-career graduates (36% male, 63% female, 1% non-binary, mean age 24) completed a self-report survey comprising items on developmental experiences and prosocial personality traits. Data were collected through the prolific survey panel platform.

Prosocial personality traits were measured using 125 items organised into 22 scales (e.g. Kindness, Supporting, Initiative, Social Ease). Participants were asked to rate themselves as they perceived their characteristics at present.

Developmental experiences were measured using 51 items organised into 11 scales (e.g. Helping, Volunteering, Conserving). Participants were asked to rate the frequency with which they performed behaviours during their education from age 16 until the end of higher-education (i.e. University study).

Structural equation models were used to examine the associations of latent developmental experience factors and higher-order prosocial personality factors.

#### Results and Discussion

Structural equation models were conducted organised into six categories: prosocial, inclusive, sustainable, proactive, engaged and resilient. In each case, analyses revealed acceptable model fit, and significant associations between latent developmental factors and personality factors (ranging from 0.30 to 0.92). Retrospectively rated developmental experiences examined in the study did predict current prosocial personality characteristics.

These results highlight how late-stage educational experiences might form foundations of prosocial characteristics in work settings. Implications are discussed for understanding the development of prosocial organisational cultures, recruitment and selection of graduates, and employee learning and development.

Decent work and economic growth; good health and well-being

*Keywords: Prosocial Work Behaviour; Personality at Work; Employee Development*

## Oral presentation OP564

### An Ambient Information System for the Workplace

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science&practice

The article is based on the experiment “Periphery” of a running interdisciplinary research project (anonymised reference). It focuses on peripheral user experience and data mapping design in an ambient information environment. Ambient Information Systems (AIS) and Ambient Display (AD) can be described as a physical, tangible representation of different information in the environment (Pousman & Stasko, 2006; Wisneski et al., 1998). AIS pass on these information to the users via technical systems such as sound (Mynatt, Back, Want, Ellis, 1998), light, or wind (Matthews, Rattenbury, Carter, Dey, 2003). The mediated information is not asking for full user attention but is perceived peripherally (Weiser, 1996; Pousman & Stasko, 2006).

The aim of the experimentally designed study was to find out how AIS can be used in everyday work and how the given information is perceived and processed by the test subjects. Furthermore, the research group investigated which interactive or reactive behaviour is triggered by the AIS. Studies already confirm that showing one persons for example their heart rate via eHealth devices are used as a successful intervention to reduce stress (Lukan, Bolliger, Pauwels, Lustrek, De Bacquer Clays, 2022). The visual relocation of such biofeedback from device to the architectural office environment through AIS represents a new type of work environment.

The research group designed a responsive space that maps human behaviour and arousal onto different physical parameters such as light, sound, vibration and airflow. Behaviour and arousal data were captured by means of visual position tracking, acceleration, heart rate and Galvanic Skin Response (GSR) sensors. To guarantee peripheral vigilance, the displayed information was weaved into the environment and the invited participants were asked to concentrate on their daily work for 90 minutes. Certain feedback is causal and real-time based on the measured physical motion and biodata, changes in atmosphere are temporal compositions. The represented data therefore is an indicator of somatic and psychophysiological states that have the potential to create different levels of awareness of personal reactions to outer influences. The temporal changes are designed to proactively influence user behaviour.

Two experimental groups of 10 members each were recruited. Before the experiment, group A received no indications of how the room would interact, whereas group B did receive this information. The data generated from the experiments were analysed using a mixed-method approach: The collected sensor data was visualised and synchronised with the recorded video track for the heuristic detection of correlations between action and arousal. Contextual feedback about their current well-being and their involvement for their work was collected by a short, self constructed questionnaire during the experience and will be evaluated by a frequency analysis, and semi-structured follow-up interviews were qualitatively coded and analysed by a structural content analysis by Mayring (2010). Although the gender sampling was sufficiently equal, diversity of age and background was limited, since we mainly tested with colleagues of our university. More diverse groups of subjects should be recruited to confirm the results in further research.

All participants of test group A became aware of interaction through change of position, some noticed the heartbeat in sound and light, but were not sure if it was theirs or a feature of the animated space. Participants of both groups did not consciously interact with the causal real-time

effects of hand and arm movements, designed as an indicator for restlessness – the triggered sounds were probably integrated too neatly into the background. Most participants noticed temporal changes, some became aware of the patronising attitudes of the environment and developed avoidance strategies. Some participants said they could imagine working with the AIS effects but would like to be able to adjust the parameters.

The focus of this paper is on the design and user experience of AIS for personal workplaces and possible implications and applications. Technical devices that provide personalised biodata in real time, such as eHealth devices like smartwatches, are already on the market and scientifically studied (Papaa, Mitalb, Pisanoa & Del Giudicec, 2020). In comparison to mobile devices the authors propose to weave the information into the environment with atmospheric qualities. Great potential lies the shifts of presence of information, moving from the periphery of perception to full attention (Weiser, 1996) in the situational context of the working process. How they are perceived, how they are given meaning, how they create behaviour patterns and are possibly used for the improvement of well-being and productivity.

*Keywords: Mindfulness and Meditation, Resilience and Adaptability, Human-Machine-Systems*

## Oral Session OP442

### **An analysis of the current situation of the Home Help Service in caring for the elderly. Professionalization and working conditions.**

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science&practice

#### Theoretical background and research objectives

The increase in the proportion of older people and the propensity to live alone is accompanied by a change in the trend in their care. Specifically, there is a transition from care carried out mainly by female relatives to care carried out by professionals. In response to these changes, the public system has implemented numerous services in accordance with the wishes and needs of the model of aging at home. Among these services, Home Assistance (hereinafter SAD) is essential because it is the one that most favors older people being able to continue living at home. But in addition to this essential objective, there is another reason that gives it great value: its potential for job creation.

However, from the perspective of the literature on care, the interest of the SAD falls on the characteristics of the demand, but not on the characteristics of this profession or on the working conditions of the employed persons who carry out the work. This communication aims to make the care profession visible by exploring some characteristics that currently define it, specifically, the degree of professionalism and the working conditions of those who perform this job.

#### Methodology

We show preliminary results of the research project 'Older people in solitude. Daily problems and improvement of their quality of life', funded by the Andalusian Studies Center Public Foundation. These results come from its qualitative part by conducting 19 in-depth interviews with professionals and volunteers in the field of care for the elderly, including SAD professionals in Andalusia (Spain). Their testimonies have enriched our knowledge with the purpose of addressing the object of study proposed in this work.

#### Results obtained or expected

Despite the usefulness of the SAD in making it easier to stay at home, complaints have been collected that come together in two key weak points: the lack of professionals in the SAD and their lack of professionalism. Added to this demand is the discontent of professionals due to the unfavorable working conditions in which they carry out their work and which directly affect their quality of life and the quality of the work they offer.

#### Limitations

The information analyzed regarding the object of study responds in part to the interviews carried out with SAD professionals and in part to the participant observations of other professionals. Within the general framework of our study, it remains to analyze the discourses of the elderly themselves in relation to the assessment they make of this service. Perhaps in this second analysis we will find more indications about the deficiencies of the SAD and possible proposals for improvement of this profession.

## Conclusions

Working with older people is hard from a physical and psychological point of view, so it is a priority to require specific training for professionals in this field. But it is also essential to increase the workforce to better distribute the workload and to be able to cover more and better the needs of the elderly who decide to stay at home. Having more professionals, in addition to requiring more specific training and better working conditions, would add quality to this necessary but underused resource.

## Relevance to the Congress Theme

The oral presentation is adjusted to thematic area 19. Work patterns and conditions; Specifically, Flexible hours, Physical work environment, Psychological contract, Temporary and fixed-term contracts.

*Keywords: Home Help Service, Professionalization, Labor conditions.*

## Oral presentation OP191

### **An attributional perspective on leader's trusting behavior and followers' reactions.**

Axel Rosenbruch, Guido Hertel & Janine Kloppe, Christoph Nohe | University of Münster

science

Research goals and why the work was worth doing

Trust is an important dimension in the relation of leaders and followers. Moreover, leader's trust in their followers gains importance, as digitalization and flexibilization of work reduce leaders' potential to directly monitor their followers. However, followers might perceive different causal reasons for leader's trusting behaviors, and might respond differently based on these attributions. The current study investigates whether followers attribute leader's trusting behavior differently and whether these attributions are related to different emotional reactions.

Theoretical background

Leader's trust – the willingness to be vulnerable based on positive expectations – manifests in trusting behavior of the leader. Attributions are formed when important, surprising, or unexpected events occur. A leader's trusting behavior, manifesting leader's vulnerability, might be surprising for the follower and / or signal importance, causing followers to form an attribution. More specifically, we assume that followers can attribute their leader's trusting behavior to either internal causes (i.e., their trustworthiness), external causes (i.e., the leader's trust motivation), or relational causes (i.e., the leader-follower-relationship). Moreover, we assume different emotional reactions of followers depending on the specific attribution. When followers consider themselves as the reason for leader's trusting behavior, followers should interpret the leader behavior as a positive confirmation of themselves and experience pride. When followers consider the leader as the causal reason, they should respond with emotions toward the leader, like gratitude and indebtedness. Lastly, when followers understand their relationship with the leader as causal reason, they should respond with feelings of relatedness.

Design/Methodology

We conducted an online study (N = 244 employed participants) based on the event-reconstruction-method (Grube et al., 2008). First, participants were instructed to re-experience a work event during which their leader had shown trusting behaviors. Participants then responded to an open question of why they thought their leader had shown the trusting behavior and lastly answered questionnaires about their emotional reaction during the event.

Results obtained

Qualitative analyses of participants' open-responses revealed different attributions. We found internal attributions, external attributions toward the leader, external attributions toward the situation, and relational attributions. In our quantitative analysis, we found internal attributions to be positively related with pride and relational attributions to be positively related with relatedness. We did not find the postulated relations of external attributions with gratitude and indebtedness.

Limitations

While the event-reconstruction method captures real-life events, results might be biased by memory effects and potential self-serving biases. Further, the cross-sectional design might be affected by

common-method-biases. Accordingly, cross-validation with different methodological approaches is desirable.

### Conclusions

Our results suggest that followers indeed attribute their leader's trusting behavior to different causal reasons. In this sense, we contribute to an integration of trust and attribution literature, especially by demonstrating that relational attributions can be formed in response to trust. Moreover, we provide initial evidence for the differential effects of follower attributions on emotional reactions. Although future research should further investigate whether these effects can be replicated with experimental designs and consider behavioral outcomes. In addition, future research should investigate whether multiple attributions can be formed simultaneously, like our results suggest.

Practitioners can benefit from this work as it indicates that followers act as constructivists and create their own understanding of leader's behavior, which has implications for how followers react to leader's trust. Further, our qualitative results suggest that followers attribute egoistic motives to leader's trusting behavior, which provides further evidence for the potential "dark-side of trust".

### Relevance to the Congress Theme

As digitalization and flexibilization of work increases, leader's trust becomes increasingly important. In digitalized working contexts leaders can no longer walk around to check what followers are doing and thus need to increasingly trust their followers. We contribute to the topic of changing working worlds by investigating the processes of how followers respond to leader's trust.

### Relevant UN SDGs

Our work is relevant for the UN Sustainable Development Goals related to decent work and wellbeing. Our results indicate that leader's trusting behavior can contribute to followers' experiences of pride and relatedness, which might act as resources for followers' wellbeing and health.

*Keywords: leader-follower-relationship, trust, attribution*

## Oral presentation OP354

### **An empirical investigation of the moderating factors in the relationship between presenteeism and well-being**

Mariella Miraglia, University of Liverpool; Wee Chan Au, Newcastle University

science&practice

#### Research goals

Presenteeism, defined as the behaviour of working while ill (Aronsson et al., 2000), has predominantly been portrayed as harmful to individuals and organisations (e.g., Demerouti et al., 2019; Hemp, 2004). However, a review of the literature revealed inconsistencies in the association of presenteeism with health and well-being (Skagen & Collins, 2016), and a more recent stream of research sees presenteeism as an adaptive behaviour to manage health and performance at work, provided that specific resources are in place (Karanika-Murray & Biron, 2020). In light of these contradictions and the sparse research on the effects of presenteeism, we aim to investigate its influence on individual well-being and uncover the personal and contextual factors that can attenuate such effect.

#### Theoretical background

We draw on ego depletion theory (Muraven & Baumeister, 2000) to argue that presenteeism can lead to decreased subjective well-being and increased burnout. Working through sickness requires extra self-regulatory resources as employees have to compensate for the aversive consequences of the illness in question, and invest extra cognitive resources to regulate effort and attention to meet their work goals. Thus, presenteeism can deplete regulatory resources (Rivkin et al., 2022) and result in mental stress (Demerouti et al., 2009). In line with the call to investigate the nature of the illness in question to better understand the phenomenon (Ruhle et al., 2020), we also focus on the perceived significance of the health event triggering presenteeism, proposing that a significant event will exacerbate the detrimental effects of presenteeism for well-being. Moreover, we build on conservation of resources theory (Hobfoll, 2001) to explore whether workplace resources, operationalised as workplace support, can alleviate the negative effect of presenteeism on employee well-being. We argue that supervisory and collegial support could provide additional resources to mitigate the above-described loss of regulatory resources.

#### Methodology

A self-administered questionnaire was completed by 395 Malaysian teachers (response rate: 86%) at two points in time (attrition rate: 12%) – at the start (T1) and end (T2) of the academic year. Presenteeism, significance of illness, supervisory and collegial support from T1 and life satisfaction, exhaustion, and disengagement from T2 were entered in moderation models tested in Mplus 8.3. Age, gender, and perceived Coronavirus threat were used as controls.

#### Results

The significance of illness moderated the positive relationship between presenteeism and exhaustion ( $B = .05$ ,  $SE = .02$ ,  $p < .05$ ), such that working while ill resulted in higher exhaustion only at high levels of significance. Supervisory and collegial support moderated the negative relationship between presenteeism and life satisfaction ( $B = .35$ ,  $SE = .17$ ,  $p < .05$ ;  $B = .49$ ,  $SE = .20$ ,  $p < .05$ , respectively), such that the association was significant only at low levels of the moderators.

## Limitations

The time frame of the research was dictated by the pandemic, preventing us from exploring the short- vs long-term effects of presenteeism and limiting the data collection to two waves.

## Conclusions

The study's value lies in the exploration of the factors that shape the relationship between presenteeism and well-being, particularly in relation to the moderating role of the social context (i.e., workplace support) and the health issue causing working while ill. In so doing, we address previous calls in the literature (Miraglia & Johns, 2021; Ruhle et al., 2020); we empirically contribute to the health-performance theoretical framework of presenteeism (Karanika-Murray & Biron, 2020); and we extend initial empirical evidence on the pivotal role of workplace support in shaping presenteeism's consequences (Chen et al., 2021). Moreover, by showing that personal and workplace factors influence different well-being outcomes in relation to working when sick, we reveal the nuances of the association of presenteeism and well-being in line with a multi-dimensional view of well-being (Grant et al., 2017; Inceoglu et al., 2018).

The results have important practical implications for organisations, managers, and employees to help them gauge the relevance of presenteeism in the light of its consequences and understand the factors that can mitigate its negative outcomes. Workplaces should ensure that specific resources in terms of collegial and leadership behaviours are in place to manage presenteeism.

## Relevance to the Congress Theme

Presenteeism permeates the current world of work emerging from the pandemic, as demonstrated by a greater salience associated with health behaviours in the workplace following Covid-19 and the rising phenomenon of virtual presenteeism (e.g., Brosi & Gerpott, 2022). It is essential to provide recommendations to individuals and organisations on how to tackle presenteeism in the changing world of work.

*Keywords: Presenteeism; well-being; workplace support*

## Oral presentation OP105

### **An Event-Oriented Approach to Change: Role of Positive and Negative Everyday Events**

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science

Research goals and why the work was worth doing:

A substantial amount of research has focused on (mainly negative) employee responses to understand the challenges of organizational change. Despite the fact that change typically unfolds over time, much of the change literature is relatively static and investigates general responses to change, rather than everyday experiences. This can be problematic because it tends to overlook how the larger change trickles down to and affects everyday experiences, further impacting on employees' attitudes and commitment towards change. Furthermore, existing research has largely focused on negative responses to change, overlooking the role of positive change events. We here take an event-oriented approach, which suggests that employees' view and support of change may shift over time as they experience everyday events at work that are related to the ongoing change.

We aim to advance the literature in three ways. First, we argue that employees' commitment to change is not static but rather can shift as they experience everyday change-related events (e.g., as the change is implemented). Second, we argue that it is important to explore both negative and positive everyday events in change, as employees are likely to experience different aspects of change in different ways at different times. Third, we identify why and how everyday change-related events can shape employees' reactions to and support for the change project. We focus in particular on the role of organizational fairness.

Theoretical background:

We draw on event system theory (Morgeson et al., 2015) to argue that organizational change, as a major event, not only initiates but also shapes how employees experience everyday change-related events. We propose that employees' initial reactions to the major change event can shape their anticipatory perceptions related to the impact of the major change for themselves. These anticipatory perceptions can create a lens through which they experience subsequent change-related events. Employees' experiences of everyday positive and negative change-related events can signal information about the organization and affect perceptions of organizational fairness, which in turn impacts on employee support for the organization's major change initiative. Taken together, by applying event system theory, we reveal how employees' perceptions of major change events can guide their everyday experiences of organizational change, thereby showcasing the active role that employees can take in shaping their own experiences of organizational change. Further, we identify how employees' experiences of everyday change-related events can shed light on their dynamic reactions to and support for major change initiatives.

Design/Methodology:

Data was collected with a field study (N=276), in which employees were surveyed after a merger was announced (but before it occurred), then participated in a 2-week daily diary study as the merger was being implemented, and finally completed a second survey two weeks after the diary study.

Results:

Our hypotheses were generally supported. Findings suggest that employees' initial reactions to major change shape how they experience everyday positive and negative change-related events. Both positive and everyday change-related events impacted on employees' daily fairness perceptions and subsequent their commitment to the major change over time.

Limitations:

We used a diary methodology, sandwiched between two surveys. Asking respondents daily about their experiences, can bring attention to specific topics that might otherwise not have been noted. Furthermore, due to the complexity of the design, we had to rely on self-report.

Conclusions:

Our findings shed light on how organizational change trickles down to everyday experiences. In practice, organizational change should involve effectively managing of the major change event as well as the everyday change-related events. Whereas the former can guide how employees experience change on an everyday basis, the latter can offer the opportunity to enhance fairness and build commitment to major change.

The current world of work is in flux and norms about how best design work are dissolving. Our research has implications for the designed and implementation of change. It also speaks to the UNSDG's goal 3 on fostering wellbeing and goal 8, which promotes decent work.

*Keywords: Organizational change, positive and negative events, fairness*

## Oral presentation OP15

### **An Examination of the Link Between Job Content Plateau and Knowledge Hiding From a Moral Perspective**

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science

Knowledge hiding has been a growing concern for organizations, as their success is increasingly dependent on knowledge exchanges among employees. Drawing on an integrated ethical decision-making model, we examine knowledge hiding from a moral perspective and identify job content plateauing as an important predictor of knowledge hiding. We contend that when employees experience a high level of job content plateauing, they are inclined to hide knowledge from colleagues to serve their self-interest. We further propose that attribution of blame, a specific mechanism of moral disengagement, explains how employees' experiencing high content plateaus bypass their moral self-regulation to engage in knowledge-hiding behavior. Specifically, employees can cognitively reconstruct themselves as faultless victims who are driven to hide their knowledge because: (a) their colleagues cannot be trusted; and (b) the knowledge-exchange process in the organization is exploitative. We tested our dual-path mediation model using time-lagged data collected from 301 working adults across three time points. The results support the mediating roles of distrust in colleagues and fear of exploitation from the organization's knowledge-exchange process. Our study opens the door for future research to better understand knowledge hiding from an ethical lens.

*Keywords: job content plateau, knowledge hiding, moral disengagement*

## Oral presentation OP623

### **An Exploration of Job Demands and Personal Resources of Teachers from Under-Resourced Contexts in Relation to their Burnout and Engagement Levels.**

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science

Teachers are often described as burned out, but the levels of emotional exhaustion vary across countries. South African teachers report very high scores of burnout intensity, and many work under adversarial conditions. This study, thus, aims to shed more light on the working conditions and wellbeing of South African teachers. Research on teacher wellbeing has mainly focused on the effects of job demands and job resources. The personal resources of teachers have been less in the focus of research. Job resources, however, may activate employees' personal resources, and these, in turn, can make employees more capable of managing the work environment. They are, thus, less likely to be burned out and remain well (Xanthopoulou et al. , 2007). Thus, the role of personal resources for teacher burnout and engagement was investigated in this study.

A questionnaire study was conducted with 123 secondary school teachers from 18 schools in two school districts. Established scales were used to assess teacher burnout, work engagement, job demands (workload, emotional demands and disruptive pupils), and personal resources (meaning of work, opportunities for development, planning, humour, self-distraction and behavioural disengagement).

Descriptive results show that teachers in the sample were moderately burned out and reported high work engagement levels. Participants reported moderate to high levels of job demands. Interestingly, participants reported high levels of opportunities for development and meaningfulness of their work. They moderately use coping strategies like humour, self-distraction or behavioural disengagement. Their planning strategies were moderate to high.

Results of a series of hierarchical regressions with teacher burnout and work engagement as dependent variables show that workload, emotional demands, and student disruptions contribute to the emotional exhaustion levels of participants. Unlike workload and disruptive students, emotional demands did not significantly contribute to teacher depersonalisation and feelings of reduced personal accomplishment. Disturbances by disruptive students are consistently negatively associated with all three dimensions of work engagement.

Meaning of work contributed significantly to reduced emotional exhaustion levels of teachers and reduced feelings of impaired personal accomplishment. Meaningful work also made teachers feel significantly more vigorous, dedicated and absorbed in their work. Development opportunities are linked to lower levels of depersonalisation or feelings of reduced personal accomplishment. Teachers who perceive higher development opportunities will also feel more dedicated to their work. An interesting pattern occurred for the coping strategies of teachers. Despite the assumption that coping resources may be linked with teacher wellbeing, they did not significantly contribute to teacher burnout or work engagement. When entering personal resources into the regression models, the effects of job demands on burnout and engagement decreased substantially. Exploratory analyses were conducted to assess non-linear relationships. All personal resources had a curvilinear relationship with emotional exhaustion. Results indicate that coping strategies seem to increase levels of emotional exhaustion, but this effect then plateaus.

This study adds to previous studies by examining the effects of job demands on teacher burnout and engagement by looking at different personal resources. Results indicate a differentiated effect of personal resources on teacher wellbeing, which aligns with COR theory (Hobfoll & Shirom, 2001). Opportunities for professional development and meaning of work seem to set off a gain spiral. Coping strategies, on the contrary, seem to trigger a loss spiral. These results are especially relevant considering the location of the study in an under-resourced context. Under such circumstances, personal resources are even more crucial – not only for teacher wellbeing but also for providing quality teaching. Conclusions will be drawn on how burnout can be reduced, and engagement increased through fostering personal resources of South African teachers. The Congress Theme is 'The Future is Now: The Changing World of Work'. Teachers need to be supported to provide quality teaching and, thus, train and support the next generations.

*Keywords: personal resources, wellbeing, teachers*

## Oral presentation OP499

### **An Exploration of The Emotions and Entrepreneurial Passions of Tech and Digital Entrepreneurs During Their Start-up Journey**

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science

#### Research goals

Entrepreneurial ventures in the Tech and Digital sectors form an increasingly important part of the UK and European economies. One of the critical factors determining the success of entrepreneurs is how they deal with their emotions and remain passionate and motivated during the early start-up phase on their venture, when challenges, setbacks, failures, and frustrations are common. However, despite this growing interest, there is still a shortfall of qualitative research on the lived emotional experiences of entrepreneurs owing to a historical positivist bias in entrepreneurial research that endures to this day. This longitudinal, qualitative research aims to bridge this gap by examining how UK Tech-Digital entrepreneurs experience emotions and passions as their venture unfolds and how these shape the founder and the venture creation process.

#### Theoretical background

Entrepreneurship has long been regarded as an emotional endeavour. It has metaphorically been described as a rollercoaster ride involving stronger and faster changing negative and positive emotions than most other professions and occupations (De Cock, Denoo, & Clarysse, 2019). Although the role of emotions in entrepreneurship is receiving increased focus as a topic of research (Baron, 2008; Delgado et al., 2015; Fodor & Pinteá, 2017), it remains under-researched. Most academic research into entrepreneurship has been positivist and temporal in nature, so very little is known about how entrepreneurs experience the process as it evolves (Schindehutte et al., 2006). Entrepreneurial passion (EP), or intense positive feelings toward entrepreneurial activities and roles that are meaningful to the entrepreneur (Cardon et al., 2009) has emerged as a particularly popular emotional and motivational construct among researchers seeking to better understand entrepreneurial behaviour and processes. This interest reflects a growing acceptance that entrepreneurship is typically a messy and intensely emotional experience requiring high levels of emotional energy, enthusiasm, and motivation to succeed. Yet despite EP having become deeply embedded in the folklore of entrepreneurship, it is still poorly understood. Most studies assume a positivist paradigm, are survey-based, and measure EP at a single point in time. There is also no agreed definition on what EP is and how it arises. Additionally, we know little about how EP is experienced by different people, how it emerges and how it shapes both the entrepreneur and the start-up of their venture.

#### Method

Employing purposive sampling and a longitudinal research method, data was collected from 12 Tech-Digital entrepreneurs over a 12–18-month period using 3 semi-structured interviews together with a short questionnaire before the second and third interviews. Each interview was transcribed and coded using NVivo. Within-case narrative analysis was used to capture unique variations in entrepreneurs' emotional experiences and EP. Cross-case exploration using template analysis was then applied to explore common themes within the sample.

#### Results

The results of the study will be available by April 2022, although publication of the final thesis is planned for September 2022.

#### Limitations

Given the qualitative nature of this research and intention to provide a rich, contextualized account of entrepreneurs' evolving emotions and passions, the results are not generalizable to UK Tech-Digital entrepreneurs or entrepreneurs in other sectors.

#### Conclusions

This research enriches the body of research and literature on the role of emotions and EP in venture creation by providing insights into how entrepreneurs experience the inevitable highs and lows of their start-up journey. Moreover, it highlights the unique emotional experiences and sense-making of each entrepreneur in response to unfolding events, including how this shapes their motivation, behaviour, and self-identity. This is particularly salient for the future design of training and development offered by entrepreneurial training organizations, start-up accelerators, universities, and incubators, as topics such as EP and emotional agility are rarely covered in such programs. Finally, it is hoped that the research will enable entrepreneurs themselves to gain a deeper understanding of how their emotions and passions shape their identity, motivation and how the venture unfolds.

#### Relevance to the congress theme

Entrepreneurship is becoming increasingly common in a fast-changing world of work, with more people of working age (particularly younger generations) turning to Tech-Digital entrepreneurship as an alternative to traditional corporate roles. In this fast-changing context, it is important we conduct more research to augment our understanding of entrepreneurial processes and behaviours, including how emotions and passions emerge, are experienced, and impact an entrepreneur's start-up journey.

*Keywords: Entrepreneurship, Passion, Emotions*

## **Oral presentation OP264**

### **An Integrative Literature Review on Psychological Resilience in the Context of Leadership**

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science

#### Research Goals/Purpose

In times of crisis and adversity, leaders are particularly challenged since they are expected to support the ones they lead while also having to cope themselves. This has made the concept of psychological resilience ever more important to leadership research. While psychologically resilient leaders are usually assumed to avail themselves of constructive types of leadership, they may also be at risk of creating challenging environments in expectation of their followers to keep up with their own resilience. Despite increasing interest in the psychological resilience of leaders and followers, theory is still about to switch from relatively well-established intrapersonal perspectives that consider either the leaders or their followers to the required interpersonal leader–follower perspective. We hence aim to take stock of what we know about psychological resilience in leader–follower contexts to help this field mature.

#### Theoretical Background

Defined as the positive adaption despite adversity, psychological resilience is one of the core constructs of positive organizational behavior. We draw on a multi-perspective leader–follower framework to help better understand the role that psychological resilience plays in the broader leadership literature, such as that on constructive (e.g., transformational, authentic, and servant leadership) and destructive types of leadership (e.g., abusive supervision and narcissistic leadership).

#### Design/Methodology

We offer an integrative review of leadership literature on psychological resilience. By following the most recent version of the PRISMA approach during our search for relevant research in Web of Science and EBSCO, we identified 109 journal articles and 24 dissertations that form part of our integrative literature review. When reviewing these 133 empirical research items, we develop a multi-perspective leader–follower framework that helps guide future research in this field.

#### Results

The majority of studies we identified investigated psychological resilience in the context of leadership from an intrapersonal perspective of either the leaders or their followers, with the latter perspective being more prominently applied. Although constructive types of leadership and their ability to activate psychological resilience in followers received more attention from both intrapersonal perspectives, some studies also considered more destructive types of leadership and how followers' resilience may buffer against their detrimental consequences. With regard to the upcoming literature attending to the intrapersonal leader–follower perspective, most studies are concerned with actual interactions between leaders and their followers by investigating how leader–member exchange or the support of leaders relate to the psychological resilience of leaders, followers, or both.

#### Limitations

While reviewing the leadership literature on psychological resilience, we identified three major shortcomings in this field that we consider worthwhile for future research to address. First, there is

scarce research concerning the interdependency between the psychological resilience of leaders and their type of leadership. Second, little is known about the contagion and convergence of psychological resilience among leaders and followers through their social interactions. Third, more research is encouraged to study the role that (in)congruence in resilience between leaders and followers plays for psychological resilience to become contagious.

### Conclusions

Since leadership research on psychological resilience has grown rapidly in recent years but in unstructured ways, there is an urgent need for an integrative review of the interplay between leadership and resilience that guides research in terms of where to go in the future. The multi-perspective leader–follower framework advocated in our review advances leadership research on psychological resilience, contributing to the broader scholarly conversations on how leaders can enable adaptive organizational responses to change, setback, and adversity.

### Relevance to the Congress Theme

The changing world of work is a critical challenge for leaders that are under enormous pressure because of being asked to ensure the continued success of their organizations and help their followers develop and demonstrate adaptiveness. Being expected to support their followers in the face of these challenges is even more problematic because they affect leaders themselves, which may have serious consequences for their functioning due to stress. Our integrative literature review offers a more elaborate understanding of the role that psychological resilience plays in the context of leadership, which is important to reliably inform organizational practices about the threat of considering resilience a silver bullet that allows every employee to cope even with the most critical situations.

*Keywords: psychological resilience, leadership, interpersonal relations*

## Oral presentation OP102

### Anger in Meetings: Do Resulting Emotional Labor and Meeting Outcomes Depend on Meeting Members' Hierarchical Position?

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Science

Research goals and why the work was worth doing

We aim to connect research on anger with the developing research on emotional labor in meetings, to understand 1) how meeting participants deal with their anger in meetings, 2) resulting consequences on meeting outcomes, and 3) whether hierarchical positions change how meeting members deal with their anger in meetings. Being the first to focus on anger in meetings, this research is particularly worthwhile as anger results from feeling that others block one's goals such as often occurring during changes in the world of work.

Theoretical background

The neglect of anger in meeting research is especially problematic as anger expressions can have both functional and dysfunctional consequences. On the one hand, anger expressions can provide useful social information as they indicate performance shortcomings and dissatisfaction with results. Yet, on the other hand, expressing anger can be confronting and harm relationships. Thus, despite anger expressions being potentially useful in meetings, the question arises how meeting participants deal with their anger during meetings.

Given the confrontational nature of anger, meeting members might refrain from openly expressing their genuine emotions after experiencing anger. Instead, employees may surface act, i.e., fake unfelt emotions and/or suppress felt emotions, or deep act, i.e., alter their emotion experience to genuinely display desired emotions, their emotions in meetings in response to anger experiences. Despite these general tendencies, however, not all meeting members may engage in emotional labor in the same way. Especially as anger is closely connected to power, one may expect hierarchical positions to change emotional labor in response to anger experiences.

Design/Methodology/Approach/Intervention

We tested the resulting research model in two studies. Study 1 applies a critical incident design (N = 458) to examine how incidental anger experiences in meetings influence meeting outcomes via emotional labor depending on meeting members' hierarchical position in the organization. In Study 2, we used an experimental design (N = 240) to compare emotional labor in response to anger experiences with experiences of sadness and, meetings in general, which additionally enabled a qualitative analysis of the causes of anger in meetings.

Results

Results across both studies confirmed that anger experiences are responded with emotional labor in meetings. Anger experiences are connected to less genuine emotion expressions and more surface as well as deep acting. The connection between anger experiences and genuine emotion expressions led, in turn, to lower meeting effectiveness, the connection with surface acting resulted in lower meeting satisfaction. In contrast, the connection with deep acting led to higher meeting effectiveness and satisfaction. Yet, the results for the moderating effect of hierarchical positions differed across both studies. Study 1 showed that those in lower hierarchical positions were especially likely to

refrain from genuine emotion expressions, while those in higher positions deep acted their emotions more in response to anger experiences. In contrast, Study 2 did not indicate differences across hierarchical positions.

#### Limitations

Despite replicating the results of the cross-sectional critical incident study with an experimental study, we cannot rule out that underlying differences in meetings alternatively explain the differences in emotional labor in response to anger experiences. Furthermore, all measures were taken from the same sources, i.e., meeting participants. While especially anger experiences and emotional labor are difficult to obtain externally, future research on anger in meetings may instead experimentally induce anger in meeting participants and objectively measure verbal and bodily anger expressions.

#### Conclusions

In sum, we make three theoretical contributions to research. First, we are the first to focus on anger in meetings. Second, extending the examination of anger experiences on meeting outcomes via emotional labor, we highlight a specific emotion, i.e., anger, and related circumstances that necessitate emotional labor. Third, we test hierarchical positions as a moderator for understanding how meeting members deal with their anger, which contributes to the long-standing discussion of power and emotional labor. Given the prevalence of anger in meetings, the results of the two studies give concrete indications on how meeting members — in low and high hierarchical positions — may best manage their anger in meetings.

#### Relevance to the Congress Theme

With anger resulting from feeling that others block one's goals such as often occurring when changing the world of work, our research can help paving the way for discussing changes in organizations. Furthermore, results give important implication for improving meetings, which for many employees constitute a substantial part of their world of work.

*Keywords: Anger, emotional labor, meetings*

## Oral presentation OP235

### **Anticipated discrimination on the labor market: Implications for impression management tactics used on LinkedIn**

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science&practice

**Research goals:** Hiring discrimination against minority applicants is widespread. The aim of the present research is to understand how anticipations of experiencing discrimination at hiring influence the way job seekers present themselves on social-media platforms like LinkedIn. We also explore the impact of these strategies on job-related outcomes.

**Theoretical background :** Discriminations against stigmatized individuals (e.g., women, older individuals) at hiring is prevalent and well-documented by experimental (Neumark, 2018) and survey research about job seekers' experiences of discrimination (Schmitt et al., 2014). We add a novel perspective to this literature by considering job seekers not only as passive spectators but as actors who react to the discriminations they are facing. It has been suggested that job seekers use certain impression management strategies to overcome stereotypes or stigmatizing associations and reduce the risk of negative outcomes (Shih et al. 2013). Indeed, some studies suggest that for minorities associated with low competence using impression management like self-promotion during the interview reduces social bias (Gioaba et al., 2017). In this study, we focus on impression management on LinkedIn, today's most important entry portal to the labor market. On social media platforms, job seekers craft their professional image to render themselves attractive to not only one specific employer but several potential employers and network contacts (Roulin & Levashina, 2016). We investigate the relationships between anticipated discrimination and the use of honest and dishonest impression management on LinkedIn, as well as the efficiency of these strategies, in a large survey with job seekers.

**Methodology:** We conducted a time-lagged survey with of 332 U.S.-job seekers (19 to 65 years; M age = 39.54; 41.9% women). Participants reported how they constructed their LinkedIn profile, to what extent they perceived and anticipated being discriminated against and several job search success indicators (e.g., invitations to company events or interviews). Moreover, we measured participants' use impression management tactics on LinkedIn with an adapted version of Bolino and Turnley's (1999) scale. Additionally, we measured the use of dishonest impression management strategies such as hiding information on LinkedIn. Finally, participants provided basic demographic questions and responded to a short version of the Big Five Personality Scale.

**Results:** The results of our regression analyses showed that perceived and anticipated discrimination were positively related to the use of impression management tactics: The more job seekers anticipated being discriminated against, the more they used honest and dishonest impression management tactics, when constructing their profile. Moreover, the extent to which they used impression management on their LinkedIn profiles was positively related to job related outcomes like invitations for job interviews obtained through LinkedIn. Importantly, all relationships remain stable when controlling for the Big Five personality traits, education, age, gender, and ethnicity.

**Limitations:** Our data are self-reports coming from the same source which may inflate relationships between variables. We tried to minimize this issue by collecting predictor and outcomes variables in different points in time. Nevertheless, to establish causality, our results should be replicated in an experimental study.

Conclusions: Our findings show the impact of anticipating the experience of discrimination on job seekers behavior on LinkedIn. By doing so, we hope to add to the innovating literature viewing minority candidates as active actors in this process. Our results also bring practical insights in showing the benefits for companies in engaging publicly in non-discriminatory practices. Indeed, when anticipating being discriminated, job seekers tend to use more dishonest impression management tactics. This could increase the difficulties for companies to hire candidates that fit with the organization and the requirements.

Relevance to the Congress Theme: This study is relevant for the congress theme “The future is now” because it explores the impact of anticipated discriminations and tries to provide jobseekers with tools to fight against them (honest impression management strategies). In addition, this research studies job seekers behaviors on LinkedIn, a technology that challenges the traditional paper resume. By studying these mechanisms on a popular platform, we hope to help building a better future for all.

Relevant UN SDGs: The present study is relevant for the UN SDGs by exploring how (honest and dishonest) impression management strategies can be related to discrimination and how these different strategies impact job-related outcomes. By doing so we hope to help reduce inequalities for all the minorities which is one of the priorities for the UN.

*Keywords: diversity, impression management, LinkedIn*

## Oral presentation OP33

### **Applicants' reactions to traditional and digital interviewing and the impact of inappropriate questions**

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science&practice

#### Research goals and why the work was worth doing

HR departments often face difficulties with applicants' reactions to employee recruitment and selection, e.g. fairness of the selection method, feedback to candidates, etc. This research investigates the comparison between face-to-face (FTF) and digital employment interviews, exploring how applicants' reactions are shaped. Digital interviewing is a process whereas applicants record themselves whilst answering interview questions received through text, audio, or video on an online platform, and interviewers can watch and rate these recordings at any time.

More specifically, we explore a) applicants' preferences in relation to the recently widely used selection method – the digital interview compared to the traditional FTF interview, including the determinants of the mechanisms associated with organizational justice perceptions, expectancy of a favorable outcome and propriety of questions.

Our research contributes further to applicants' reactions research. Recently, negative applicants' perceptions of technology-mediated interview methods are uncovered while organizations seem to assess the digital interview as an effective selection method (Blacksmith et al, 2016). Thus, our research attempts to examine this contradiction.

#### Theoretical background

The theoretical foundation of our study is based on the Organizational Justice framework. Initially, we compare FTF and digital interview regarding applicants' attitudes and fairness reactions suggesting that procedural justice influences applicants' perceptions towards these methods.

Moreover, the factor of propriety of questions that describes appropriate/inappropriate questioning and the likelihood of provoking positive/negative reactions based on the perceived fairness of selection procedures is under consideration. The more irrelevant/inappropriate the questions are to the job (i.e., sexual orientation), the more unfair the candidates will perceive the tool.

Our research contributes further to applicant reactions research based on Media Richness Theory, whereas an employment interview is perceived by candidates as more favorable depending on how rich the tool medium is (Chapman et al, 2003). Thus, the rich, personal communication of the FTF interview is taken as more favorable compared with the digital.

#### Design/Methodology

We employed a pre-post design with two groups (experimental and control) including FTF vs. digital interview and normal vs. manipulated interview questions (such as sexual orientation, possible drug abuse, etc.)

Both the experimental and the control groups completed the same pre-test and post-test self-administered questionnaires, including measures as Process Favorability, Intention to online Review Writing, etc.

Our sample consisted of 80 participants (university students, employed or unemployed individuals) that have taken part initially by completing a pretest questionnaire and then by participating with active mock employment interviews. The sampling frame was selected along purposive lines.

Half of the participants attended a FTF interview first with a trained recruiter followed by a digital interview using a professional digital-interview platform. Upon completion, half of them were provided an official letter of job offer and the other half of rejection and subsequently completed the post-test questionnaires.

## Results

The results of this research are mainly aligned with the existing theoretical literature. Hypotheses based on the positive perceptions of interviewees on the traditional interviews are confirmed while the effect of inappropriate questioning is inconsistent with the theoretical background. Also, it is demonstrated that perceived justice has a causal relationship with expectations of a positive outcome, implying that FTF creates a positive result based on its evaluation as more fair compared to digital interviewing.

## Limitations

The study limitations include the relatively limited sample size, the lack of potential moderator's worthy of consideration that were excluded due to time limitations (e.g. interviewee status), the large percentage of students in our sample and the absence of prior experience of the digital interview.

## Conclusions - Research/Practical Implications

The implications of this research are both theoretical and practical for testing interviewing process preference in relation to organizational justice perceptions. It could also be used by practitioners to determine the influence of the selection processes (FTF and digital alternatives) on the perceived fairness, high tech usage preferability, etc. to evaluate the different interviewing techniques.

## Relevance to the Congress Theme

This research is associated with 'reducing inequalities' in the workplace since it covers the topic of appropriateness of questions during an interview, an element of candidates' selection that is relevant to inequities, discrimination, and subjectivity of the interviewer.

*Keywords: Applicants' Reactions, FTF interview, digital interview*

## Oral presentation OP405

### Applying for impact. Social Responsibility as a competitive advantage for start-up talent acquisition

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science

1. The goal of this empirical research is to introduce social responsibility as an important recruiting factor for start-ups and to integrate it into existing employer branding theory. The results give important insights and practical knowledge for talent acquisition in start-up companies struggling considerably with the current “war for talent”.

2. Many entrepreneurs experience difficulties finding qualified employees, due to a lack of resources, reputation or other reasons (Greer et al., 2016). Yet, finding fitting employees is crucial for early-stage ventures (Nyström, 2021). The role of socially responsible actions for organizational attractiveness has been researched in the context of corporations, yet there is a lacking body of research in start-up firms (Aguinis & Glavas, 2012; Del Mar Ramos-González et al., 2022; Tiba et al., 2019). As job seekers value different employer attributes in start-ups and start-ups attract younger employees, we argue that social responsibility might be even more important in an entrepreneurial context (Ouimet & Zarutskie, 2014; Tumasjan et al., 2011). We propose that social responsibility is an important recruiting factor for start-ups that might even compensate for a lack of benefits such as an above average compensation, developmental opportunities and work-life-balance. Thus, we hypothesize:

H1: Social (SR) and environmental (ER) responsibility is positively related to organizational attractiveness and job-pursuit intention.

H2: SR and ER will influence organizational attractiveness and job-pursuit intention beyond the effect of the employer attributes (a) compensation, (b) development and (c) work-environment.

We propose that the influence of a company’s social responsibility depends on the applicant’s personality, in line with P-O Fit theory (Kristof, 1996). Accordingly, we expect the same values and traits that are shared by founders of social enterprises, to be important for the decision-making processes of applicants attracted to socially responsible employers. Hence, we hypothesize:

H3: The effect of SR and ER on organizational attractiveness and job-pursuit intention will be moderated by the prospective applicants’ (a) meaningful work value, (b) help value and (c) empathy.

3. Using a conjoint analysis approach, factorial combinations of five employer attributes are displayed, which participants rate on a scale of employer attractiveness. We vary the attributes within job ads, which have been a widely used and valuable source of information as the first touching point between employer and job seeker (Yu & Davis, 2019). Every job-ad includes high or low variations of the attributes. A fractional design will be used, displaying 16 decision profiles plus 16 replicated profiles to evaluate test-retest reliability. Following each profile, participants will rate the respective company’s organizational attractiveness (Highhouse et al., 2003). We target a sample of 306 of prospective job seekers, following an a-priori power analysis conducted for a small to medium sized effect ( $1 - \beta = .80$ ; average marginal component effect (AMCE) = 0.04; Bansak et al., 2020).

4. The present research consists of two studies. A first study has already been conducted (N = 90), successfully checking the manipulations of employer attributes. Results of the first study indicate that ER was perceived as more attractive than SR (Cohen’s  $d = -0.39$ ,  $t(89) = -3.74$ ,  $p < .001$ ). Data

revealed a two-factorial structure with SR and ER loading on one factor, and the other benefits loading on a second factor, indicating the applicability of the model by Lievens and Highhouse (2003). Data collection for the second experimental study is in preparation and will be finished by December 2022. In the second study we will also investigate possible moderating effects of the participants' individual values and personality factors typically associated with a social entrepreneurial orientation, assessing empathy as well as helping and meaningful work values (see H3).

5. To avoid fatigue effects, we use a fractional design (Graham & Cable, 2001; Karren & Barringer, 2002). This limits our ability to investigate three-way interactions between the employer attributes.

6. We integrate SR and ER into existing frameworks of organizational attractiveness, e.g., the instrumental-symbolic-framework (Lievens & Highhouse, 2003) and extend previous employer branding theory. We examine if responsibility can be conceptualized as a symbolic employer attribute, or whether it displays neither instrumental nor symbolic factors. Practical implications for entrepreneurs are given, offering insights about how social responsibility might be able to compensate a lack of other benefits.

7. We directly relate to the Congress Theme by addressing the rising importance of social and sustainable innovation and entrepreneurship in the changing world of work combined with the "war for talent".

*Keywords: entrepreneurship, social responsibility, employer branding*

## Oral presentation OP308

### **Applying the Green Human Resource Management. An analysis and revision of the model guided by HR experts**

Ilaria Buonomo & Paula Benevene | LUMSA University

science

Applying the Green Human Resource Management. An analysis and revision of the model guided by HR experts

**Research goals.** This contribution provides a new viewpoint for Green Human Resource Management (GHRM) analysis. More specifically, it aims to explore which GHRM practices are in use in Italy, HR managers' opinions about the helpfulness and suitability of current GHRM models, and suggestions to modify the current GHRM model.

**Theoretical background.** Although current literature provides no strict definition of GHRM (e.g., Shahriari et al., 2019), its domain has been broadly identified considering the perspectives of strategic HRM, corporate social responsibility, and Environmental Management (EM) (Randev & Jha, 2019). The lack of a structured definition allowed for several research papers analyzing GHRM without relying on a theoretical underpinning (e.g., Opatha & Arulrajah, 2014; Renwick et al., 2016). Some common GHRM dimensions emerge in the studies: selection and recruitment, employee training, performance appraisal and management, rewards, and employee involvement. According to literature reviews, the mentioned practices account almost for the totality of dimensions described as pertaining to GHRM in the current literature (Jackson et al., 2011; Opatha & Arulrajah, 2014; Renwick et al., 2016; Benevene & Buonomo, 2020). However, the knowledge about GHRM at theoretical and empirical levels is still far from being exhaustive due to its relatively recent development. Several points need to be further addressed and developed. Firstly, each dimension may have a differential impact according to organizational contexts. For example, while for some contexts, the use of green selection criteria is mandatory, for others, it is not, thus leading to a lower commitment to using this greening strategy. In these cases, the organizational story and culture should be addressed to verify how these dimensions impact employees' greening conduct and general corporate HR practices (De Vries, 2004). Secondly, several studies focus on the manufacturing sector. While activities in this sector are highly responsible for pollution and waste disposal (European Commission, 2010), each organization, according to its size, mission, stakeholders, and territory, will shape GHRM practices differently, thus leading to a more complex, extended model. Finally, current GHRM models have a normative approach to HR in greening processes. Given the implications of organizational features and cultures, a descriptive approach could be more helpful, as it may offer differentiated solutions to organizations willing to become greener by considering current best practices and customized solutions.

**Methodology.** Forty HR managers (85% males) of small, medium and large-sized Italian organizations took part in the study. 70% worked in profit organizations (e.g., transport, food, and ICT), while 30% in healthcare and non-profit organizations (e.g., private healthcare facilities). Semi-structured interviews were conducted on three main topics: 1) current GHRM practices; 2) research-based GHRM model; 3) proposals of revisions in the model to suit organizational greening needs better.

**Results.** Employee involvement (73%) and Training and development (54%) were the dimensions most frequently implemented. In the first case, implementations can involve "evangelists" (i.e., employees sustaining specific practices, behaviors or approaches to green issues at work) or follow external green initiatives (e.g., sustainability challenges or volunteerism). In the second case, the

training opportunities were often voluntary or integrated with awareness actions. Green recruitment and selection was considered the less feasible dimension (45%), mostly because of a general scarcity of qualified candidates and the potential reduction of the candidate pool due to the use of green sensitivity as an exclusion criterion (23%). Consistently, 9% suggested using it as a preference criterion. Proposed revisions of this dimension included assessing the candidates' cultural fit with the organization (14%) and curating employer branding activities to attract green-sensitive candidates (18%). Employee involvement (95%) and Training and development (82%) were claimed to be the most feasible dimensions, even because they were already being implemented.

Limitations. 1) The sample is not representative of the heterogeneity of Italian organizations; 2) A mixed-method approach could measure the impact of current practices and assess the expectations and attitudes of employees towards future initiatives.

Conclusions. Current GHRM models are mostly oriented to medium/large-sized manufacturing organizations outside Europe. This contribution provides information on the applicability of GHRM models in different contexts.

Relevance to the Congress theme . This contribution helps analyze how people within organizations can act as a lever for the greening process, which is crucial for the future of work.

*Keywords: GHRM, greening processes, sustainable HRM*

## Oral presentation OP511

### Are BDMs gender specific? An Exploration of Mentoring Experiences for Men in STEM

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science

Research recently published suggests that women working in science, technology, engineering and mathematics (STEM), might experience mentoring relationships slightly different than their male counterparts. In particular, previous research suggests that women encounter four Barriers to the Development of Mentorship (BDM) when trying to develop a mentorship at work. These BDMs act as hurdles that prevent initial meetings between potential mentor and protégé from developing into long-term, healthy and successful mentoring relationships. The BDM identified for female employees include Need for Fit, Demonstrating Capability, Commitment of the Mentor, and Trust in the Mentor. Although very relevant and impactful for the mentoring literature and practice, these BDM were unearthed in samples comprised solely by females, which begs the following questions: Do men in STEM also encounter BDMs? If so, are these the same or are BDMs gender-specific?

The current study set out to answer these research questions by conducting in-depth interviews with 21 men holding managerial positions in STEM organizations in the United States and Canada. These interviews followed a semi-structured protocol that included questions such as “Think about your relationships with mentors. Do you have a mentor right now within your organization? Tell me about this relationship. How did it come about? What about past mentorships? What factors have helped you develop these mentorships?”. The collected data, as well as notes taken throughout the interview (including verbal and non-verbal cues) were analyzed using a grounded theory approach.

Common themes were found in the data regarding mentoring in general, and in particular, around the existence of BDMs. Data suggests that men also experience BDMs in the workplace when trying to establish these developmental relationships. However, the BDMs experienced by men are slightly different than the ones encountered by women. Men discussed two known BDMs, Commitment of the Mentor, and Trust in the Mentor, as two crucial elements that could impede initial meetings from growing into a mentorship. Furthermore, men interviewed described two BDMs that have not yet been discussed in the mentoring literature. These two new BDMs were labelled “Need to Share a Goal/Vision” and “Admiration towards the Mentor”. Therefore, the data from this study would suggest that both male and female employees experience BDMs, that there are at least six BDMs, and that these seem to be gender-specific.

Although these findings significantly expand our knowledge of mentoring relationships and BDMs, this study is not without limitations. Mainly, the sample used was North American, white collar and within a specific industry area, STEM. Even though the sample was adequate given the research questions, the generalizability of the findings needs to be explored. Future research needs to determine the existence and impact of BDMs across different industries, cultures and countries. Furthermore, even though personal characteristics of the interviewee (other than gender) was collected, these did not seem to be related to or impact BDM in any way. Future studies could explore the impact and pervasiveness of BDMs according to other personal characteristics of the protégé, such as race, age, cultural background and sexual orientation.

This study makes significant contributions to the mentoring literature in two related ways. First, the data from this study confirms the existence of BDMs as hurdles that impact the development of mentoring relationships. Second, this research discovered two BDMs previously unknown, therefore expanding our knowledge in this area.

In-depth understanding of BDMs could aid researchers and practitioners alike understand why women are under-mentored and consequently underrepresented in STEM workplaces. Furthermore, identifying which BDMs are most likely to impact a particular employee, could meaningfully improve the way we support the development of informal mentoring as well as how we design, implement and encourage formal mentoring programs.

Mentoring relationships have been signaled as very important for the development of employees. In fact, literature has identified mentorships as having the potential to help women and minorities break the glass ceiling. Therefore, the more we understand the factors that aid or impede these relationships from blossoming, the more we can help employees reach their full potential, furthering gender equality and reducing societal inequalities.

*Keywords: Mentoring, STEM, Career development*

## Oral presentation OP372

### Are four working days enough? Working time preferences and working time reduction in Germany

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science

#### Research Goals

For a large part of the workforce in Germany, the five-day week is a reality. The discussion about reducing the working times was further reinforced by international pilot projects. This contribution is aimed at providing a representative overview of working time preferences in contrast to actual working time arrangements of German employees. Therefore, we describe preferences in terms of weekly working hours and the number of working days per week. Furthermore, we examine discrepancies between preferred and actual working times over time in relation to working conditions, health, and well-being.

#### Theoretical Background

According to the theoretical framework of Caruso (2006) long working hours reduce the time for sleep and recovery, and extend the exposure and increase vulnerability to job demands. Thus, long working hours increase stress, impair health and well-being (e.g., Pega et al., 2021), and increase the risk for occupational accidents (Matre et al., 2021). Furthermore, long working hours lead to impaired sleep (Bannai & Takahashi, 2014) and reduce family, social and leisure time (e.g., Arlinghaus et al., 2019). In contrast, researchers report that working time reduction is associated with reduced work stress, improved sleep quality and better work-life balance (Jansen-Preilowski et al., 2020; Voglino et al., 2022).

#### Methodology/Design

We use data from the BAuA Working Time Survey 2015, 2017, 2019 and 2021. The study is conducted via computer-assisted telephone interviews (CATI). The sample is representative of the German working population. Both the existing (actual weekly working hours and number of working days) and the preferred working times (preferred weekly working hours and number of working days) are analysed based on self-reports. We focus on describing the prevalence of working time arrangements as well as discrepancies between preferred and actual working times and working days per week in relation to subjective health status, work intensity, psychosomatic health complaints, and work-life balance. To identify relationships among these variables, cross-sectional and trend analyses are used based on linear and logistic regression models with predictive margins (Graubard & Korn, 1999).

#### Results

The descriptive results suggest that employees increasingly wish to reduce their working times over the last years. In 2021, half of all employees want to work 4 days per week or less, in most cases with a reduction in weekly working hours. This is also reflected in increasing working time discrepancies: A growing number of employees wish to shorten weekly working hours. Wishes to shorten the workweek are related with high work intensity, lower self-reported health, more psychosomatic health complaints and lower satisfaction with work-life balance.

#### Limitations

The analysis is partially based on cross-sectional data and does not allow for causal inference. In addition, common-method bias is also an important aspect since all variables stem from self-reports (Podsakoff et al., 2003). In contrast to „objective“ data derived from electronic working time records, estimated dimensions of working times are subject to certain biases and lead to inconsistent results (Härmä et al., 2015).

#### Conclusion

The results make clear that more and more employees in Germany prefer to reduce their working times and shorten their working weeks. There are also growing discrepancies between actual and preferred working hours. A wish for a shorter working week is associated with high work intensity, a low health status and well-being, and a low level of satisfaction with work-life balance. However, implementing these preferences can be difficult, for example, due to the increasing shortage of skilled workers in many sectors or potentially lower income when working time is reduced, especially in the low-wage sector.

#### Relevance to the Congress Theme “The future is now: Changing world of work”

Working times are indicators of changes in the world of work. In particular, reducing working times is a current trend that has become prevalent in many international trials, e.g., in Great Britain, Iceland or Belgium. The article gives a representative overview about working time preferences in Germany.

#### Relevant UN SDGs

Recovery and free time are essential to maintain employment health and performance, especially in times of increasing work demands. Shorter working weeks can also lighten high workloads and promotes decent work (UN SDG 8). In addition, working time reduction improves health and well-being, especially when working long hours (UN SDG 3). Finally, by equalising the working times of men and women, a reduction in working times contributes to greater gender equality (UN SDG 5) and equality in general (UN SDG 10).

*Keywords: Working time preferences, Working time reduction, Occupational health*

## Oral presentation OP628

### **Are Individual- or Team-Based Rewards Better in Minimizing Workplace Incivility? The Role of Competition, Frustration, and Task Interdependence**

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science

Building on research about the dark side of pay for performance, we investigated the influence of reward base (individual vs. team) on experienced and expressed workplace incivility through competition and frustration, as well as the moderating role of task interdependence on this relationship. We build on earlier research that shows that rewards increase competition leading to an aggressive organizational culture (Porter et al., 2018), and to interpersonal deviance (Gläser, et al., 2017). Previous research has not investigated the ways in which teams collaborate, however. We address this by investigating the effect of different levels of task interdependence (e.g., Wageman & Baker, 1997) as a moderator.

A first, cross-sectional, study surveyed eighty-seven professionals from different professional backgrounds about their experience in recent teamwork, asking about individual vs. team-based rewards, and measuring frustration, interdependence, and incivility. Contrary to our predictions, the regression results of this study did indicate that team-based rewards indirectly increase the level of experienced workplace incivility through competition. Furthermore, in line with previous research, team-based rewards were found to increase frustration, especially in low task interdependent situations. This study contributes to the rewards literature by analyzing and showing the differentiating effect of individual- and team-based rewards on workplace incivility through competition, and by analyzing task interdependence as an important boundary condition in reducing frustration.

In order to systematically explore the effects of rewards and interdependence without the confounding effects of other organizational aspects, we conducted an experimental study as Study 2. In this study, participants signed up through an online link and were entered to the 2 (team vs. individual reward) x 2 (high vs low interdependence) live online group task, followed by a survey measuring their experience during the task. The results complement findings about the dynamics between reward base, task interdependence, incivility, and the underlying mechanisms of competition and frustration of Study 1.

We aim to contribute to the literature on pay for performance (Barnes et al. 2011, Glaeser et al. 2017), as well as the literature on incivility (cf. Schilpzand et al. 2016). Based on our findings, we recommend organizations that implement a form of team-based rewards, to structure the tasks such that task interdependence is high, to avoid high levels of frustration among the team members.

This study is relevant to the Congress Theme “The future is now: The changing world of work” as it provides insights into teamwork and particularly focuses on teams that are self-managed and consist of different members. In addition, the study is relevant to the UN SDG “Decent work and economic growth” as it provides academics and practitioners with insights and competences to decrease competition and workplace incivility, and thereby contributes to improve individual and team collaboration, performance, and sustainability. Decreasing incivility will particularly benefit more vulnerable groups in organizations and minority members, as earlier research has shown those groups to be most likely to be subjected to incivility overall.

*Keywords: Incivility, Rewards, Group dynamics*

## Oral presentation OP221

### **Are our Selection Instruments Actually Free of Stereotypes? Development of a Coding Scheme to Detect Gender Stereotypes in Situational Judgement Tests**

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In recent years, the focus on gender bias and discrimination against women in personnel selection is increasingly attracting attention. One trigger that can lead to gender bias in selection decisions are gender stereotypes among decision-makers in organizations (Heilman et al., 2012). However, gender stereotypes among HR managers can not only directly influence selection decisions but also indirectly by being reflected in personnel selection instruments, if recruiters have these stereotypes in mind when developing selection tools. This, in turn, would be problematic as it may perpetuate old role models (i.e., females are unsuitable for leadership positions) and may trigger a stereotype threat in the affected subgroups (Walton et al., 2015).

Thus, to promote a fair and diversity-enhancing personnel selection, our study aimed to develop a coding scheme to detect gender stereotypes in simulation-orientated selection instruments. Furthermore, we used the coding scheme to review ten Situational Judgment Tests (SJTs) and evaluate them in terms of the stereotypical use of gender, as the situation descriptions of SJTs may reflect gender stereotypes of their developers.

#### Development of the Coding Scheme

In developing the literature review, we searched for articles concerning gender stereotypes and how women and men are stereotypically perceived. Based on the literature sighting and the Lack of Fit model (Heilman, 1983) as well as the Role Congruity Theory (Eagly & Karau, 2002), we identified agency and communion as the two dimensions into which most of the stereotypical perceptions regarding male and female workers fall into (Heilmann et al., 2012). Thereby, men are generally seen as more agentic, comprising attributes such as achievement orientation, assertiveness, and autonomy, whereas women are regarded as communal, attributing caregiving behaviors and emotional sensitivity (Bakan, 1966).

The coding scheme is implemented as follows: First, the protagonist is classified in a certain item (i.e., male, female, no gender, paired forms). Then the item context is determined as either agentic or communion, with a situation displaying agency when it is about career, work, achievement, and communion when the situation is about family, caring for others, social relationships, and activities outside work. After coding the items, items containing female and male stereotypes are summed up and put in proportion to the stereotype-free items. Here, an item would be classified as female stereotyped if it describes women in a communion situation or in an agentic situation where the woman is pictured solely as a clerk or similar. Items are counted as male stereotypical when male protagonists are described in an agentic context where they hold great authority or behave in an agentic manner.

#### Results

We applied the coding scheme to ten different SJTs by two independent raters. There was high interrater reliability for the 263 SJT items for ratings of protagonist and context ( $\kappa = .92$ ) and for evaluations of the presence of a stereotype (none, female, or male;  $\kappa = .78$ ).

The application of the coding scheme showed that among the 263 SJT items a total of 19 female and 36 male stereotypes were used, amounting to 20.9% of items with stereotypes. In addition, results of a Pearson Chi-square test showed that stereotype-consistent male protagonists (47) occur significantly more often in agentic contexts than do female protagonists (23),  $\chi^2(1) = 8.23$ ,  $p = .004$ . Regarding the items with communion contexts, no difference was found in the frequency of female (15) and male (20) protagonists being present in these items,  $\chi^2(1) = 0.71$ ,  $p = .40$ . Additionally, we tested whether a particular gender was overrepresented among the leaders mentioned in the individual items. Results showed that male leaders were mentioned in 19 items and were significantly more frequently represented than female leaders, who occurred in only seven items,  $\chi^2(1) = 5.54$ ,  $p = .02$ .

#### Discussion

The application of our coding scheme indicated that stereotypical use of gender exists in various SJTs, with men more often present in agentic contexts and leadership roles. This is problematic not only for legal reasons but also because such stereotypes impair a fair and unbiased personnel selection. Thus, HR specialists should be aware of common stereotypes regarding gender when designing, implementing, and evaluating selection methods. Aiming for a balanced proportion of males and females in both agency and communality contexts when creating items of selection instruments could be a first step to preventing the implementation of stereotypical use of gender.

Thus, the coding scheme may help identify and prevent gender stereotypes in developing new personnel selection instruments to promote a more diversity-friendly personnel selection process. Thereby, the coding scheme does not only apply to SJTs but can be used as a manual for the development of more gender-fair selection methods.

*Keywords: gender stereotype, coding scheme, personnel selection*

## Oral presentation OP134

### **Are the Effects of Servant Leadership Only Spurious? The State of Research on the Causal Effects of Servant Leadership and an Illustrative Experiment**

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science

#### Research goals

In the present study, we aimed to investigate the current state of research regarding causality in the field of servant (and authentic) leadership and provide recommendations on how causally identified studies can be conducted.

#### Theoretical background

As one of the most popular leadership theories in recent years, servant leadership has been associated with numerous positive work-related outcomes. However, the findings often cannot be interpreted causally, although this is a precondition for drawing reliable scientific or policy implications. Thus, we outline what we consider methodological problems that can threaten causality in the field of servant leadership (i.e., endogeneity bias and problems in randomized experiments). Based thereon, we provide recommendations on how researchers can investigate the causal effects of servant leadership more carefully. Our recommendations focus on the implementation of sound randomized experiments and the use of instrumental variable regression.

#### Methodology

First, to investigate the prevalence of the methodological problems that potentially prevent causal inferences (i.e., endogeneity bias and problems in experimental research), we conducted two systematic reviews of the effects of servant and (because of their overlaps) authentic leadership as explanatory variables. In both systematic literature reviews, we focused on the methodological aspects of the studies. For the review of servant leadership, we extended the time frame of a previous review (Eva et al., 2019) and searched for articles in Web of Science published in the top 30 journals (according to Web of Science) in each of the four categories business, ethics, management, and applied psychology since 2018 (resulting in 46 coded studies published in 38 articles). For authentic leadership, we used the same search string and coding scheme, except for the search date (starting from 2011, extending Gardner et al., 2011; resulting in 47 coded studies published in 42 articles).

Second, we illustrated our recommendations to establish causality by conducting an exemplary online experiment examining the effect of a combination of two servant leadership dimensions (i.e., stewardship and authenticity) on individual task performance (n = 595, without careless responders; both pre-study and experiment were pre-registered). Our manipulation consisted of two videos (combined stewardship and authenticity speech vs. neutral speech) in which participants were informed of the importance of the task that should subsequently be done (i.e., a consequential decryption task linked to donations). The manipulation was developed based on van Dierendonck and Nuijten's (2011) conceptualization and subjectively and objectively pretested, also showing discriminant validity regarding charismatic leadership. Moreover, to examine the effect of a potentially endogenous predictor (i.e., perceptions of combined stewardship and authenticity) on performance, we applied instrumental variable estimation using our manipulation as an instrumental variable.

## Results obtained

Regarding our two systematic reviews of servant and authentic leadership, the interrater agreement between the coders was almost perfect, respectively. The results showed that the problems regarding causality are very prevalent, so we cannot be sure if servant or authentic leadership indeed affect the outcomes in the studies. Our illustrative experimental investigation and the instrumental variable regression showed no effect of combined stewardship and authenticity and their perception on performance.

## Limitations

To measure combined stewardship and authenticity perceptions, we used the items for the two corresponding dimensions of the Servant Leadership Scale (van Dierendonck & Nuijten, 2011). The resulting construct might be ambiguous because the measure has not been validated for combining single dimensions. Secondly, the significant  $\chi^2$ -values in our confirmatory factor analyses indicated that the models might not fit the data well. Finally, the quality fail rate in our experiment was high (but comparable to other online panel studies) and underscored the importance of detecting careless responders.

## Conclusions

Rigorous and causally identified research is important to inform science and practice correctly. However, previous research on the effects of servant and authentic leadership could not provide such robust investigations. Therefore, we call for more profound experiments and the use of instrumental variable regression to account for the potential endogeneity of measured explanatory variables. As measured instruments are often difficult to find, experimentally randomized instrumental variables are an excellent way to tackle potential endogeneity. We hope that our work can help researchers address the challenge and further advance research intended to draw causal conclusions—not only on servant leadership but also on authentic leadership and other constructs in the field.

*Keywords: servant leadership, causality, instrumental variable estimation*

## Oral presentation OP398

### **Are we on the same page? The moderating role of value congruence in charismatic signaling-charismatic effects relationship**

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science

#### Research Goals

Charismatic leaders have strong moral convictions, stick to their values, and some love but others loath them for that. So, what determines whether a charismatic message falls on fertile or barren ground? Self-concept (Shamir et al., 1993) and signaling theories of charisma (Antonakis et al., 2016) posit that charismatic signals do not universally affect all followers, but only those who have (partially) congruent values with their leaders.

Therefore, we investigate the effect of leader charisma-charismatic effect relationship and whether leader-follower value congruence moderates it. Our study overcomes the conflation of leader behaviors with their evaluations (Banks et al., 2021), addresses the endogeneity problem of previous studies, and offers—to best of our knowledge—a first causal test for leader-follower value congruence as a central pillar of charisma theory. The validity of the value congruence assumption is crucial for charisma theory, as it fortifies the central role of values as an essential building block of charisma's definition and emphasizes the followers' role in the occurrence of the charismatic effect.

#### Theoretical Background

Charisma is defined as "values-based, symbolic, and emotion-laden leader signaling" (Antonakis et al., 2016, p. 304). Based on charisma signaling theory (Antonakis et al., 2016) and leader categorization theory (Lord et al., 1984, 2001, 2020), we predict that charismatic signaling (e.g., metaphors, moral conviction, or ambitious goals) increases follower perceived leader charisma, prototypicality and effectiveness. Based on self-concept theory (Shamir et al., 1993) and signaling theory of charisma, we predict that value congruence positively moderates the relationship between charismatic signaling and follower perceived leader charisma, prototypicality and effectiveness.

#### Study Design

In a pre-registered experiment (N=489), we manipulated leader charisma, using video recorded speeches (charismatic vs. neutral) about a foodbank. We operationalize value-congruence as two (potentially endogenous) questionnaire measures: helping others attitudes and altruism. We exploit that the interaction effect between an exogenous treatment and endogenous variables can be interpreted causally under some conditions (Nizalova & Murtazashvili, 2016). We reasoned that higher (lower) scores imply stronger (weaker) value congruence with the leader's mission (i.e., the food bank). We operationalize charismatic effect as three distinct dependent variables: perceived leader charisma, prototypicality, and effectiveness.

#### Results

Our study showed that charismatic signaling fosters perceived leader charisma, prototypicality, and effectiveness. Value congruence as helping others attitudes moderated the relationship for perceived leader charisma and effectiveness, but not for prototypicality. The effect of charismatic signaling on perceived leader charisma and effectiveness was stronger for participants that resonated with the

content of the speech. Value congruence as altruism did not moderate any of the relationship, but the altruism scale had a very low reliability.

#### Limitations

The marginal effect of value congruence is incorrect, as the main effect of it is very likely biased and inconsistent because of the omitted variable bias (Antonakis et al., 2010). Measuring value congruence introduces an endogeneity bias via measurement error (Antonakis et al., 2010; Wooldridge, 2008). Future studies could manipulate value congruence to obtain correct marginal effects and rule out measurement error.

#### Conclusions

We found that value congruence as helping others attitudes moderated the charismatic signaling-charismatic effects relationship. But we did not find that altruism moderates the relationship. Measurement error is a form of endogeneity (e.g., Antonakis et al., 2010; Wooldridge, 2008) and has the property to "pull" the regression coefficient to zero. Hence, larger measurement error in the altruism measure compared to helping others attitudes measure could have made it more difficult to find the effect (i.e., lower power). Our results contribute to the self-concept theory (Shamir et al., 1993) and signaling theory of charisma (Antonakis et al., 2016): Charismatic signaling does not affect all followers equally; instead, charismatic leaders create a connection between followers' initial values and their vision (Antonakis et al., 2016), leading value-congruent followers to perceive them as charismatic and effective. Overall, our results highlight that charisma is not a panacea. Instead, leaders must meet the values of their followers.

#### Congress Theme

This work puts followers in the center of charisma theory. The more people resonate with the leader's value, the stronger the charismatic effect.

#### UN SDG

Decent work and economic growth.

*Keywords: Value congruence, charismatic signaling, charismatic effects*

## Oral presentation OP488

### Are You Better than Me? Competitive Working Climate and the Impostor Phenomenon

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science

Research goals and why the work was worth doing. The impostor phenomenon (aka impostor syndrome) refers to an experience whereby individuals think that others overestimate their abilities (Clance & Imes, 1978). Despite their objective success, these individuals have trouble internalizing their achievements, and instead, attribute it to external causes. Therefore, they worry that they may be found out as “impostors”. This phenomenon is common in all levels of organizations and has negative consequences (for a review see Bravata et al., 2019). Considering the widespread occurrence and detrimental consequences of the phenomenon it seems of utmost importance to examine what causes such feelings of impostorism. To date, however, we know little about the organizational roots of the impostor phenomenon, as previous research predominantly focused on identifying individual-level predictors (e.g., Bernard et al., 2002; Bravata et al., 2019). The present research aims to fill this gap, as we adhere to previous calls to examine the role of workplace context in shaping the impostor phenomenon (Feenstra et al., 2020; Kark et al., 2021).

Theoretical background. A particularly important workplace context is employees’ perceptions of their work environment (aka work climate; Ames, 1992). Nerstad and colleagues (2013) make a distinction between a mastery and performance climate. The former refers to a working climate that focuses on, and rewards, effort and cooperation and emphasizes learning and development. The latter focuses on intra-team competition and social comparison. Employees working in such competitive climates are encouraged to constantly compare themselves to their colleagues. We propose that such a work climate that focuses on competition and social comparison will elicit impostor feelings in employees (Cohen & McConnell, 2019).

Design/methodology. To test this prediction, we conducted two studies. We first conducted an experiment (Study 1; N = 199; M age = 37.07, SD = 11.43; 51.26% female) in which we randomly assigned participants to either a competitive or non-competitive working climate using animated videos (based on scenarios of Wisse et al., 2019). We further conducted a field-study (Study 2; N = 151; M age = 29.40, SD = 7.42; 49.67% female) in which we measured employees’ perceptions of competitive work climate (Nerstad et al., 2013; 8 items; e.g., In my organization it is important to achieve better than others;  $\alpha = .85$ ), mastery climate (6 items;  $\alpha = .83$ ) and trait competitiveness (9 items; Houston et al., 2002;  $\alpha = .90$ ). Finally, in both studies we measured impostor feelings (Leary et al., 2000; 7 items; e.g., Sometimes I’m afraid others in my organization will discover how much knowledge or ability I really lack;  $\alpha = .95$ ).

Results. Across both studies we show that a competitive working climate is associated with increased impostor feelings. In Study 2 we further show that, as expected, a mastery climate is not related to impostor feelings and that the relationship between a competitive climate and impostor feelings remains unchanged when controlling for trait competitiveness and relevant demographics (i.e., age, gender, educational level, and organizational tenure).

Limitations. The present research is not without limitations. Our first experimental study might be suspect to demand effects and our second study relies on single-source survey data making it suspect to concerns of common method bias. Consistently showing the importance of competitive climate for impostor feelings in two studies using different methodological approach alleviates some of the

concerns observed in the separate studies. Nevertheless, we plan to conduct another two-waved study in which will measure perceptions of work climate at Point 1 and impostor feelings at Point 2.

Conclusion and relevance to conference theme and UN SDGs. Overall, the present research shows that a competitive working climate is associated with increased impostor feelings. By doing so, this work contributes to literature on the impostor phenomenon by empirically showing the importance of work context in shaping such insecurities (Feenstra et al., 2020; Kark et al., 2021). We further contribute to research on work climates by identifying impostor feelings as a potential mechanism that could explain the previously observed negative consequences of competitive work climates (Parker et al., 2013). Finally, the present research has important implications for practice. As women and members of ethnic minority groups are particularly likely to experience impostor feelings, and these insecurities hinder their career advancement, the impostor phenomenon is an important barrier to diversity (Chrousos et al., 2020). By identifying the organizational roots of the phenomenon, we can create organizational interventions that reduce impostor feelings of employees, thereby contributing to a future of work in which everybody feels like they rightly belong.

*Keywords: impostor phenomenon competition*

## Oral presentation OP729

### **Artificial Intelligence (AI) in personnel selection: A qualitative study of HR professionals' beliefs about AI-based chatbots and decision support**

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science&practice

Research goals and why the work was worth doing: Technological advances have recently made it possible to use Artificial Intelligence (AI) in personnel selection. From a technical point of view, AI-based systems can perform a wide range of selection tasks, but show their greatest potential during the pre-selection phase e.g., by collecting candidate data through a chatbot and analyzing it as decision support for HR professionals. However, the use of such systems in practice is scarce. HR professionals, as first-party users, can provide an explanation for the gap between research and practice. Therefore, the aim of this explorative study was to examine HR professionals' beliefs about AI-based systems for personnel selection and how these may influence their intention to use them.

Background: Digitization in personnel selection has opened up new opportunities. Candidates can easily apply for multiple jobs online, and companies can track down potential candidates in databases. However, the screening of incoming applications or the active search in databases are among the most time-consuming and labour-intensive activities of HR professionals. Using AI-based systems for such tasks would save an enormous amount of time and HR professionals could focus on assessing the most promising candidates only (Black & van Esch, 2020; Leong, 2018). Companies using this new technology may thus have a competitive advantage in finding the best employees, which makes AI-based systems more and more attractive.

Methodology: Semi-structured online interviews with 25 HR professionals from 21 Austrian companies, covering a wide range of business sizes and sectors, were conducted between June 2020 and March 2021. They lasted about 60 minutes. Inclusion criterion for interviewees was the significant involvement in the selection of employees in the company. To create a basis for discussion, HR professionals were presented with two visualized, fictional examples of AI-based personnel selection tools: a chatbot to conduct pre-selection interviews and a dashboard with candidate ranking for decision support. Additionally, to establish common ground, we provided a definition of AI as intelligent technology which typically works with Machine Learning algorithms that iteratively learn from data to solve problems (Huang & Rust, 2018). However, we only did so after we asked HR professionals about their own conceptualization of AI. Interviews were transcribed verbatim and coded using thematic analysis (Braun & Clarke, 2006).

Results: HR professionals hold different beliefs about the scope of AI and its instruction needs. Beliefs about the scope of AI determine for which use cases the application of AI is conceivable. Beliefs about AI instruction needs affect how barriers to AI use are perceived. Taken together, they contribute to the finding that AI is still observed with some restraint in personnel selection, while HR professionals' attitudes toward AI as a supportive tool for repetitive, time-consuming, or organizational tasks are generally positive.

Limitations: Despite significant efforts, only a few companies could be identified that already have actual experience with AI-based systems in personnel selection. Its use in Austrian companies is currently still not widespread, which is reflected in the beliefs of HR professionals about AI capabilities. However, this allows us to identify pre-existing beliefs that should be addressed during introduction of such new systems in companies.

Conclusions – Originality/Value/Implications: Only few previous studies on AI in personnel selection have focused on the perspective of HR professionals. We contribute to research by exploratively investigating HR professionals' beliefs about AI-based systems in personnel selection. The results shed light on how HR professionals' beliefs shape perceived use cases and barriers of AI. They can explain the gap between perceived potential of AI and low application in practice. Often, the beliefs do not match the current state of AI applications, which is why our study emphasizes the practical importance of information and training that specifically address these beliefs and resulting perceived barriers.

Relevance to Congress Theme: AI-based systems for personnel selection are expected to show a significant increase in practical use in the coming years (Pan et al., 2021), and will thus change the personnel selection process. From the perspective of HR professionals as first-party users of such systems, this study addresses the question of what changes are actually desired as support, and what beliefs and perceived barriers researchers from different disciplines as well as companies need to address for AI-based systems to be successfully used in the future.

*Keywords: Artificial Intelligence (AI), personnel selection*

## Oral presentation OP826

### Assessing a Global Workforce: How to Account for Differences in Cultural Social Desirability

Paul Agnello & Sonya Stokes | Aon Assessment Solutions

Aon's ADEPT-15® is a personality assessment developed to be effective across the globe. It is currently available in 31 languages and 47 unique cultural configurations. In this symposium, we will discuss best practices and lessons learned from Aon's use of ADEPT-15® globally. Developing and maintaining an assessment for global use is complex. Each culture is unique, and the same statement, even with faithful translation, may be interpreted and valued differently across cultures, thus accounting for cultural differences is key to accurate cross-cultural measurement (Johnson & Van de Vijver, 2003)

#### Adjusting Assessment for Cultural Contexts

ADEPT-15® is a multidimensional forced choice (MFC) personality assessment. Applicants are presented pairs of statements with each statement reflecting one of fifteen personality dimensions and asked to select which one better reflects them in a work setting. This format helps to reduce response distortion in the service of accurate and valid measurement (Christiansen et al., 2005; Converse et al., 2010; Jackson et al., 2000; McCloy et al., 2005; Stark et al., 2005).

However, a key consideration in the construction of MFC assessments is how statements are paired – there cannot be a statement that is obviously 'correct' or more desirable in a work setting. Statements must be matched on their social desirability (i.e., the attractiveness of the trait or behavior represented by the statement). Calibrating statement pairs in terms of social desirability prevents applicants from "faking good". However, what is considered "good" is variable across cultural contexts.

#### Accounting for Social Desirability in Personality Assessment

Statements reflecting high, medium, and low standing on each of the fifteen personality dimensions were developed. Once this pool of statements was finalized, the statements were analyzed via a generalized graded unfolding model (GGUM) to determine location and discrimination parameters for the statements. However, neither of those item parameters reflect social desirability in one culture, let alone several.

Whenever ADEPT-15® is developed for a new language, each statement is translated and then back translated. Once translations are completed, individuals who are fluent speakers in the language and native to the country of intended use are trained on rating the social desirability of each statement. Once these ratings are finalized, the result is an updated set of social desirability parameters so that no one language or culture encourage to "fake good" on ADEPT-15®.

#### Methods

Social desirability ratings for all 1470 ADEPT-15® statements across 41 different cultural configurations were examined. Additionally, country values from Hofstede's Cultural Dimensions (Hofstede, 1980; 2015) were examined alongside social desirability. Exploratory analyses were performed on this novel data set. Findings and best practices are discussed below.

#### Best Practices

Accurate translation is essential in developing assessments for international use and a critical step of this process is back translation. However, there is always the risk that two statements designed to

tap into 'low' and 'medium' or 'medium' and 'high' on a personality dimension end up converging into the same area of the latent construct after translation. While there is no magic number for the number of raters required, we generally recommend 8-10 raters to provide social desirability ratings. This ensures a more comprehensive view of social desirability for the respective culture and the larger sample size means sufficient ratings remain if a rater provides incomplete ratings.

## Results

Cultural differences do exist together with cultural similarities. For example, while a statement like "The best way to get someone to do a favor for you is to praise and flatter them first" is a socially desirable statement in Japan, it is neutral in China and Australia and negatively received in the USA, Brazil, and Italy. When correlating social desirability values for each statement across cultures, the mean correlation was  $r=.79$  with a low of  $r=.54$  and a high of  $r=.84$ .

One also cannot assume that neighboring countries have same or similar views on social desirability – for instance, the United States and Canada have a social desirability correlation of  $r=.85$  whereas China and South Korea have a correlation of  $r=.63$ . Indeed, when factor-analyzing social desirability ratings, whether overall or by ADEPT-15® dimension, any factor structure that emerges does not reflect cultural or geographic regions.

Country-level values of social desirability across ADEPT-15® dimensions showed small but significant relation with Hofstede's Cultural Dimension scores. For instance, social desirability ratings for the Power dimension of ADEPT-15® are correlated  $r=-.05$  with Hofstede's values for Power Distance while Humility is correlated  $r=.39$  with Power Distance. Indeed, non-leaders in cultures with high Power Distance are expected to show themselves as humble and obedient.

*Keywords: Personality Assessment, Social Desirability, Cultural Differences*

## Oral presentation OP571

### **Assessment Centers in the Digital Age: Initial Evidence of Validity and Fairness about Gender-Based Adverse Impact.**

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science&practice

**Research Goals:** Recruitment and selection of personnel is a relevant process for improving human capital but is complicated because it can produce errors. Assessment centers have played an important role in recruitment and selection. With a rapidly changing global environment in the form of the fourth industrial revolution, there is a need for organizations to adapt. In accordance, organizations have started utilizing assessment centers in a digital format. Consequently, this study is aimed at exploring and providing a general indication of the construct and criterion-related validity of digital assessment centers, along with, evaluating and establishing the adverse impact of the methodology mainly focusing on gender differences.

**Background:** Assessment Centers have been utilized for more than 7 decades for recruitment and selection. Since the methodology is adaptable to various needs, the assessment center may vary in its selection of exercises, number of participants, and other characteristics. Regardless, conventional assessment centers remain a vital methodology for organizations from diverse industries for their assessment needs. Since online assessment centers are assessments in a digital format, there is a lack of literature on its psychometric properties. In a study (Avni & Luria, 2022), a comparison of conventional and digital assessment centers revealed similar validity and reliability which is alignment with other studies providing support for digital assessments (Woods et al., 2019; Langer et al., 2017).

Therefore, this study aimed to answer three research questions, with respect to an application of the method in an Italian company. 1. Whether the assessment center in its digital format showed general indications of validity (construct and criterion-related validity) as a selection procedure, 2. Whether the selection procedure, digital assessment center, was an appropriate tool of selection for both the genders, male and female, candidates, and 3. Whether the gender of the lead assessors had an impact on the fairness of the selection?

**Methodology:** The paper is based on data derived from a pool of 120 managers of an Italian company that were subjected to an online assessment center. About 55.8% of the participants were male, whereas 43.3% were females. Of them, 91 (75.8%) were managers while 29 (24.2%) were senior managers. The age range of the participants was from 20 years to 51 years. Moreover, there was a total of 15 lead assessors. Of them, 11 (73.3 %) were females, and 4 (26.7%) were males.

The digital assessment center was developed with the objective of identifying the group talent from an Italian organization. The assessment center was an individually administered procedure conducted on digital platforms in English. It had a number of exercises, namely BEI Interview, In-Basket or Business Case Presentation, and Direct Report Meeting, and took 4.5 hours to complete on a standardized schedule. It was designed on 8 competencies that were based on the Company's Leadership Model. Predictive validity was gauged in accordance with the competencies and Status Validation of the employee as a group talent.

Results: To gauge validity, we used Pearson correlation indexes, Principal Component Analysis, McDonald's Omega, and Binary Logistic Regression. For Research Question 1, the results showed preliminary evidence of general indications of the validity of the digital assessment center: Pearson correlation indexes, normal distribution, and descriptive statistics showed support for content validity. As per Binary Logistics Regression, the competencies showed signs of predictive validity; but 2 competencies, Adaptability and Execution were found to be the better determinants of who will attain Status Validation. The findings also provide support for a unidimensional construct which is an indication of construct validity through Principal Component Analysis.

To gauge the fairness of the methodology, we used MANOVA, Chi-Square, and the 4/5 th rule. For Research Questions 2 and 3, this study found conclusive results suggesting fairness in terms of gender and there was no evidence of adverse impact.

Limitations: The paper is based on a single organizational case with a small sample, thereby, the first limitation is that the results lack generalizability. The second limitation is the absence of a job performance variable. If the performance data of the participants had been provided, the research would have claimed to provide validity of the digital assessment center.

Conclusion: Changing times necessitate changing measures, and assessments in a digital format are a fitting example. Our research presents preliminary evidence of validity and fairness for online assessment centers. However, it is important for future studies to, (a) explore multiple digital assessment centers, (b) compare digital and conventional assessment centers to gauge their effectiveness, and (c) find ways to assess fairness on more subgroups.

*Keywords: Online Assessment Center, validity, fairness*

## Oral presentation OP599

### **Associations between digital work stressors, burnout symptoms, and biological stress: A prospective study in hospital employees**

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science

#### Research Goals and Relevance

With the profound change of the world of work in the age of digitalization, investigations into ramifications for employees' physical and psychological health are crucial. Despite the growing research interest in the concept of technostress (1), biological effects of the work with digital technologies are under-researched (2,3). The goal of this study was to assess prospective associations of (digital) work stressors, mental health, and biological stress.

#### Theoretical Background

Chronic exposure to work stressors is associated with physical and mental morbidity as well as mortality (4–6). One potential pathway linking stress experience to disease development is chronic systemic low-grade inflammation. There is evidence that psychosocial working conditions are associated with inflammatory markers, yet prospective studies are scarce (3,7,8). Another potential mechanism how chronic stress facilitates disease pertains to the hypothalamic-pituitary-adrenocortical axis with changes of cortisol output (9). Analysis of hair cortisol concentrations (HCC) is increasingly used to capture cumulative cortisol secretion (10). However, there is a paucity of prospective studies on work stress and HCC. Technostress relates to the phenomenon of “stress experienced by end users of Information and Communication Technologies” (11), although several definitions exist. Only few studies with predominantly cross-sectional designs investigated mental health outcomes and showed positive associations of technostress and burnout (12).

To address these knowledge gaps and to draw conclusions on a higher level of evidence, we conducted a prospective study with repeated measurements of (digital) work stressors, burnout, and two biomarkers indicative of immunological and endocrine stress responses.

#### Methods

This study draws upon two measurement time points of a prospective cohort study, i.e., baseline (T1) and six months later (T2). The sample includes N = 144 (107 women,  $M \pm SD$  age = 31.1 ± 9.4) eligible participants of a cohort of new employees at a university hospital. Participants reported on general work stressors based on Karasek's model (work overload, job control), digital work stressors (work interruptions, multitasking), burnout symptoms (exhaustion, mental distance), relevant confounders (sociodemographic, health- and employment-related characteristics), and provided samples for biomarker analysis. We measured the inflammatory marker C-reactive protein (CRP) via

dried blood spots (13) and HCC from strands. Change scores and multivariate linear regressions were calculated.

## Results

Burnout increased ( M T1 =1.94, M T2 =2.11), CRP did not change ( M T1 =1.15, M T2 =1.18; mg/l), and HCC decreased significantly ( M T1 =8.71, M T2 =5.02; pg/mg) over time. Increased work overload was associated with increased burnout ( $\beta=0.35$ ,  $p < .001$ ), job control was not related to burnout. Moreover, increased work interruptions and multitasking were associated with increased burnout ( $\beta=0.35$ ,  $\beta=0.32$ ,  $p < .001$ ), also after additionally adjusting for changes in work overload ( $\beta=0.26$ ,  $p = .003$ ;  $\beta=0.25$ ,  $p = .004$ ). Changes in work overload were not significantly related to changes in CRP, yet work overload at T1 was linked to CRP at T2 ( $\beta=0.14$ ,  $p = .031$ ). No associations of the other predictors with CRP were observed. Increased interruptions were associated with increased HCC ( $\beta=0.19$ ,  $p = .047$ ). Work overload, job control and multitasking were not associated with HCC.

## Limitations

This study was based on a limited number of participants due to strict exclusion criteria regarding health status and employment-related characteristics. Given our a-priori power analysis yielding a target sample size of  $N = 187$ , the results need to be interpreted with caution. Moreover, the findings concerning work interruptions should be cautiously considered, because this scale showed low internal consistency (Cronbach's  $\alpha = .66-.67$ ). Lastly, we only measured CRP as an inflammatory marker, while there are many other useful markers such as cytokines.

## Conclusions

This study shows effects of different job factors on employees' health and well-being not only on a psychological (i.e. burnout), but also on a biological level (i.e. CRP, HCC). More specifically, we discerned adverse effects of digital work stressors with positive effects on burnout and HCC. To our knowledge, for the first time a link of a digital work stressor with HCC was revealed. Future research however, is needed to replicate observed effects in other occupational samples.

## Relevance to Congress Theme

Especially in the healthcare sector, there has been a tremendous adoption of digital technologies in the recent time. However, there is a striking lack of research on possible health effects of this new reality of work conditions. From an occupational health and safety angle, we need to unveil whether digitalized working environments represent new forms of stress sources and if so how they affect workers' mental health and biological stress.

*Keywords: technostress, burnout, biological stress*

## Oral presentation OP486

### Associations Between Effort-Reward Imbalance and Burnout Among Swedish Physicians

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science

Research goals

The overall aim of the present study was to depict the levels of work-related stress and investigate the associations between psychosocial work-factors and burnout among Swedish physicians.

Background

Globally, the prevalence of burnout among physicians is high. Recently, Haggqvist et al identified a prevalence of symptoms of burnout in up to 28% of Swedish physicians, with significant variations across different specialties, worksites, and technical ranks. This is alarming due to the possible detrimental effects on both an individual level as well as on a societal level. However, knowledge of work-related stress across different groups of Swedish physicians, and the contributing factors, is lacking.

Organizational changes within Swedish healthcare during the past decades have resulted in an imbalance between occupational efforts and rewards among physicians. According to Siegrist et al, exposure to effort-reward imbalance (ERI) is related to increased risk for occupational burnout.

Methods

The present cross-sectional study was approved by the Swedish Ethical Review Authority (2020-06613). In February 2021, a representative sample of 7200 Swedish physicians were invited (inclusion criteria: age < 70 and employed the last 12 months). In total, 2761 submitted questionnaire data (response rate = 41.2%) which comprised i) assessments of job efforts (E) and rewards (R) using validated ERI items, ii) assessments of burnout using the The Burnout Assessment Tool (BAT), and iii) sociodemographic data.

Logistic regression models were used to investigate the associations between exposure to psychosocial work factors (i.e., high-risk ERI conditions: high E, low R, and E/R ratio > 1.00) and risk for burnout (i.e., mean BAT score  $\geq$  2.59). Models were adjusted for occupational and sociodemographic data. Data analyses were performed using STATA version 17.1 and SPSS version 28.

Results

The mean E/R ratio among all physicians was 1.20, and a majority (60.6%) had a high-risk E/R ratio > 1.00. Female physicians had higher mean E/R ratio (1.25) and more commonly a high-risk E/R ratio (65.1%) versus male physicians (1.15 and 56.1%, respectively). The highest mean E/R ratio and percent of high-risk E/R ratio were observed in emergency medicine (1.45 and 83.3%, respectively), followed by surgery (1.32, 66.9%), infectious disease medicine (1.26, 65.7%), and psychiatry (1.22, 60.4%).

In total, 12.1% of Swedish physicians were at risk for burnout (14.2% of female and 9.9% of male physicians). Across clinical specialties, the highest proportion of physicians at-risk for burnout were observed within psychiatry (23.7%), followed by infectious disease medicine (23%), emergency medicine (22%), and surgery (16.7%).

In crude models, all high-risk ERI conditions were significantly associated with increased risk for burnout among Swedish physicians (high E: OR 10.6, low R: OR 17.8, E/R ratio > 1.00: OR 16.3,  $p < .001$ ). In adjusted models, associations were lessened but remained statistically significant (high E: OR 6.3, low R: OR 11.0, E/R ratio > 1.00: OR 12.5,  $p < 0.001$ ).

#### Limitations

First, the cross-sectional study design precludes any causal conclusions. Second, self-report data implies a risk of several biases (i.e., recall bias). Third, data was gathered during the peak of the third wave of the COVID-19 pandemic and results should be interpreted accordingly. Last, factors that may influence individual experiences of work-stress (e.g., personality traits, resilience to stress, individual stress coping strategies) were not considered.

#### Conclusions & Implications

A majority (61%) of Swedish physicians were subject to high levels of work-related stress according to ERI, which was associated with a 12.5-fold increased risk for burnout. Additional studies are needed to further investigate the variations across different medical specialties.

The present study underlines the need to monitor occupational health among physicians over time. Therefore, we will adopt a longitudinal study approach, providing a robust foundation for continuous measurements of occupational health among Swedish physicians.

#### Relevance to the Congress Theme

In general, our research is highly relevant with respect to Work and Organizational Psychology. The present study is based on a well-established psychosocial model (i.e., ERI) and comprise results and conclusions that are relevant for several themes of the congress, e.g. 15. Stress and Dysfunction as well as 19. Work Patterns And Conditions.

#### Relevant UN SDGs

The present study stands in direct proximity to several UN SDGs, e.g. good health and wellbeing as well as decent work and gender equality.

*Keywords: Effort-Reward Imbalance, Burnout, Swedish Physicians*

## Oral presentation OP554

### Atmosphere, emotion and problem solving – hints for the design of virtual work environments

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#### Goal

The aim of our research is to understand how the atmosphere of a certain place influences the strategies and results of problem solving processes indirectly by triggering the emotional state of the problem solvers. Atmosphere is defined as the holistic influence of a location on all sensory channels of a human being. The result shall help to design virtual work environments which generate a productive atmosphere for problem solving which use visual information, audio information, haptics and, if possible, odour in an integrated way.

#### Theory / Originality

The approach of this research is new. The theoretical framework integrates research of environmental psychology, psychology of architecture and human factors about the influence of environments on emotion and stress and results of cognitive psychology on the influence of emotion on problem solving (Starker and Von der Weth, 2015). Especially the influence of work environments on strategies for solving complex problems shall be explained.

#### Method

In a first experiment students shall solve problems (an image interpretation, a creativity task and the crisis management of a nuclear accident) in three real life environments (place in front of a castle, in a tiny house and a church, n = 38). The ideas, problem solving steps and results were recorded. A questionnaire about the perceived atmosphere and the emotional state had to be filled in.

#### Results

Preliminary results show an influence of the environment and atmosphere on emotion and problem solving. For single sensory channels there are hints that view, temperature and feel good at the place are influencing the results of the problem solving process. The next step is to build up a model of a "problem solving atmosphere" which includes besides the location data about the mood and behaviour of the subjects to integrate all the aspects addressed in the experiment. For the design of virtual environments, the role of non-visual aspects of the atmosphere are most interesting at the moment.

#### Limitations

There exist much more complex problems for which the model about the influence of atmosphere on problem solving must be tested. It shall be adapted to additional demands of more complex problem scenarios. Until now the results have preliminary character.

#### Implications

This research generates important information for a planned application in an ongoing technology development project. In an interdisciplinary project an artificial environment for learning and serious games is planned which generates a highly naturalistic virtual atmosphere for these activities which integrates different places in the world to one common environment and atmosphere for working on

complex problems. This virtual work environment includes information for all sensory channels mentioned above.

Starker, U. & von der Weth, R. (2015). Strategie und Gefühl. Die Rolle von Emotionen bei der Bewältigung komplexer Managementaufgaben. *Wirtschaftspsychologie, Themenheft M*

*Keywords: Working Spave, Complex Problem Solving, Emotions*

## Oral presentation OP429

### **Authentic Leadership, Authentic Followership, Need Satisfaction, and Self-Actualization at Work: A Multi-Level Study**

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science

Relevance, goals, background. Authentic leaders are deeply aware of their values and beliefs and continuously strive to create meaningful organizational contexts. Recently, authentic leadership has gained immense attention because studies found it positively related to group and organizational performance, leader and follower job satisfaction, well-being, and work engagement (Gardner et al., 2011, 2021; Gill & Caza, 2018). To date, however, the authentic leadership literature has attributed little attention to outcomes related to self-actualization, which commonly refers to individuals' development of their potential. Moreover, most prior studies neglected the transmission process between leaders and followers and have thus failed to consider relational multilevel processes (van Knippenberg & Sitkin, 2013; Chun et al., 2016). Viewing authentic leadership as a relational leadership process (Uhl-Bien, 2006), we expected a transmission between leaders' authentic leadership and followers' authentic followership. Furthermore, drawing on the assumptions of the self-determination theory (Deci et al., 2001), we expected that authentic leadership is related to increased psychological need fulfillment and self-actualization of followers. This study is the first to study the associations between leaders' authentic leadership and followers' self-actualization with followers' authenticity and psychological need fulfillment as potentially explaining mediators.

Design, methodology . Data was collected from leaders and their followers via an online survey in an international organization within the food industry. We used established questionnaires: Authentic Leadership Inventory (Neider & Schriesheim, 2011), Work-related Basic Need Satisfaction Questionnaire (Deci et al., 2001), and Indicators of Self-Actualization (Glaser et al., 2018). We gathered self-ratings of the concepts under study from leaders and their followers from established teams. A team was composed of one team leader and three or more team members who reported directly to their leader. Structural validity was tested with confirmatory factor analysis (CFA). Complete datasets of 53 teams (i.e., 171 team members and 53 team leaders) were used to test three multi-level models using the MSEM approach with self-rated authentic leadership at the group level (Level 2) and followers' authentic followership, psychological need fulfillment, and self-actualization at the individual level (Level 1).

Results. The proposed factor structures of authentic leadership, authentic followership, psychological need fulfillment, and self-actualization were supported in their proposed configuration. The MSEM analyses confirmed the proposed (2-1-1) indirect effects of authentic leadership on followers' need satisfaction via authentic followership. They confirmed the proposed indirect effect of authentic leadership on followers' self-actualization via need satisfaction, and the proposed indirect effect of authentic leadership on followers' self-actualization via authentic followership.

Limitations. Characteristics of the sample do not reflect those of the entire labor force and hence might restrict generalizability to the whole population. Given the nature of cross-sectional designs, strong causal claims cannot be inferred. Additionally, self-reports might be inflated by common method bias. A larger sample is required to test our hypotheses in a full serial mediation model instead of splitting it into separate models. Finally, we approached followers indirectly through contact with their respective leaders, which may have biased the overall employee sampling.

Conclusions. We confirmed fundamental assumptions of the self-determination theory by showing that followers' self-actualization is not solely related to authentic leadership. The data suggest that self-actualization emerges from a synergistic effect of authentic leadership, authentic followership, and psychological need fulfillment.

Relevance to SDG. Leaders play a central role in organizations and their behavior has a significant impact on followers' work behavior, performance, and well-being (Inceoglu et al., 2018). Thus, studying how leaders can promote the well-being of their followers contributes to addressing challenges, such as achieving the Sustainable Development Goal of "good health and well-being".

Relevance to congress theme. Psychological need fulfillment and self-actualization are indicators of a „good life“ and are important for the eudaimonic well-being of employees at contemporary workplaces.

*Keywords: authenticity at work, self-determination, self-actualization*

## Oral presentation OP342

### Automated Structured Interviewing: What question types work best for algorithms?

Justine Chalifour, HireVue; Franziska Leutner, HireVue & Goldsmiths University of London; Theodoros Bitsakis & Nathan Mondragon | HireVue

science&practice

The literature on structured interviewing suggests that past behavioural interview questions outperform situational interview questions in predicting job performance. Our goal is to establish whether the same is true for automated structured interviewing, that is, to establish whether machine learning models built to predict competency ratings are more accurate for behavioural versus situational interview questions.

#### Theoretical background

Structured interviews are a gold standard in personnel selection, with some of the highest prediction accuracy for job performance compared to other common selection methods (Schmidt & Hunter, 1998). They are characterised by a standardised set of interview questions, as well as standardised behavioural rating scales used to evaluate candidates on relevant competencies. Two different question types are commonly used: past behavioural and situational questions. Past behavioural questions might have an advantage, for example, as they demonstrate higher incremental validity compared to cognitive ability tests as well as situational questions, when measuring competencies (Campion & Campion, 1994; Pulakos & Schmitt, 1995).

In recent years, automated structured interviews have become popular in practice, where machine learning algorithms predict human interview ratings of competency proficiency levels, thereby automating the interview rating process. These machine learning models achieve similar levels of accuracy compared to human raters (Hickman et al., 2022; Rasipuram & Jayagopi's, 2016). However, it is unclear whether algorithms perform better when using data from past behavioural versus situational questions.

#### Methodology

We test the relative predictive accuracy of machine learning algorithms predicting competency scores based on recorded answers to past behavioural versus situational interview questions. We use data from 1,904 video interviews that were recorded as part of job applications, where applicants answered situational or behavioural interview questions to assess their level of Team Orientation. Situational questions ask about hypothetical scenarios ('what would you do if...') and behavioural questions ask about past experiences ('tell me about a time when...'). The mean age of interviewees is 29.49 (SD 9.95), 58% are female (31% male, 11% N/A), and 42% white (23% Black, 22% Hispanic, 5% Asian, 8% N/A). Interview responses were rated along the relevant competency by trained human raters (mean 2.8 ratings per response). We then specify Ridge Regression machine learning models predicting human ratings for each question type. Transcripts of the interview response (3,382 Bag of Words features, 4 Word Stats features, and 768 features generated with customised Bidirectional Encoder Representations from Transformers extraction) are used as predictors in the model, and competency ratings as the outcome. We compare inter-rater reliability of human ratings, as well as machine learning model performance by question type.

#### Results

Both human ratings of past behavioural and situational interview questions measuring Team Orientation show good and comparable inter-rater reliability.

Machine learning models perform well at predicting human ratings, with model performance comparable for both behavioural and situational interview questions.

#### Limitations

A smaller amount of past behavioural interview questions were available compared with situational interview questions, which might negatively impact the prediction model accuracy of models built based on behavioural questions. This could mask a potential advantage of behavioural questions for prediction models.

#### Conclusions

The preliminary results of this study indicate that both situational and behavioural interview question types perform well in automated ratings of structured video interviews. No differences in inter-rater reliability for human competency ratings, or prediction accuracy for machine learning models were found between the two question types.

#### Congress Theme Relevance

The use of Artificial intelligence (AI) is growing at a rapid pace, including with new assessment and selection methods. The benefits to organisations, candidates and society are equally as strong: supporting organisations in high volume hiring, identifying qualified talent quickly resolving labour shortages, getting people into roles that align to their skills, reducing biases in hiring, and improving the candidate experience. To ensure these benefits are realised, we must understand how AI is used in assessments. One of these avenues is to explore AI performance with different interview questions.

*Keywords: Video Interviews, Artificial intelligence, Assessment*

## Oral presentation OP386

### **Barriers and facilitators of Human Resources Policies and Practices to Promote Hiring and Retention of Employees with Disabilities:A Systematic Review**

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science

**Research goals:** Our research aimed to develop a systematic review of foundations and contributions to the barriers and facilitators of Human Resources policies and practices for the labor inclusion and retention of people with disabilities, and synthesize the findings, best practices, and gaps identified.

**Theoretical background:** People with disabilities are often confronted with difficulties in their process of accessing and retaining employment. Moreover, both organizational policies and practices can play a major role in identifying barriers and facilitators, acknowledging that policies can become barriers when they are outdated, ambiguous, and do not offer strong protection to workers with disabilities. In this sense, the increase of factors perceived as enhancers and obstacles to organizational policies and actions to improve their inclusion in the labor market may lead to a revision exercise to identify the tendencies, gaps, and emergent elements that are foresting the recent developments in this matter.

**Methodology:** The systematic review collected and assessed the encountered findings on different topics to provide compelling evidence for the study of disability in the workplace between 2007 and 2021. The intention of selecting subsequent publications after 2007 lies in the occurrence of global phenomena that marked the development of employment globally, such as the Great Recession, the period of economic recovery, and the most recent crisis caused by COVID-19. The search string used a two-pronged approach including scholarly and grey literature search to balance possible gaps between the academic literature and cases of success in this topic from self-initiatives of organizations aside from the scientific approach. The coding and data extraction process was completed with the selection of 171 out of the initially 4,242 records that met the inclusion criteria in three databases (i.e., PsycINFO, MEDLINE, and Web of Sciences), and other sources (i.e., grey literature). The analysis was supported using an inductive approach as an alternative that allowed the characterization of emergent relevant topics avoiding the use of rigid data analysis procedures commonly used in structured methodologies. Two reviewers with Ph.D. in related fields, and specialists in disability and inclusion in the workplace participated in the critical appraisal of the selected studies and the systematization process.

**Results:** The findings of the scholarly literature search identified barriers categorized in negative attitudes of others, workplace accommodations, comorbidity, socio-environmental factors, governmental issues, employer negligence, personal barriers, and education, knowledge, and competencies. Facilitators were categorized in reasonable accommodations, education and training, governmental support, socio-environmental factors, personal strategies of development, inclusive employer interventions, different types of employment, technology-based solutions, networking, hiring programs, and empowerment strategies. In addition, the grey literature findings identified facilitators classified in networking, technology-based solutions, education and training, hiring programs, empowerment strategies, inclusive employer interventions, and reasonable accommodations in the workplace.

Limitations: The systematic review had certain limitations related to the extensiveness of the research in terms of geographic location, and type of disability. Besides, the systematization of the results could be affected due to the duality and co-dependence of the barriers and facilitators.

Conclusion: The research identified significant themes that can help to enhance the study of disability in organizations, such as the interactions between barriers and facilitators, the reasons that can motivate a barrier to become a facilitator, and vice versa. Important aspects on which the focus of the analysis was centered were the impact of the attitudes of others as a severe barrier to employment, the role of the employers to promote inclusion, the leverage of the rise of the technological advances, the influence of new ways to employment, and the inputs from the grey literature.

Relevant UN SDGs : The contribution of the research towards the study of disability in the workplace is tied to the strategy to reduce inequality in the population with disabilities reflected in the 2030 Agenda for Sustainable Development, and moreover in the Disability and Development Report realizing the sustainable development goals, in which SDGs 8 and 10 (i.e., 10.2) are focused in promoting decent and inclusive opportunities for all, including people with disabilities.

*Keywords: Disability, inclusion, practices*

## Oral presentation OP591

### **Be a HERO, be Your Own Best Friend: The Effects of Developing PsyCap and Self-Compassion on PhD Students' Well-Being and Performance**

Luisa Solms, Astrid Homan, Barbara Nevicka & Machteld van den Heuvel | University of Amsterdam  
science&practice

#### Research goals and why the work was worth doing

PhD students are increasingly suffering from mental health problems. Compared to the normal population, PhD students are six times more likely to develop anxiety or depression (Evans et al., 2018). Although research has produced substantial knowledge about factors contributing to PhD students' ill-being (e.g., publication pressure, lack of supervisor support, self-doubt; Schmidt & Hansson, 2018), little is known about how to support PhD students effectively. Given that PhD students' ill-being is a critical threat for their functioning at work, there is an urgent need for intervention strategies to support PhD students. The aim of this study is to develop and evaluate two interventions aimed at developing PhD students' personal resources – namely, psychological capital and self-compassion, to increase PhD students' well-being and performance. Psychological capital (PsyCap; Luthans et al., 2007), a malleable four-faceted psychological resource consisting of hope, self-efficacy, resilience and optimism, enables individuals to pursue their work-related goals with confidence and perseverance. In addition, self-compassion, that is being understanding and kind to oneself when confronted with difficulties (Neff, 2003) allows PhD students to view own shortcomings and failures in a more positive light (Neff, 2003).

#### Theoretical background

We combined Conservation of Resources (COR) Theory (Hobfoll, 2001) with the literature on PsyCap and self-compassion to design two training interventions aimed at improving PhD students' well-being and performance. Specifically, we designed 1) a PsyCap training and 2) a self-compassion-based PsyCap training which extends the PsyCap training with self-compassion practice. Based on COR theory's resource investment principle, we argued that PhD students would be motivated to invest the resources gained from the interventions (i.e., PsyCap and self-compassion) in order to cope with the challenges of their PhD and to protect higher-order resources, such as their well-being and performance.

#### Design

We used a randomized controlled design with a waitlist-control group ( N = 117) to investigate the effectiveness of the two training interventions. Because of scheduling conflicts, some participants switched groups, leading to a final sample of n = 40 in the PsyCap group, n = 33 in the Self-compassion-based PsyCap group and n = 44 in the wait-list control group. 74 participants were female, 40 were male and three participants did not disclose gender. We expected both intervention groups to increase in psychological capital, as well as well-being and performance outcomes after the intervention compared to a) their pre-intervention levels and b) the control group. In addition, we argued that self-compassion would facilitate the development of PsyCap, thereby expanding the positive effects of PsyCap. Consequently, we expected the self-compassion-based PsyCap intervention group to show higher psychological capital, well-being and performance compared to the PsyCap group.

#### Results

Pairwise comparisons indicated that the PsyCap group reported increases in psychological capital, decreases in work pressure and improvements in task accomplishment relative to baseline. The self-compassion-based PsyCap group showed increases in self-compassion relative to baseline and control group, increases in support seeking and positive affect relative to baseline, control group and the PsyCap group, and a reduction in work pressure relative to baseline and control group. There were no pre-post changes for the control group. Exploratory mediation analyses showed that the increases in well-being and performance that were observed in the self-compassion-based PsyCap intervention were driven by changes in self-compassion (rather than psychological capital).

#### Limitations

This study suffered from mortality issues, that is the three groups were smaller than expected and unequal in size. Also, given that PhD students were asked to sign-up for participation, there might be a self-selection bias in our sample.

#### Conclusions

Our findings suggest that developing PsyCap and self-compassion may be effective strategies to support PhD students' well-being and performance. Moreover, we found initial evidence that a self-compassion-based PsyCap training may be a more effective strategy to promote PhD students' well-being compared to a PsyCap only training.

#### Relevance to the Congress Theme

Academia is facing a mental health crisis and it is particularly young employees, such as PhD students that are affected. We argue that, in addition to structural changes, timely solutions are needed. One such solution is to develop PhD students' personal resources (e.g., self-compassion).

*Keywords: personal resources, well-being, academia*

## Oral presentation OP90

### **Because I Care: Leader Work Centrality as an Important Antecedent of Visionary Leadership and Subsequent Follower Outcomes**

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science

**Research Goals and Theoretical Background:** It is often argued that visionary leadership – that is, “the communication of a future image of a collective with the goal of persuading others to contribute to its realization” (van Knippenberg & Stam, 2014: 241) – is one of the most important and effective leader behaviors (Lewis & Clark, 2020). While several studies have investigated which elements make visions more or less effective (e.g., Carton et al., 2014), we still know surprisingly little about which leader characteristics determine whether leaders employ this behavior and under which circumstances these characteristics might be especially important. In our research, we draw on theories of human and social capital (Becker, 1964; Kwon & Adler, 2014) and argue that work centrality – that is, the extent to which individuals believe that work plays a major role in their life (Hirschfeld & Feild, 2000) – is an important antecedent of visionary leadership. We propose that individuals with high work centrality care so deeply about their work that they are more willing than others to engage in visionary leadership – a leader behavior that is often seen as extraordinary and an act of unconventional risk taking (Halevy et al., 2011). Moreover, we argue that work centrality is more important for leaders with low rather than high organizational tenure (i.e., the length of an individual’s employment in an organization; Ng & Feldman, 2010). We propose that while leaders with high organizational tenure have already acquired large amounts of organization-specific knowledge and many social contacts, which makes visionary leadership less difficult and risky for them, leaders at the beginning of their tenure need high levels of work centrality to compensate for their lack of these resources. Because work centrality enables leaders to engage in visionary leadership, we propose that such leaders are then also more likely to increase their followers’ perceived work meaningfulness, which in turn reduces their turnover intentions.

**Design and Results:** To test these assumptions, we conducted a two-source, two-wave lagged-design field study with 101 organizational leader-follower dyads with established scales from Hirschfeld and Feild (2000), Kearney et al. (2019), Kirkman et al. (2004), and Chen et al. (2011). By using the regression-based approach from Hayes (2022), we found that leader work centrality predicts visionary leadership, and especially so for leaders with low organizational tenure. Moreover, we find that visionary leadership transmits this interactive effect via followers’ perceived meaningfulness onto turnover intentions.

**Limitations:** We acknowledge two limitations of this research. First, the data from our field study do not allow for causal inferences and it would thus be desirable to complement them with experimental data. Second, the majority of our dyads came from Pakistan and India. Although it is generally argued that visionary leadership is a cross-culturally effective leadership style (Venus et al., 2018), future research should ascertain the generalizability of our findings to other cultural contexts.

**Implications and Value:** With our research, we provide two central contributions to the literature. First, our research complements and extends research on antecedents of visionary leadership (e.g., Venus et al., 2018) by highlighting the importance of work centrality for visionary leaders. In addition, we show that work centrality is especially important for leaders who are still new to their organization. While the leadership literature has mostly considered leader organizational tenure as a control variable (Bernerth et al., 2018), our research shows that it can also be an important boundary

condition for the effect of leader characteristics on leader behavior. Second, it has often been argued theoretically that visionary leadership provides followers with meaningfulness (e.g., Kearney et al., 2019; Stam et al., 2010a, 2010b). However, the only existing empirical evidence for this comes from research where vision communication is combined with other leader behaviors to form a broader measure of transformational leadership (e.g., Frieder et al., 2018). With our study, we address the criticism on such broader leadership constructs (van Knippenberg & Sitkin, 2013) and provide evidence for the specific and unique effect of visionary leadership on meaningfulness.

Relevance to the Congress Theme: Our work is especially relevant to this year's conference theme because the future of work will be determined by increasing levels of automation, a global dispersion of the workforce, and rising levels of complexity. Our work shows that organizations should focus on recruiting leaders with high levels of work centrality because it is those leaders in particular who will be able to help their followers navigate such an environment by providing them with vision and meaning.

*Keywords: visionary leadership, work centrality, organizational tenure*

## Oral presentation OP393

### Beggars can't be choosers – how managers grow marginalized employees

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science

This study shows how the challenges of recruiting eligible employees can lead to the sustainable management of socially and psychologically marginalized employees while maintaining the corporation's competitiveness.

The record-high employment rate in Denmark results in labor and skill shortages, challenging companies to recruit and retain eligible employees. The food-processing industry in Denmark is particularly challenged in recruiting and retaining blue-collar employees. They commonly experience heavy lifting, straining work positions, high levels of accidents, and work-related pain. Despite the straining work conditions, the skilled or unskilled slaughterhouse employees are relatively highly paid compared to other European countries.

This study explores how a corporation with high-performance demands and physically demanding work processes can sustainably recruit and retain blue-collar employees. We apply the concept of sustainable management to describe the combined managerial focus on balancing organizational performance and employee health.

#### Design

We collected data from six Danish food-processing facilities belonging to the same corporation. We conducted semi-structured interviews with six top managers, four department managers, four line managers, ten administrative personnel, three shop stewards, and twenty blue-collar employees, both formally trained and untrained. We also examined stories in the twenty-eight magazines published by the corporation for its employees from the last three and a half years. We conducted a thematic analysis focusing on narrations from or about the employees' experiences of becoming blue-collar employees.

#### Results

Managers and administrators faced ongoing difficulties recruiting eligible employees to uphold the corporation's performance. A manager from the strategic level stated that their apprentices were critical to the development and competitiveness of the corporation. They recruited and retained marginalized employees, e.g., social or psychological issues, substance abuse, and migrants. Some employees recounted that they used to be in trouble with the law before working in the factory and needed the stability that the work provided. Another employee described, "I usually say that I was rejected everywhere else. I am neither tall, skinny, nor pretty enough; I also have dyslexia and dyscalculia."

The work is male-dominated and values traits like strength and stamina. Around 15% of the blue-collar employees in the corporation were female. In the employee magazine, a manager on a strategic level described that potential female candidates perceived the corporation as having "a dusty image" with no clear career pathways. The corporation tried to change its image by creating role models and making the corporation a place where more people would like to work. The organization celebrated the craftsmanship of the trade by improving the education of the apprentices and by featuring employees that participated in or won trade competitions. A manager on a strategic level stated, "We have been on a journey that has lasted 5-6 years, aiming at

retrieving the pride in the trade and reinstalling the recognition of the trade as a proud craftsmanship”.

An apprentice butcher described the prejudices towards settling for the trade as “ it’s something you do if you can’t do anything else.” Continuously, the organization tried to fight prejudice concerning the job by educating SO-ME ambassadors and presenting the job and education at fairs and in production schools. The organization attempted to manage the employees sustainably by addressing their issues and supporting them in growing to be the employees the corporation needed.

Conclusion and relevance to the congress theme

We studied how a corporation could recruit and retain blue-collar employees sustainably. The results show that the corporation has difficulties recruiting eligible employees, which forces the managers to hire socially marginalized candidates and support them in growing to be the hard-working and stable workers they need.

Corporate preconditions force managers to fight misconceptions and preconceived notions about the work and to reinstall pride in the work. They see the employees as an asset that needs to be managed rather than a cost they need to keep down. In this development, the employees and the corporation go from begging for employment and qualified employees to a position where they grow desirable blue-collar work. Beggars become choosers.

The future is now! Corporations today face recruitment and retention problems, and the solution to this challenge might also help solve pressing societal problems like creating decent work for marginalized groups.

Limitations

We conducted this study within one corporation in Denmark, so the transferability of the results to contexts with markedly different blue-collar working conditions is probably limited.

*Keywords: Sustainable management, Blue-collar work*

## Oral presentation OP271

### Behind Worker Perception Accuracy: The Role of Job Autonomy

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science&practice

#### Research Goals

The literature on team cognition emphasizes that shop floor employees need to develop accurate perceptions about their tasks in order to effectively accomplish the team's objectives. However, how can managers help employees to develop accurate perceptions? To address this question, we draw on work design theory and we examine whether and how the accuracy of shop floor employees' perceptions is related to characteristics of their work environment.

#### Theoretical Background

Effective teamwork relies on the emergent aggregation of individual perceptions, which can be defined as a set of mental activities resulting from their intimate interpretation of the external environment (Furlan et al., 2019). Given the emergent nature of team cognition, the literature has investigated how individual perceptions aggregate at the team level mainly focusing on intra-group similarity. Few scholars emphasize that "[similarity] does not equal quality [as] teammates may share a common vision of their situation yet be wrong about the circumstances that they are confronting" (Mathieu et al., 2000, p. 281). Inaccurate perceptions may mislead team members to focus on secondary rather than primary goals, impeding the team to work effectively. Therefore, some researchers have suggested to shift the focus from intra-group similarity to accuracy for enhancing the quality of both individual and team decision-making and performance.

In this study, we address the call for more research on perception accuracy rather than similarity. We draw on work design theory to examine the antecedents of perception accuracy. Specifically, we posit that job autonomy enables employees to develop accurate perceptions about their job by providing them with the freedom of organizing their work. Moreover, we argue that the effect of autonomy on workers' perception accuracy is moderated by the supportive climate in which workers operate. Having supportive colleagues or supervisors should help workers to make the most out of the autonomy in terms of quality of their perceptions.

#### Methodology

To test our hypotheses, we conduct a survey on different organizational levels from a range of 13 Italian manufacturing firms. Our sample is composed of 309 shop floor employees and 69 team leaders from 54 manufacturing units.

#### Findings

To test our hypotheses, we performed moderated linear regressions. We find that job autonomy positively affects the accuracy of individuals' perceptions. However, this relationship is significant only when moderated by supervisor support, such that the higher supervisor support, the stronger the positive effect of job autonomy on perceptions' accuracy. Moreover, we find that coworker support moderates the effect of job autonomy on perception accuracy such that the lower coworker support, the stronger the relationship between job autonomy and perception accuracy.

#### Limitations

First, our survey design did not allow to investigate the evolution of perceptions over time. Second, our measure of perception accuracy was based on the similarity between individuals and their reference group of experts, admittedly oversimplifying the task of assessing the quality of individuals' perceptions. Third, whilst most organizational theorists assume that perception accuracy should be maximized, inaccurate perceptions may also be beneficial or at least not damaging for organizations.

#### Conclusions

Drawing on the literature on team cognition and organizational behaviour, this study addresses the following research question: how can managers help employees to develop accurate perceptions about their job? To answer this, we collected data on shop floor employees and experts' assessments about the team priorities and we analysed whether and to which extent the similarity among their assessments (i.e., perception accuracy) was related to their job autonomy. We demonstrate that the accuracy of shop floor employees' perceptions about their job is related to both job autonomy and the moderating effect of supportive climate. This study provides insights to organizations seeking to enhance the quality of their employees' perceptions and explains how to create a working environment that supports the development of accurate understandings about the team's objectives.

#### Relevance to the Congress Theme

In a fast-changing world, our study seeks to help practitioners designing works that enable employees to better understand their tasks and to align with the team and organizational objectives.

*Keywords: Work design, job autonomy, perception accuracy*

## Oral presentation OP453

### **BEING “GOOD” BENEFIT THE SELF BUT UNDER CERTAIN CONDITIONS: WHEN AND HOW HIGH-MORAL IDENTITY EMPLOYEES WANT TO KEEP THEIR JOBS**

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science&practice

**Research goals.** Record numbers of employees have left their jobs since the beginning of the pandemic due to how they are treated by their managers and organizations, a phenomenon called the Great Resignation. This trend is troubling companies for the high costs related to employee turnover. Indeed, according to a new global PwC survey, a fifth of workers report they are very likely to quit their jobs in 2022. Shedding light on how and when “good” employees can decide to quit their jobs is nonetheless crucial to formulate preventive measures that help companies attract and retain valuable staff. This study aims to clarify to what extent, how, and when high-moral identity employees can develop turnover intention.

**Theoretical background.** Drawing on the conservation of resources (COR, Hobfoll et al., 2018) theory, moral identity – i.e., the centrality of moral traits in one’s overall self-concept (Aquino & Reed, 2002) – is a personal resource as it enhances employees’ self-regulation, motivating them to exhibit prosocial behaviors (Aquino et al., 2011; Jennings et al., 2015). This results in more morally desired actions and fewer unethical behaviors with potential gains in terms of positive social relations with others (Hertz & Krettenauer; 2016). Then, based on the COR theory (Hobfoll, 2001), we expect that high-moral identity employees will be better positioned for resource gains and less vulnerable to resource losses, thereby having less need to adopt defensive conservation strategies. In this regard, knowledge hiding (KH) represents a defensive coping behavior as it implies withholding relevant knowledge as a mechanism of self-protection intended to avoid experiencing personal resource losses (e.g., becoming less valuable; Shin & Kwag, 2017). KH is predictive of turnover (Anand et al., 2020), namely a withdrawal behavior that resource-depleted employees can adopt to scale back from resource investments and protect their left resources. Then, we expect that high-moral identity employees will be less likely to engage in KH and then develop turnover intention. However, this will be conditional on levels of the emotional culture of companionate love (ECCL). Thus, we hypothesize that the presence of a strong ECCL characterized by the expression of affection, caring, compassion, and tenderness among employees (Barsade & O’Neill, 2014) would be an enhancing environmental condition as it will provide employees with a satisfactory way of meeting their reciprocal responsibilities and socio-emotional needs of social connection with the care of each other (Parkinson et al., 2005).

**Design.** Data were collected on 235 employees from several UK and U.S. companies during the first wave of the COVID-19 pandemic. We used a three-wave, cross-lagged design with a one-month lag between measurements. Participants were recruited via Prolific Academic, an online crowd-sourcing research platform.

**Results .** Results from moderated mediation analyses revealed that when there were high (vs. low) levels of ECCL in the workplace high-moral identity employees were less likely to engage in KH and then less willing to leave their job.

**Limitations.** This study relied only on self-report measures and online data collection.

Conclusions. This longitudinal study moves a step forward in the moral identity and knowledge management literature, as it is the first to clarify when moral identity is a personal-level negative predictor of KH and then turnover intention, by identifying ECCL as a key enhancing environmental condition for this link. In doing so, our results shed new light on the reactions of high-moral identity employees to their own unethical behaviors and add to the limited number of studies that have examined the costs of KH for the hider. From a practical standpoint, when hiring new employees, HR representatives could consider a candidate's influence on the emotional culture and emphasize honest, prosocial, and helping characteristics as critical credentials that employees should have. Managers could cultivate practices and policies that make companionate love a desirable and normal practice by, for instance, conducting sharing and debriefing sessions where collaborators are encouraged to share their emotional experiences openly. To promote an ECCL, companies could consider arranging informal gatherings to help their employees build strong bonds with each other, while managers should adopt a compassionate approach, making them present and available for their employees.

Relevance to the Congress Theme. This study extends the topic of well-being by disclosing through which psychological mechanisms (i.e., KH) and under which organizational boundary conditions (i.e., low ECCL) high-moral identity employees may consider quitting their job.

Relevant UN SDGs . Good health and wellbeing.

Audience. Both practitioners and academics

*Keywords: moral identity, knowledge hiding, employee turnover*

## **Oral presentation OP184**

### **Bending to fit: Improving equality of access to workplace policies and practices for LGBTQ+ people**

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science&practice

**Aims:** While reproductive technology advancements are aiding increased diverse family formation, limited literature exists on LGBTQ+ people's experiences of pregnancy loss and support at work. We aimed to contribute to a foundational understanding of how work-related factors affect the lived experiences of family formation for LGBTQ+ people. This presentation will illustrate: how the advancement of assisted reproductive technologies and associated legislation does not equate to access to equal workplace provisions for LGBTQ+ people; how access to heteronormative perinatal care and support can impact LGBTQ+ people in a range of domains, including the workplace; and discusses directions for practice in areas including antenatal healthcare, legislation and policy, counselling services, and informal supports.

**Theoretical background:** Interpretivist epistemology applying feminist theory was adopted to enable both individual experiences and structural factors to be captured in the study.

**Design:** Qualitative design using semi-structured in-depth interviews with LGBTQ+ people about workplace experiences after pregnancy loss. Data were analysed using reflexive thematic analysis.

**Results:** Heteronormative policies and entitlements can compound the distress LGBTQ+ people experience during their family formation efforts and pregnancy loss. Key findings demonstrate how workplaces featured prominently in the family formation efforts of LGBTQ+ people, particularly following pregnancy loss. Three aspects of the workplace featured prominently: How existing levels of inclusion influenced disclosure in the workplace; how heteronormative workplace policies, leave, and entitlements increase distress; and the need for leave flexibility as grief and coping at vary for different people. Organisations can take practical steps to improve equality of access to organisational policies, leave and entitlements.

**Limitations:** This sample comprised 12 English-speaking participants located in Australia and the United Kingdom. The conclusions, therefore, reflect a set of workplace policies and legislation within those two countries. While this presentation offers suggestions relevant for organisational settings in many countries, we recognise that not all suggestions will be applicable to all attendees due to varying legislation across countries.

**Conclusions:** A key feature of this presentation is the practical implications of the findings. We provide practical suggestions for academics, practitioners, and clients to better support LGBTQ+ people at work after a pregnancy loss. Examples include how employers and practitioners can assist by using inclusive language in leave policies and forms; providing access to parental and bereavement leave irrespective of family formation method and gestational age; and allowing flexibility in hours, workload, and tasks after a pregnancy loss.

**Congress Theme Relevance:** While technological advancements are enabling an increase in diverse family formation, limited knowledge exists about LGBTQ+ people's experiences of workplace policies and practices that relate to family formation. In line with the Congress theme 'The Future is Now', while the world of work is changing, LGBTQ+ people are experiencing a gap between their reality and policies, practices, and procedures at work. This presentation provides applied suggestions for

academics, practitioners, and clients to offer a more inclusive future for people with diverse sexualities and genders at work.

Relevance to UN Sustainable Development Goals (2015): The aims of this presentation and associated research align with three of the UN Sustainable Development Goals (2015): 1) the specific focus is on understanding how inequalities play out in the workplace and offers practical suggestions for academics, practitioners, and clients to reduce the impact of inequalities for people with diverse genders and sexualities; 2) this presentation supports the achievement of good health and wellbeing by sharing new insights about and providing examples of previously unreported workplace barriers to health and wellbeing; 3) caring responsibilities and the way in which these responsibilities impact paid employment are a known barrier to gender equality, and this presentation both highlights how the gendering of care perpetuates gender inequality at work and offers practical suggestions for improving gender equality in workplaces. Raising awareness and understanding the variability in inclusiveness and inequality of access to workplace policies and entitlements available to LGBTQ+ people is a vital first step in creating policies, practices and entitlements that provide truly equal care and support at work.

*Keywords: LGBTQ+ inclusion; inclusive leave and entitlements; diverse bodies and genders*

## Oral presentation OP396

### **Between materialism and sufficiency: Influences of consumption orientations on well-being, support of political measures and sufficiency behaviors**

Shirin Betzler, Karsten Müller, Sabine Lebedinski & Lena Schmeiduch | Osnabrueck University

science

**Research goals:** With historically high levels of individual consumption, we are exceeding the boundaries of the earth year by year. This makes it necessary to reduce absolute levels of individual consumption, and support respective societal change through political measures. This study aims at shedding light on how these outcomes relate to individual materialistic or sufficiency orientations.

**Theoretical background:** Our current global consumer culture is characterized by a materialistic orientation of individuals, where the consumption of rapidly circulating commercial products is aimed at achieving well-being, success and happiness. As a counterpoint, orientation towards sufficiency calls for a shift in the way we consume, focusing on finding a good life in deceleration and the simplicity of reduced consumption. With the global sustainability strategy vastly following a green growth paradigm, developments towards sufficiency are still a niche topic. However, on an individual level, initial studies suggest sufficiency orientation to have positive consequences for well-being (Tröger et al., 2021), environmental protection (Verfuerth et al., 2019), and social life (Loy et al., 2021).

**Method:** Against this backdrop, the present study examines the negative connection between materialistic and sufficiency orientation and their direct effects on cognitive and emotional facets of subjective well-being, individual sufficiency behaviors for different consumption domains (mobility, housing, nutrition, and leisure) and attitude towards sufficiency policies. Moreover, the mediating role of time affluence is examined. Data was obtained from an online survey with a final convenience sample of  $N = 530$ . Participants indicated their agreement to items adapted from existing research on a seven-point Likert scale. For the measurement of sufficiency policies, pro- and contra arguments of different policy measures were presented. Participants were asked to rate to what extent they were in favor of the measure. A model integrating the hypothesized connections was tested with structural equation modelling.

**Results:** Results revealed a negative correlation between materialistic and sufficiency orientation. Sufficiency orientation positively predicted individual sufficiency behaviors ( $\beta = .83, p < .001$ ) as well as attitude towards sufficiency policies ( $\beta = .65, p < .001$ ), but not subjective well-being ( $\beta = -.07, p = .218$ ). Materialistic orientation was a significant negative predictor for subjective well-being ( $\beta = -.31, p < .001$ ) and individual sufficiency behaviors ( $\beta = -.12, p < .05$ ), but not for attitude towards sufficiency policies ( $\beta = .06, p = .292$ ). As for testing the mediating role of time affluence, it was significantly and negatively predicted by materialistic orientation ( $\beta = -.14, p < .05$ ), but not by sufficiency orientation ( $\beta = -.03, p = .619$ ). Time affluence had a significant positive influence on subjective well-being ( $\beta = .33, p < .001$ ), and a significant, however negative influence on individual sufficiency behaviors ( $\beta = -.12, p < .05$ ). Overall, the model explained 22% of variance in subjective well-being, 41% in attitude towards sufficiency policies and 76% of individual sufficiency behaviors.

**Limitations:** Data collection via convenience sampling led to a predominantly female (60.9%), comparatively young (age mean = 31.8) and educated (38.9% with a University bachelor's degree or higher) sample. Reliabilities of the main constructs were generally at least acceptable (Cronbach's  $\alpha \geq .70$ ). However, selected sub-scales of the factors of individual sufficiency behaviors and attitude towards sufficiency policies were as low as  $\alpha = .52$ .

Conclusions: The present study stresses the importance of sufficiency orientation for furthering individual sufficiency behaviors as well as the support of respective policy measures. Materialistic orientation seems to impede individual sufficiency behaviors and to have a detrimental effect on subjective well-being and the perception of time affluence. In turn, disposing of enough time has a positive impact on well-being. However, with time affluence having an unexpected negative connection with individual sufficiency behaviors, more research is needed in order to unravel the complex role that time affluence plays in this context. The results of this study offer valuable points of departure for education and training, such as questioning the predominant societal paradigm of materialism, or furthering critical thinking about individual use of time. Also, the results can be a promising avenue for social marketing campaigns for the public good.

Relevance to the Congress Theme: The study offers insights on what influences members of organizations or customers in their sufficiency behaviors and well-being and how they partake in the broader context of society. This contributes to shaping future-oriented and responsible producer - consumer relationships.

*Keywords: consumption orientation, sufficiency behaviors, policy support, well-being*

## Oral presentation OP478

### BEYOND CONSENSUS: A DYADIC PERSPECTIVE ON STATUS PERCEPTION IN GROUPS

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science

Status, the relative amount individuals are voluntarily respected, admired and deferred to, is a central organising process in groups that facilitates performance (Anderson et al., 2015; Berger et al., 1972). Expectations States Theory, the dominant theoretical lens, predicts groups allocate higher status to members with higher willingness and ability to contribute towards performance, which requires groups to form consensus over expectations (Berger et al., 1972).

Whilst EST has dominated theorising on status, it overlooks a conceptual and empirical reality: not all interpersonal perception, particularly status, is consensual, as individuals develop unique status perceptions and often disagree over status rankings (Joshi & Knight, 2015; Kilduff et al., 2016). This calls into question the extent to which EST, reliant upon consensus, is able to explain the antecedents of status perception in groups, and thus highlights our incomplete understanding.

Here, we focus on dyads as a key locus of status perception to advance a relationship-based account of EST. We propose that individuals uniquely see others as higher or lower in status as a function of their dyadic relationships. Moreover, we hypothesise that members of dyads perceive higher status when they share similar personality traits, particularly extraversion, grounded in Similarity-Attraction Theory, which predicts that individuals prefer to interact with similar others (Byrne et al., 1986).

In our first study, we apply a Social Relations Model (Kenny, 1994) to allocate variance in status perceptions between consensus and relationships for 980 dyads nested in 39 teams. We find that 23% of the variance in status perception is relationship-based. We then analysed in Study 2 the status perceptions of 130 participants placed into 36 groups to complete a one-time problem-solving task. We used a Response Surface Analysis (Edwards & Cable, 2009) to show that congruence in extraversion uniquely predicts dyadic status perception. Though research has shown a positive link between extraversion and consensual status (Bendersky & Shah, 2013), our findings are notable since they demonstrate a dyadic link that goes beyond the consensus-based rationale of EST. In terms of limitations, we note our data are correlational, which restricts our ability to make causal inferences.

Our findings are important because they provide both theoretical and empirical advances to the study of status-organising processes in groups. Theoretically, we advance knowledge of how individuals attain status by examining dyadic perceptions that dominate status. Empirically, we employ a technique that combines SRM and RSA in a novel way. Our research calls into question the hegemony of EST and brings to light new insights into how individuals attain status.

*Keywords: Status, Dyads, Extraversion*

## Oral presentation OP482

### Compressed Work Week – Intention Predictors and Outcomes: A Systematic Review Using Topic Modeling

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science

The title of our presentation is “Compressed Work Week – Intention Predictors and Outcomes: A Systematic Review Using Topic Modeling”.

In order to reconcile work and family lives, organizations offer their employees Flexible Work Arrangements (FWAs) (Allen et al., 2012). These arrangements allow individuals to choose when and where to work outside of their traditional work schedule (Spreitzer et al., 2017). One of the FWAs' strategies is the Compressed Work Week (CWW), which can reduce the schedule to 3 or 4 working days (Baltes et al., 1999). This study aims to provide an overview on the state of the art regarding the intention predictors and outcomes of the CWW. Additionally, it also analyzes the latent themes arising from research articles on this theme.

For that purpose, we conducted a systematic review through the use of statistical text analysis methods (Sharma et al., 2021). Data was retrieved from Web of Science and we initially obtained a grand total of 1421 papers. We included all the English-written papers addressing the access and/or use of CWWs in our analysis, and excluded those who did not meet this criteria, thus resulting in a final corpus of 132 (N = 132). The topic modeling technique applied in this study allows us to identify the latent themes in the subject of CWWs, as well as their prevalence across a range of documents (Imel et al., 2015).

Our results provided a clearer overview on the state of the art regarding the intention predictors and outcomes of the CWW. Firstly, we could state the existence of multiple intention predictors regarding the use of CWWs (e.g., being women or perceiving a reduction in commuting time). Then, our analysis showed us that the outcomes from the use of CWWs are dependent upon the number of daily working hours. Thus, working under a “4/40” scheme (a 4-day work week, in which employees will work for 10-hours each day) may sort different outcomes comparing to a “3/36” (a 3-day work week where each workday has 12 hours). Further, we identified 15 topics and grouped them into 5 main clusters. Hence, these 5 main clusters were related to: 1) the work-family dynamic (work-life balance, role conflict management, supervisory support, parenthood and the gendered nature of flexible schedules), 2) health (health and stress, flexibility bias and the role of health and age on work engagement), 3) shift work (fatigue and sleepiness), 4) time and distance (number of daily working hours and commuting time and distance) and 5) talent retention.

A possible limitation of this study is that we used data retrieved from only one research database – Web of Science - and have not compared it with other sources (e.g., Google Scholar).

However, this study provided a clearer overview on the state of the art regarding the intention predictors and outcomes of the CWW. Additionally, we also identified the most common themes arising from the analyzed literature on this theme, and grouped them into 5 main clusters. A detailed explanation of each topic will be provided in the presentation, as well as the reason for framing each topic in its specific main cluster.

Considering the growing relevance of FWAs in shaping the world of work following some of the recent notable events (e.g., COVID-19 outbreak), as this study addresses one of it (CWWs), we believe it goes in line with the congress theme.

This study is relevant for the following UN SDGs: (1) good health and wellbeing and (2) decent work and economic growth.

*Keywords: compressed work week, cww, intention predictors, outcomes*

## Oral presentation OP592

### Binge-watching's effects on work engagement

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science

Research goals and why the work was worth doing: During the past 25 years, there has been an increase in watching television for people of working age (Barwise et al., 2020). In the United States, the average amounts to around five hours a day. Employees may spend up to 30% of their waking hours in front of the TV and/or streaming devices (Barwise et al., 2020). Binge-watching (i.e., watching multiple TV show in one sitting; Starosta & Izydorczyk, 2020) may represent a unique domain in everyday life which should influence the work domain via spillover effects (Edwards & Rothbard, 2000). However, there is surprisingly little research on the work-related antecedents and consequences of daily binge-watching. Drawing on recovery research (Sonnentag & Fritz, 2007; 2015) and media psychology (Reinecke & Oliver, 2017), we have good reason to assume that binge-watching could be both positive and negative for work engagement. However, much-needed empirical evidence for this assumption is lacking. By examining the daily effects of job stressors (i.e., workload) on increased binge-watching with downstream consequences for recovery experiences (i.e., increased detachment and relaxation), recovery activities (i.e., deteriorated sleep), and occupational well-being (i.e., work engagement), we contribute to the literature by further integrating research on recovery and media consumption. Furthermore, with our moderated-mediation model, we introduce the role of TV enjoyment. Both binge-watching and TV enjoyment are under the employee's control and can be targeted to improve recovery experiences, recovery activities, and occupational well-being.

Theoretical background: The background for the research is recovery research (Sonntag & Fritz, 2007; 2015) that hypothesizes job stressors such as workload to be associated with detachment—being mentally away from work—and relaxation with downstream consequences on well-being. However, with our media psychology perspective, we hypothesize distinct positive and negative effects of workload on work engagement via binge-watching. On days with high workload, employees might be more inclined to binge-watching because this activity does not require high energy levels to be invested. In turn, binge-watching may hinder and benefit work engagement (i.e., a positive, work-related state of mind that is characterized by high levels of energy, being dedicated and being concentrated and happily engrossed in work; Schaufeli & Bakker, 2004). Binge-watching should improve detachment and relaxation, whereas it should be negatively related to sleep in terms of sleep quality and quantity.

Furthermore, we hypothesize TV enjoyment boosts the positive relationship between binge-watching on the one hand and detachment and relaxation on the other hand. TV enjoyment should buffer the negative association between binge-watching and sleep quality/quantity. We assume that detachment, relaxation, and sleep will positively affect next-day work engagement. Taken together, we propose a moderated-mediation model with indirect effects of workload on work engagement via detachment, relaxation, as well as sleep quality/quantity, and TV enjoyment as a boundary condition.

Design/Methodology/Approach: We will conduct a daily diary study in November, in which we will sample 83 participants, which is an appropriate sample size for this method (Gabriel et al., 2019). Prolific Academic will provide access to the sample. Participants will fill out a baseline questionnaire to indicate demographic information and then fill out short questionnaires in the morning and afternoon for 10 working days. In the afternoon, participants will indicate their level of workload. The

next morning, we will measure binge-watching, TV enjoyment, recovery experiences (i.e., detachment and relaxation), and sleep quality/quantity. In the afternoon, we will assess next-day work engagement.

Results expected: We will have the results available in early 2023.

Limitations: The main restriction from a methodological point of view is using self-reports, which might contribute to common method variance.

Conclusions - research and or practical implications: We advance the literature on binge-watching and its effects on occupational well-being. The study can potentially improve organizations' knowledge of binge-watching and how it may improve or deteriorate the employee's work engagement. This could help organizations offer interventions targeted at their employees (e.g., providing certain highly enjoyable TV content during work breaks).

Relevance to the Congress Theme: With the ever-increasing popularity of watching TV, it is beneficial to understand how it may affect employees at work. We will contribute to this and help organizations coordinate action in this changing world.

Relevant UN SDGs: Our research advances knowledge on work engagement "Good health and well-being."

*Keywords: binge-watching, recovery, work engagement*

## Oral presentation OP203

### **Bonus or Backlash?: Examining the Effects of Supervisor Gender Vanguard on Gender Differences in Subordinate Leadership Aspiration**

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science&practice

#### Research Goals and Theoretical Background

According to the role congruity theory (Eagly & Karau, 2002), leader stereotypes place an emphasis on typically masculine, agentic features like dominance and assertiveness over typically feminine, communal features like being helpful and nurturing. This might not only reduce women's access to leadership roles but could also discourage them from aspiring to such roles to begin with (Hoobler et al., 2014). The purpose of the present research is to explore whether women's leadership aspiration can be strengthened by supervisors' demonstrations of communality or agency. Supervisors can serve as important role models and research has found that women with female supervisors have higher aspiration (Fritz & van Knippenberg, 2020). This supports research highlighting the importance of gender-congruent role models for women (Dasgupta & Asgari, 2004). However, the influence of role models can go beyond seemingly salient elements of perceived similarity, like gender (Cheryan et al., 2011), and the extent to which gender-congruent role models are considered critical at work is currently under debate (Yan et al., 2021).

We extend this debate by testing whether supervisors that disconfirm gender stereotypes (referred to as gender vanguards) can influence subordinate aspiration. According to expectancy violation theory, category-based violations can result in extreme evaluations, in line with the valence of the violation (Bettencourt et al., 1997). Behaving in gender atypical ways could create positive expectancy violations by means of a bonus effect (Hentschel, et al., 2017), in which demonstrations of atypical behaviour from an unexpected source could be perceived as especially favourable and generate positive outcomes. The same behaviour however, could create negative expectancy violations by means of a backlash effect (Bosak et al., 2018; Moss-Racusin et al., 2010) that could be perceived as especially unfavourable, and generate negative outcomes. This leads us to test the following competing hypotheses.

Hypothesis 1a: Communal behaviour would confer a communality bonus to male supervisors that could strengthen subordinate aspiration, especially women's.

Hypothesis 1b : Communal behaviour would confer a communality backlash to male supervisors that could negatively influence subordinate aspiration.

Hypotheses 2a: Agentic behaviour would confer an agency bonus to female supervisors that could strengthen subordinate aspiration, especially women's.

Hypothesis 2b : Agentic behaviour would confer an agency backlash to female supervisors that could negatively influence subordinate aspirations, especially women's.

#### Methodology and Expected results

We will test these hypotheses and finish data collection over the next two months. In a between-subject experimental study, participants' leadership aspiration will be measured in relation to a hypothetical supervisor where supervisor gender (male, female) and supervisor behaviour

(communal, agentic) will be manipulated. In a second, cross-sectional study, participants will rate their own leadership aspiration and evaluate the communality and agency of their current supervisors. We will analyse the effects of supervisor gender, supervisor behaviour and their 3-way interaction on subordinate leadership aspiration to determine which hypothesis is supported or rejected.

#### Limitations

The present studies only look at communality and agency in isolation as a way of assessing their unadulterated interaction with supervisor gender (Kulich et al., 2021). However, future research should assess the effect of supervisors who demonstrate both communality and agency. This aligns with recent research that increasingly highlights the positive evaluations of androgynous leaders (Kark et al., 2012; Powell & Butterfield, 2020).

#### Implications and Relevance

Prevailing stereotypes about gender and leadership place women in a double bind that can undermine their pursuits for leadership roles and their motivation to behave in stereotypically masculine ways (Amanatullah & Morris, 2010). As such, support for the agency bonus hypothesis could highlight the value of displaying agency for women, both in leadership roles and those aspiring for them, instead of navigating the backlash associated with it (Williams & Tjebkes, 2016). Moreover, women are embedded in environments that are predominantly occupied by men in supervisory positions (Smith, 2002). Thus, if the communality bonus hypothesis is supported, it could encourage male supervisors to display their communal traits, by fostering more nurturing, sensitive working environments, that emphasize the role that men could play as allies at work (Yan et al., 2021). Overall then, identifying organisational factors that can strengthen women's leadership aspiration would positively contribute to changing existing dynamics of the workplace and development goals aimed at reducing gender inequality.

*Keywords: Leadership aspiration, gender equality, supervisor behaviour*

## Oral presentation OP810

### **bullying; power; politics**

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This study advanced insight in the power dimension of workplace bullying by investigating its political dimension: we explore whether workplace bullying can be regarded as a deliberate, competitive strategy to favour the goals of the perpetrator. To this aim, and in line with the work environment hypothesis, we analysed the role played by the social climate at work, the presence of organizational politics, the extend of work overload and the degree of internal competition as catalysators of instrumental bullying behaviour. We also looked at the main sources of power underlying the bullying.

We combine quantitative data (N = 561) with qualitative data (N = 64) to (a) assess the association between exposure to bullying and the social work climate, organizational political behaviour, work overload, internal competition, and to (b) gain more in-depth insight in the interrelatedness of bullying incidents and instrumental behaviours by organizational members through organizational politics as well as the power dimensions at stake (i.e., reward, coercive, legitimate, expert and reference).

The social climate at work was regarded as “strained and competitive” by 45,3% of respondents. Exposure to workplace bullying was positively related to perceptions of political behaviour, work overload and internal competition at work. The qualitative data revealed that bullying incidents occurred when political behaviours happened in the line of organizational practices that tie closely in with negative social behaviour (i.e., “Being left idle”, “Denying of promotion”, and “Staff appraisal for performance”). The main sources of power identified in such incidents were coercive and negative reward power.

These results add to knowledge on the power dimension of workplace bullying and widens the traditional scope of research from work stressors to organizational features fostering instrumental and political bullying behaviours.

*Keywords: workplace bullying; Power political behaviors*

## Oral presentation OP5

### Calibrating Internal Communication Maturity within Organizations as an Auditing Index

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science&practice

Research goals and why the work was worth doing: Organization's internal communication is an important aspect that increases organizational productivity. It represents the relationship between the employer and the employee (Verčič et. al., 2021). Literature regarding communication audit within organizations depicts its general understanding of various aspects of the communication process and evaluates it only from the channel of communication perspective (Zwijze-Koning et al., 2007). However, there is a need to develop a questionnaire that assesses internal communication with different aspects (feedback, interaction with supervisor and colleagues, formal and informal communication), which are considered essential within organizations. Moreover, there is a need to develop a questionnaire that measures the concept through an employee-centric approach rather than management centric. Therefore, the present study aimed to validate a newly developed scale that measures internal communication Maturity within organizations. It will be widely helpful in diagnosing specific communication Areas and formulating recommendations for improvement.

Theoretical background: Communication within the organization is a crucial activity that connects workers with management and enables organizations to function smoothly. It circumscribed both formal and informal communications within the organization (Verčič et. al., 2012). An effective communication system is considered essential for an organization's success (Hussain, 2013; Verčič, 2019). At present, organizations across the globe are investing financial and human resources to establishing internal communication systems (Downs, 1994) and monitoring with communication audits (Goldhaber, 1993; Hargie & Tourish, 2000; Verčič et al., 2009). Considering the importance of internal communication, the paradigm has shifted from management to the employee (Ruck & Welsch, 2012). From the employees' perspective, effective internal communication may enhance employees' understanding of change and consequently contribute to the organization's success (Hussain, 2013).

Methodology: Present study employs a cross-sectional survey research design. 2071 employees (94.4% Male; 5.6% female) working in the logistic industry across the Kingdom of Saudi Arabia were approached through a convenient sampling technique. Based on the literature review and results from FGDs, 16 items have been generated. Participants responded to these 16 items on a 5-point Likert Scale of 1 (strongly disagree) to 5 (Strongly agree). High scores indicate a high level of satisfaction among employees. Psychometric properties were analyzed via factor analysis (exploratory as well as confirmatory) and reliability analysis through SPSS 27.0. and AMOS V. 25.0.

Results: Analysis of the data indicated the measure is reliable and valid. Reliability analysis showed good alpha reliability coefficients ( $> .75$ ) between Internal communication satisfaction total and its subscales (Awareness, Appreciation, Relationship, Engagement & Maturity). The correlation matrix from EFA revealed the presence of coefficients of .3 and above, indicating the data is fit for factor analysis. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.951, indicating that the sample was adequate, and Bartlett's Test of Sphericity gave a p value of  $< .001$ . EFA was performed with Promax rotation with an enforced five-factor solution. Confirmatory factor analysis showed an acceptable model-data fit of the five-factor model. with the model being significant ( $p < 0.01$ ). NFI,

CFI, and TLI are close to the 0.09 criterion, PCFI meeting the  $>0.5$  criteria, and RMSEA meeting the  $< .10$  criterion. The 5 confirmed factors are (1) Awareness of strategy, values, news, and rights; (2) appreciation involving praise from leader and organization to employees as well as from employees to the organization; (3) relationship between employees, their immediate boss, and employee family to organization; (4) engagement with other colleagues, job and corporate; (5) maturity involves active internal communication, satisfaction with it and its' reach.

Limitations: To improve psychometric properties, a second-order CFA can be done in future studies. Moreover, data is collected only from the logistic industry. However, data can be gathered from other industries as well. Furthermore, cross-sectional data is used in the current study. Therefore, it cannot be used to infer a causal relationship.

Conclusions: The instrument will be worthwhile in communication audits of the organization. It allows researchers and practitioners to utilize the newly developed scale in empirical studies to diagnose and improve organizational communication.

*Keywords: Internal communication, employee engagement, Conceptual model for internal communication*

## Oral presentation OP109

### Can board games improve our change management competencies? Results from an organizational leadership training intervention

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science&practice

The current paper presents the results from an intervention (the Change Competency Intervention CCI) using board game-based simulations of change events to improve the change management competencies of managers and other change agents.

The specific context of the intervention is Novozymes A/S, a Danish biotech company whose production plants are conducting a long-term change process towards more systematic and widespread use of Lean management tools. Lean implementation is an interesting case as it is a type of change that is both potentially beneficial to and demanding on employees' wellbeing (von Thiele Schwarz et al., 2017).

#### Theoretical background

A primary element in CCI is training leaders to understand readiness (Holt et al., 2007) and resistance (Maurer, 2010) towards change and how these can be addressed. In relation to both change resistance as well as change success, a key element in CCI is that situations, contexts and people are different and hence change impacts differently (Oreg, 2006).

The CCI project aims to teach the managers these change concepts through a mix of dialogue tools and board game based leadership simulations. Using so-called 'serious games' (Abt, 1987), allows for the participants to play through, and learn from, a simulation in a training setting.

Previous change-management intervention studies (Abildgaard et al., 2018; Schweiger & Denisi, 1991), suggest that there are potential gains from intervening against the psychosocial effects of change, but substantial results of interventions targeting both employee wellbeing and organizational change goals are lacking. The current project aims to address this gap.

The programme theory for CCI is that implementation of Lean management can both improve production and be strenuous for employees in the sense production and organization of work will be changed. CCI is theorized to help managers implement Lean more efficiently hence improving the effects of Lean on productivity and reducing the strain on employee wellbeing.

#### Methods

The intervention consisted of four full days of workshops focusing on developing an understanding and a vocabulary for the human side of change management. Key topics were handling resistance, balancing stability and change, managing stakeholders. Personal and departmental action plans were developed at the workshops. All board games and dialogue tools were developed by the change consultancy agency Workz A/S, whose consultants facilitated all workshops in the project.

Ten departments in Novozymes were enrolled in the study. These consist of two production plants with each maintenance supply chain and production departments. Cluster randomization was conducted between matched pairs of departments. In total 700 employees participate in the study.

## Measures and Evaluation strategy

For the project, tailored scales of employee-rated Lean maturity and a short scale of employee rated Lean leadership behaviours were developed and administered bi-monthly to measure impact of the intervention on the targeted change process.

For the evaluation of the project a mixed methods approach was used which included: audio/video data from workshops, workshop evaluation questionnaires, baseline and 12 month follow-up questionnaires and finally interviews with consultants, stakeholders, managers and employees.

The project is evaluated with a mixed methods (Creswell & Plano Clark, 2011) realist evaluation approach (Nielsen & Miraglia, 2017; Pawson, 2013) as well as with in-depth theoretically driven qualitative analyses.

## Results

We present both quantitative and qualitative results from the intervention following a sequential mixed methods analysis. We demonstrate how training reactions are linked to both change specific and generic learning. The results show that the two departments in the second round of training had a significantly better learning from the course and that these high-learning departments had significantly improved change fit, and change management (assessed via repeated measures ANOVA on employee data compared to its matched comparison department). No significant effects were found in the low-learning departments.

## Discussion

The study is a unique research opportunity to examine the effects of simulations and board games as novel intervention tools. It also contributed to knowledge on the impact of change management training on employee, change resistance and change success. The randomized design and the potential to collect comprehensive quantitative and qualitative data additionally strengthens the CCI project results.

*Keywords: Intervention, Change management, mixed methods*

## Oral presentation OP517

### Can Techno Pro-Bono aid towards achieving Sustainable Developmental Goals?

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The COVID-19 pandemic issue had compelled all nations to re-evaluate the significance of the relationship between sustainability and technology. The COVID-19 pandemic's adverse environmental effects such as increased biomedical waste, healthcare waste, etc., have hindered world development in terms of achieving sustainable goals. Giving developing countries an unprecedented nudge to address the climate change crisis exhausts these nations due to its constraints. Studies emphasize the increment of digital pro-bono support post-COVID-19 pandemic that has aided numerous organizations, companies and communities towards acquiring sustainable goals. To understand the impact of technological pro-bono support for sustainable development goals (SDG) in India, the current qualitative study explored the perceptions, problems and solutions proposed by the technical experts who were recruited through purposive sampling. A total of N = 36 participants between the age group of 24 to 35 years (Mean 30, SD =  $\pm 1.56$ ) were interviewed. Thematic analysis generated six major themes. Post-COVID-19 impact addressed the participants' awareness regarding the environmental issues caused due to the pandemic. Environmental Injustice, emphasized the unequal pressure put on countries like India and various states within India to meet SDG. The third theme, Perceived severity of environmental problems, indicated the general population's seriousness and severity towards the ecological problems and how their severity could affect their decisions regarding SDG. Environmental commitment, the fourth theme focussed on the individuals' commitment towards environment protection and attaining overall SDG. Technological innovations for SDG highlighted the participants' awareness and suggestions towards the possible innovations that could be implemented to achieve SDG and mitigate the climate change crisis. Lastly, the sixth theme, Pro-bono & Charitable Support, gives significance to the voluntary service and charities done by professionals that are provided without payment. This support, mainly via technology addresses concerns related to environmental and sustainable issues and aids in offering services to communities that are mainly unprivileged and cut out from receiving help from the outer world. Overall, the findings demonstrate that to tackle the environmental problems of a community as a whole, individuals' severity, awareness, commitment and unequal expectations should be addressed and resolved mainly through digital pro-bono support. The study also investigates these themes with the country's socio-economic and cultural perspectives.

*Keywords: Environmental injustice, technological support, climate change*

## Oral presentation OP23

### Can We Measure the Unconscious Discrimination By Using Eye Movements?

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science

**Aim:** Discrimination among minorities is learned throughout the whole life. However, in adulthood, we do not directly measure discriminatory attitudes due to reasons such as the punishment of discrimination by the laws, social exclusion, and social desirability. However, our prejudices and behaviors towards minorities may continue implicitly. In this research, we are going to examine whether eye movements can be a predictor of implicit attitudes during the hiring process by performing eye tracking method. Although it has been shown that using eye-tracking is a valuable approach to assess attitudes in various fields, such as advertising, social and cognitive psychology, we aim to assess whether eye movements can predict implicit attitudes in the recruitment process.

**Methods:** The average age of the participants ranged from 24-47 (Mean:30.20, N=15). All participants work as recruitment specialists in one of the Top 500 companies in Turkey. We created 11 fictional resumes for evaluation by participants. All resumes belong to distinct minorities based on gender, sexual orientation, ethnicity, sect, mental illnesses and former convictions. In our pilot study, these fictional resumes are evaluated by experts who work in academia and the private sector. We found that all fictional resumes are equal in terms of work experience, education level, and skills. Only identities were found different. We allowed participants to see those identities in the membership section of the resume. All resumes were presented to the participants on a screen. Next, eye movements of the participants were recorded using a Tobii T120 recorder. A three-step procedure was applied so that all participants could evaluate each job application. In the first step, they evaluated all candidates with no time limit restriction. In the second evaluation, the participants were informed that they had to choose the three most suitable applications for the job among all candidates. All resumes were presented on the screen for 45 seconds at this step. In the final step, the participants were informed that all resumes would be presented again for 10 seconds to confirm the most suitable candidate for the job.

**Results:** Data analysis was conducted using Tobii 2.0.5 analysis software. This study analyzed whether the pupil movements of recruiters differed from each other in three steps. Review times (unlimited, 45 seconds, and 10 seconds) were defined as stress variables in the decision-making process. In three steps, the place where they looked at the CV were analyzed. We divided the fictional resumes into six parts to simplify the process. These sections were from top-to-bottom: Demographic Information, Educational Background, Work Experience, Computer skills, foreign languages and hobbies (CFH), Membership information, and Additional information. Fixation times and fixation frequency were analyzed in the 1st, 2nd, and 3rd steps of experiments for each fictional resume. Comparisons between résumés were not made because it was out of hypothesis. In the first step, the first fixation results were 44.81% (SD = 11.55), 17% (SD = 8.66), 16.23% (SD = 9.63), 6.49% (SD = 5.93), 7.14% (SD = 6.38) and 7.79% (SD = 6.38), respectively. According to these findings, the participants examined the demographic information section more than the other sections in the resumes when they reviewed the resumes for the first time. In the third step, the difference between the departments regarding the first fixation widened to a greater extent. It decreased to 18.82% for demographic data. It increased up to 10.38% for educational background and work experience, CFH, membership, and additional information results were 24%, 7%, 30.95%, and 42%, respectively.

Conclusion: Theoretically, the eye-mind assumptions reveal the extent of discrimination. The eye-mind hypothesis indicates a strong causality between “the fixation of the eyes” and “the contents of the mind.” In this study, we investigated whether eye movements could be an objective measurement tool to evaluate implicit attitudes in recruitment processes. Similarly, it was seen that there was a contradiction between the choices made by the HR specialists among the resumes and the findings in the eye movements. Although HR specialists verbally state that they prefer according to candidates' experience and educational information, when their eye movements are examined, it is seen that they focus more on social identities. Additionally, we showed that there is a relationship between the selection preferences of recruiters and their eye movements. This study presented that eye movements focused on identities the most in CV reviews, despite the explicit declarations of recruiters at the end of the recruitment process that “everyone is treated equally; I have not discriminated against anyone because of their identity”. As far as is known, this study is the first to examine the relationship between eye movements and implicit attitudes.

*Keywords: Implicit attitudes, hiring process, discrimination in workforce*

## Oral presentation OP477

### **Career Adaptability and Career shocks: Antecedents and outcomes. Longitudinal Study during the crisis in the Lebanese banking sector**

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science&practice

The survival of Lebanese organizations has been threatened by constant volatility and uncertainty due to various political and economic instability in the country since the Civil War in 1975. Nevertheless, the pressure of the continuous need for change has been aggravated mutually by the COVID pandemic and the Lebanese revolution that started in 2019. This latter has severely deteriorated the country's economic situation regarding liquidity, leading to an unprecedented currency devaluation in history. Among other sectors, Banks were the most impacted due to their influential impact throughout the years on the country's GDP and their exposure to the Government's financial difficulties (external and internal debts). Currently, this sector is still in the middle of a crisis with the need for serious restructuring measures (mergers and downsizing), which is confronting its employees with continuous disruptive shocks.

The experience of these ongoing adverse events can be conceived as a negative career shock, which is likely to affect employees' future career decisions. In this study, we address how two individual factors (individual adaptability and self-monitoring) affect how people deal with such a career shock and how this, in turn, explains career-related outcomes.

Furthermore, adapting has become vital for employees to manage their careers in volatile and challenging times. Accordingly, as a self-regulatory capacity, career adaptability plays a significant role in supporting employees to work better on their career-related challenges and traumas.

Therefore, this study addresses the impact of negative career shocks on the employee's well-being, organisational commitment and career engagement through career adaptability.

Our study contributes to the current career shock literature in several ways. First, by investigating how specific individual characteristics can explain people's sensitivity and reaction against negative career shocks.

Second, building on the growing interest in employee well-being in the current career literature, we investigate the impact of recurrent negative shocks on the well-being of Lebanese banking employees. Finally, a longitudinal design will help us better evaluate and understand changes in employees' career adaptability during negative career shocks, thereby studying the relationship with the frequency of shock occurrence and relating this to employees' organizational commitment and career engagement.

For our research model, we build on the Conservation of Resources Theory (COR), a promising theory to better understand the potential impact of career shocks on career outcomes (Akkermans et al., 2018). Furthermore, we used Career Construction Theory, CAAS (Savickas, 2013), to understand employees' adaptability while experiencing career shocks and the impact on employees' career outcomes.

The current empirical study uses a cross-sectional design to collect primary data. We distributed a survey using validated scales to Bank employees. We use multivariate statistics and structural equation modelling (SEM) to analyze the data and test the hypothesized relationships. We have received data from 500 participants.

We will use multivariate statistics and structural equation modelling (SEM) to analyze the data and test the hypothesized relationships.

Banks were the most impacted among other organizations following the recurrent shocks that hit the Lebanese population since the start of the Lebanese revolution in Oct 2019.

Therefore, for our study, we concentrated our targeted participants on this specific category of employees, “ Bank Employees”. Furthermore, we conditioned the participation only for the ones who have been working in the banking sector since the beginning of the crisis (tenure of three years), so they can better describe the impacts of the experienced recurrent shocks.

We have completed the first two waves, with responses from 500 participants at the time of writing. We expect to have the full results at the conference and will be able to discuss the respective findings accordingly.

One of our study's contributions is collecting data from one country in the Middle East, "Lebanon", a region that has been hardly explored, despite its being strongly affected by multiple waves of disruptive political, economic and social change. However, this also implies that conclusions cannot be generalized to other regions. Second, we aimed to collect data from banking employees since this sector has been affected the most during the crisis; however, different findings might result from other sectors. Third, it is difficult to isolate the impact of various social and economic changes in times of a global pandemic. This disruptive historical change has undoubtedly influenced perceptions of Shocks and corresponding outcomes.

*Keywords: Career Adaptability, Career Shocks, Well-Being*

## Oral presentation OP709

### **Career Identity and wellbeing, the mediating role of job quality, job meaningfulness and job satisfaction**

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science&practice

Research goals and why the work was worth doing

The general goal was to analyse the direct or indirect nature of the relationship between career identity and wellbeing (both at work and beyond) and the mechanisms operating between them. The study allowed to expand our knowledge about the impact of career identity on the work domain and beyond.

Theoretical background

According to Fugate et al. (2004), career identity is one of the four dimensions of employability that comprise one's self-definition in the career context, describing 'who a person is' or 'who wants to be' in the professional domain. Therefore, this dimension is a key driver of career and employment outcomes by helping individuals to direct, regulate and maintain their behaviour in order to achieve the desired career. Thus, career identity represents the motivational component of employability.

Previous research has found that career identity is a strong predictor both of the employment status (being employed) and job quality (measured in terms of indicators like horizontal and vertical fit, among others). However, it is expected that career identity has an impact that goes beyond job quality by having an impact both on wellbeing at work (job satisfaction) and general wellbeing (life satisfaction). In addition, career identity it is expected to be an even more important antecedent of job quality and wellbeing during critical situations like the coronavirus pandemic.

Therefore, the general hypothesis was that career identity has an indirect effect on life satisfaction via higher perceptions of job quality, job meaningfulness and job satisfaction.

Design/Methodology/Approach/Intervention

The hypotheses have been tested by means of a longitudinal design with several measurement points that started before the appearance of COVID-19 crisis and continuing through the pandemic. The study sample comprises 125 Spanish subjects with different educational backgrounds who were working at all measurement points (5). The mediation chain was tested using the Process macro for SPSS.

Results obtained or expected (if not available, it must be made clear when they will be)

The preliminary results show a significant indirect effect of career identity (t1) on life satisfaction (t5) via the general perception of job quality (t2), and the job meaningfulness (t3). The indirect effect through job satisfaction was not significant. More detailed results will be available for the oral presentation.

Limitations

The main limitation of the study was the sample size of subject working at all measurement points. In addition, all measures were self-reported.

## Conclusions – research and or practical implications/Originality/Value

Career identity is an employability dimension that shows an important role in the prediction of job quality and wellbeing outside the work domain. This role remains important even during the pandemic when job quality and wellbeing were seriously damaged because of the lockdowns, health issues, job insecurity among others. Therefore, the results have important practical implications due to the need of developing workers' career identity for enabling them to find and perform high quality jobs and experiencing a higher wellbeing.

## Relevance to the Congress Theme

The world of work is changing because of many factors like health and economic crisis, technological developments, environmental issues, among others. These factors could have negative consequences for the quality of the jobs many workers perform and for their wellbeing. Therefore, the present study is relevant to the Congress Theme due to its focus on career identity as a key driver of job quality and wellbeing.

*Keywords: Career identity, job quality, wellbeing*

## Oral presentation OP126

### **Caring for Carers: A pilot study helping to cope with the emotional distress produced by daily work in a Spanish Public Hospital**

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The activity in a large tertiary hospital is highly demanding, intensive, complex, and sometimes emotionally overwhelming. This situation could facilitate the development of Burnout (Maslach & Shaufeli, 2001). Burnout is associated with less work satisfaction and less empathy with peers and patients.

#### RESEARCH GOALS

To develop and consolidate a line of research that allows the generation of tools for teams that help them prevent and manage the work situations that cause distress and are emotionally overwhelming in their day-to-day.

To monitor the impact of tools used on the professional's well-being.

To analyze what are the organizational and psychological processes that impact burnout.

#### THEORETICAL BACKGROUND

According to the Job Demands-Resources Model (Demerouti, Bakker, Nachreiner & Shaufeli, 2001), work overload, emotional job demands, physical job demands, and work-home conflict are all risk factors for burnout (especially exhaustion and cynicism). However, the undesirable impact of job demands on burnout can be lightened by job resources such as job autonomy, social support, and quality of the relationship with the supervisor, and performance feedback.

This model was modified and expanded (Bakker & Demerouti, 2017), by including the role of the individual in modifying the impact of job demands and resources on motivation and energy, in the form of personal resources, job crafting, and self-undermining.

#### HYPOTHESIS

Increasing the job resources of health professionals could translate into a better employee experience by increasing empathy and social support intra-team, reducing burnout, and increasing team resilience. All this could impact the professional's well-being and patients.

We work on increasing job resources by exposing them to:

Dynamics that allows them the emotionally release patients' situations with high-stress level.

Workshops to develop intrapersonal and interpersonal skills.

Team coaching dynamics.

Psychological safety environments.

#### DESIGN / METHOD / INTERVENTION

The sample for this pilot study consists of 7 teams belonging to a large Tertiary Public Hospital with more than 5.500 health workers, 757 beds, more than 24.000 surgical interventions, and 157.000 medical year emergencies.

Participating work teams were identified among those experiencing a lot of stress daily. We engaged seven high-complexity teams in our interventions, some were interdisciplinary teams, and others were physician teams, nurse teams, or service teams.

The design was a mixed-method evaluation using:

Quantitative analysis with data collected twice, pre- and during-intervention.

Qualitative analysis is based on feedback provided by participants.

Instruments : Stress (VEDAS), burnout (reduced MBI), engagement (UWES), and resilience (Safety Organizing Scale) through online validated questionnaires.

Intervention:

We offered psychological safety spaces within working hours to do:

Dynamics that allow them the emotionally release patients' situations with high stress-level. We implemented a "Team Support Tool" to improve the team's emotional management. This intervention is a guided talk technique adapted from Mitchell (1983).

Workshops to develop intrapersonal and interpersonal skills.

Team coaching dynamics.

We want the intervention to be maintained over time, for those teams that need it.

RESULTS:

Qualitative: Having a program to cope with the emotional distress produced by daily work is highly valued by the participants. Part of the success is adapting the program to the needs that arise in the teams. Promoting tools to better fit the team's needs, like team coaching or soft skills development.

Quantitative : Preliminary pre-post data comparison shows that it is a useful tool to improve job resources, and we observe a tendency to increase the resilience of the team.

LIMITATIONS:

- We have difficulties reaching all the groups that need to use the program due to their complex work organization.
- We don't have a control group, because this project arises as a practice of Employee Experience.

VALUE:

The Value of this study is to develop a tool for hospital professional teams, which allows them to increase their job resources and better cope with burnout and distress at work. We hope that using that support teams also allows:

Increase team resilience

Help recover distress

Improve soft- skills

Increase team cohesion

Increase intra-group empathy

## CONCLUSIONS:

Implementing and assessing methods to increase the job resources of healthcare workers have an impact on health professionals and their patients.

A well-being program can be an instrument that enables: improving employee experience, building sustainability, and impacting the community as a part of the Hospital's Social Responsibility.

## RELEVANT UN SDGS:

The UN established 17 goals to transform our world and increase our sustainability. Working to prevent burnout in a Public Hospital and its consequences for professionals and patients should be mandatory for Institutions as it promotes good health and well-being.

*Keywords: Employee Experience, Resilience, Psychological safety*

## Oral presentation OP6

### Case studies on the impact of the corona crisis on firm specific transformation processes - healthcare industry and retail trade

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science

Companies and institutions are facing profound changes and transformations, especially as a result of digital and technological change in the world of work. The corona pandemic, starting in spring 2020, will continue to change our working life. In this context, several open questions occur for research in organizational psychology: In particular, we are interested in the resources and obstacles within firms that help or hinder them getting through this crisis – and even probably make use of the crisis as a winner. We assume that some firms are more resilient than others and better able to make use of this crisis – also concerning the success of their transformation processes.

We draw on academic approaches on “firm resilience” (Bhamra 2016) and “innovative ability” (Trantow/Hees/Jeschke 2011). In those approaches it is assumed that firms differ in their characteristics and resources that can be activated for a transformation process or a crisis. Individual skills and social competences, organizational structures that promote flexible and autonomous work, and external networks that offer knowledge and social capital, are part of those resources. These types of capital are usually reflected in a corresponding organizational culture, which is characterized by positive dynamics, flat hierarchies, lateral leadership, openness and the promotion of individual skills and personal responsibility. Our theoretical goal is to find out the degree to which those factors affect (1) the success of transformation processes, (2), the firm’s resilience within the crisis, and (3), the effect of the pandemic on firms’ transformation processes.

To answer our research questions, we follow a qualitative case study approach focusing on 20 firms from different branches in Germany. For each case, qualitative guideline-based interviews were realized with one person from the employer side and one from the employee side, respectively. Using a longitudinal perspective, every interviewee was interviewed twice (December 2020 to February 2021 and April/May 2021). The focus on the interviews was on the topics firm specific characteristics and resources, e.g., competences, the degree of digitalization, participation structures, but also differences in home office practices, that are helpful within both the transformation and the crisis. Two economic sectors that are affected particularly by the crisis will be considered here: the healthcare industry and the retail trade.

The results show several digitalization transformation processes within the observed firms before the pandemic started. In all cases, resources were activated that are helpful for innovation processes: i.e., competences, (self-)organizational structures and external networks. The pandemic strengthened, but also weakened the transformation processes in several aspects. The interviewees evaluate the measures taken to adapt to the pandemic as useful; broad professional and social competences of the staff could be activated during the crisis. The study also shows the many ambivalences associated with working from home.

The research doesn’t give representative results and it would be interesting to analyze to what extent these qualitative results are representative for the majority of companies in crisis. Given the lack of research on the impact of the crisis on our changing working life, however, the study helps to specify the conditions under which firms can successfully manage the crisis as well as less fundamental transformation processes. The study is also one of the few that traces the experience of the crisis in the companies in a longitudinal perspective.

*Keywords: innovation, organizational structure, management of change*

## Oral presentation OP212

### **Changes in employees' perceived fairness at work: How transformational leadership affects the relation between fairness change, commitment and stress**

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science

#### Research goals

The aim of this longitudinal study was to examine whether changes in employees' perception of organizational fairness are related to affective organizational commitment and work-related stress. In addition, we aimed to examine whether transformational leadership moderates these relationships. Our study highlights the impact of changes in organizational fairness on employees' commitment and stress incremental to static levels of fairness.

#### Theoretical Background

Previous research indicates that organizational fairness affects employees' affective organizational commitment and work-related stress, which are both related to performance measures of organizations. Interestingly, recent research suggests that not only the absolute static level of organizational fairness but also the change in fairness between two points in time might affect employees' commitment and stress (Xu et al., 2021).

One explanation might be that a positive change in organizational fairness might lead to a convergence towards the target state of "maximum fairness". In this state, employees see themselves as a valued part of the organization. To maintain this state, they should show emotional attachment to the organization (cybernetic model of self-regulation (CMS); Carver & Scheier, 1998; Tyler & Blader, 2003).

Furthermore, Hobfoll (1998) assumes in his COR theory that resource losses are one of the main reasons for stress generation. Accordingly, a negative change in organizational fairness might represent a loss of resources. Consistent with the CMS, the unmet basic need for fairness should thus be related to an increased sense of stress.

Finally, to examine the moderating role of transformational leadership it might be helpful to identify a leadership behavior that is capable of enhancing the positive effects and mitigating the negative effects of changes in organizational fairness. On the one hand, we argue that because the supervisor acts as a role model in the context of transformational leadership (Kaya & Karatepe, 2020), the corresponding attitudes of the supervisor towards the organization are adapted. Accordingly, employees should show increased commitment if this is exemplified by their supervisor. On the other hand, we argue that employees' scope for action is expanded in the context of transformational leadership (Syed, 2018). This should lead to employees feeling empowered to make the organization comply with the rules of fairness. According to COR theory, this represents a resource against the development of stress. Through this additional resource, perceived stress should be reduced.

#### Method and Design

We collected data at two time points, two weeks apart. At the first time point, demographic data and organizational fairness were assessed. At the second time point, organizational fairness, affective

organizational commitment, work-related stress, and transformational leadership were assessed. Change in organizational fairness was determined using a latent change score model.

### Results

89 complete and 98 incomplete data sets were obtained. Missing values were imputed using a random forest-based method. Two structural equation models were used to test our hypotheses. Controlling for organizational fairness at the first measurement point, positive change in organizational fairness was related to higher affective organizational commitment and lower work-related stress. The relationship between organizational fairness change and affective organizational commitment was moderated by transformational leadership. However, transformational leadership did not moderate the relationship between change in organizational fairness and work-related stress.

### Limitations

The first limitation refers to the high number of incomplete data sets. In addition, data were collected at only two points in time. This has the disadvantage that the change in organizational fairness cannot be accurately assessed because changes in fairness that may have occurred between the two measurement points could not be detected.

### Conclusion

Our results highlight the unique effect of fairness change incremental to static fairness levels on employees' commitment and stress. From a practical perspective, organizations should be aware that employees are sensitive to fairness changes and that these changes can have far-reaching consequences. One factor that plays an important role is transformational leadership, which can amplify the positive effects of change in organizational fairness. One conclusion could be that leadership trainings should focus particularly on teaching „idealized influence“ and „inspirational motivation“ as these overlap with characteristics of organizational fairness.

### Relevance to the congress theme

The present work highlights the importance of capturing changes in employees' perceptions that go beyond static levels. These changes can affect cognitive, emotional, and behavioral outcomes, which might have far-reaching consequences for the organization.

*Keywords: fairness change, transformational leadership, self-regulation*

## Oral presentation OP259

### Chatbot-supported coaching in organizations: A field study

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science&practice

#### Research goals and relevance of the study

The VUCA world has transformed the landscape of work and has emphasized continuous learning and development for individuals and organizations. In this context, workplace coaching as a reflective, goal-focused, customized learning and development intervention between an employee and a professional coach has become an increasingly important HRD practice. Coaching has taken on new forms during the pandemic, often digitally mediated. It has also begun to be supported by artificial intelligence (AI), particularly chatbot-supported coaching (CSC). Empirical research on CSC is only emerging, and little is known about its implementation within organizations: Why and how do organizations use CSC instead of or alongside human-led coaching? Our goal is to empirically investigate why and how CSC works. Specifically, we explore the aims, outcomes, challenges, and success factors of CSC in organizations from multiple key stakeholders' perspectives.

#### Theoretical background

By now, strong empirical evidence in meta-analyses and systematic literature reviews demonstrates the overall effectiveness of workplace coaching. Consequently, research attention has shifted towards investigating the coaching process, addressing the organizational context and moving beyond a generic conceptualization of workplace coaching towards investigating the particularities of specific coaching settings, target groups, and modalities. As part of the substantial changes that coaching practice has undergone, there has been an emerging interest to move beyond human-led coaching toward the application of AI in coaching, particularly in the form of chatbots. While it seems unlikely that AI will completely replace human coaches in the foreseeable future ('general' or 'strong' AI), 'narrow' or 'weak' AI, i.e., the fulfillment of specific tasks, plays already an important role in many contexts (e.g., customer service, healthcare, psychotherapy), and will inevitably play an increasingly prominent role in coaching in the future. AI coaching has the potential of lowering barriers to entry and expanding workplace coaching to a wider range of employees and organizations. Thereby, coaching is more easily scalable and its effect on the organization at large can be strengthened. To date, however, research on AI in coaching has been primarily conceptual and has failed to incorporate the organizational context. Therefore, an evidence-based understanding of chatbots' role in coaching, as well as relevant boundary conditions is essential. Of particular interest are CSC's peculiarities with respect to outcomes, processes, and contextual factors, as well as the overlooked organizational perspective on opportunities and challenges.

#### Design/ methodology/ approach/ intervention

In collaboration with a Finnish start-up providing hybrid human-led/CSC and fully CSC, we investigated CSC within its' client organizations internationally. We used a qualitative design to explore the perspectives of key stakeholders on CSC implementation opportunities and challenges. We conducted semi-structured interviews with representatives from the commissioning organization (HR, pre-post coaching), project managers from the start-up (pre-post), coachees (post), and human coaches in hybrid coaching cases (post). We interviewed 34 stakeholders from five global client organizations in technology, construction, manufacturing, and engineering. Between 6 and 30

coachees per organization participated in up to 30 coaching sessions over a period of 4 to 52 weeks. Interviews are transcribed and will be analyzed using Qualitative Content Analysis.

#### Results expected and implications

Data collection will be completed in November 2022, followed by data analysis so that results will be available for the EAWOP congress. We expect to identify key challenges and opportunities of CSC across different organizations and from the perspective of different stakeholders. Thereby, the peculiarities of CSC in organizations will be identified and implications for CSC future research and practice will be deduced.

#### Limitations

While we shed light on the contextual embeddedness of CSC and its perceptions by different stakeholders, control-group intervention studies are required in the future to thoroughly assess CSC's effectiveness in an organizational context.

#### Relevance to the congress theme and the UN SDGs

Our study focuses explicitly on the congress theme's focus on the changing world of work. Specifically, it is relevant to how workplace coaching can help people navigate the changing workplace and how AI can shape coaching practice. Our research contributes to the UN 2030 sustainable development goals by advancing the science and practice of digital and AI coaching as a means of supporting lifelong learning and assisting employees in acquiring the knowledge and skills necessary to take advantage of growth opportunities, increase productivity, and ultimately promote economic growth.

*Keywords: Chatbot coaching, Artificial intelligence (AI) coaching, human resource development*

## Oral presentation OP714

### Clusters of work contexts and personal factors predicting employee health outcomes

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science

Personal, job, and organizational factors in the workplace have been associated with stress and employee health outcomes, but it is still unclear how they cluster. By predicting groups of workers who may be vulnerable to chronic stress, and how we can tailor interventions to fit employee needs, we can protect individuals better during changing environments.

Previous research has found that risk factors for employee health cluster together. A cluster characterized by depressive symptoms, neuroticism, and stress, was related to heart disease, compared to the cluster characterized by social engagement, spirituality, and extraversion (Clark et al., 2012). One study found four clusters of job demands (high demands, low demands, psychosocial demands, physical demands), each related to different physical health clusters (Mayerl et al., 2017). Although no protective effect was found for singular work resources on heart disease development, clusters of resources did present a protective effect (Xu et al., 2022). Specifically, clusters of leader-, organizational-, and team-level resources were associated with a lower risk of heart disease. It appears that work factors cluster together, and this underlying latent variable is a better predictor of health outcomes than individual factors. However, a comprehensive integration of all risk factors has not yet been researched.

The conservation of resources theory states that individuals have an innate drive to obtain and protect resources needed for meeting demands. Chronic stressors deplete resources, thereby impairing one's ability to cope with demands, whereas workers with high resources are likely to obtain further resources and cope better with demands. Additionally, the biopsychosocial model states the interaction of biological, personal, and social factors as perpetuating the development of poor health. Therefore, the current paper aims to examine whether latent multidimensional risk profiles of personal and work-related factors could be identified. We will also examine whether these profiles are associated with stress and stress-related health outcomes.

Questionnaire and biological data in a 3-lagged research design (3-month intervals), were collected by a vitality consultancy company. The questionnaire (currently N = 2032 participants in 17 organizations) will be used to explore how work and personal factors (lag 1) cluster amongst employees, using three-step latent tree analyses. The questionnaire includes work factors, such as social support, perceived work practices, and contract type. Personal factors include optimism, resilience, and proactive behavior.

To be able to identify the risk profiles as predictors of stress-related health problems, biological data is collected within one company (N = 300). We will investigate whether the clusters from lag 1 affect behavioral (lifestyle) and biological (cortisol profile, heart rate variability) mechanistic processes (lag 2). We will then examine whether the clusters can explain employee psychological (emotional exhaustion) and physical (disease presence) health (lag 3).

Data collection is currently in progress, expected to end in December 2022. We will run explorative analyses to identify classes in January 2023, with the prediction of health outcomes available by February 2023.

A limitation is that a smaller sample is used to predict biological measures. Although this will provide insight into the predictive effects of the clusters, the generalisability of the findings will be limited compared to the larger population utilized for the latent class analysis.

Finding groups of employees who share comparable features and are exposed to comparable work contexts will allow the identification of groups who present a higher risk of chronic stress. This will contribute to the development of tailored preventative interventions in the workplace.

With huge shifts within and outside of the workplace, the world of work is rapidly changing. In line with the congress theme and the SDG target 3.4, it is crucial to understand how the workplace may contribute to the development of stress-related non-communicable diseases.

*Keywords: Stress and burnout, coping and social support, optimism and self-confidence*

## Oral presentation OP540

### **Coaching for small business owners and their spouses: Exploring the diversity of actions to craft work-life balance as a success factor**

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science&practice

#### Research goals

Coaching is an intensive and systematic promotion of result-oriented self-reflection to improve the achievement of self-congruent goals. Identifying well-functioning strategies as well as developing behavioral intentions are essential for coaching success. In this present study, we examine already demonstrated and newly planned behaviors as drivers for coaching success. We take a closer look at the content and developed solutions in a highly effective work-life balance (WLB) coaching for small business owners and their spouses. They often co-work with their spouses and are an extremely vulnerable target group when it comes to WLB because their work-life boundaries are blurred, and they find it difficult to psychologically detach from work.

#### Theoretical background

Successful pursuit of a goal is a continuous process through the four successive action phases of the Rubicon model (Heckhausen & Gollwitzer, 1987). This study focuses on the second and fourth phases as those create a feedback loop between already demonstrated and newly planned behaviors (Gollwitzer, 1990). The second phase (pre-actional) entails planning concrete strategies for achieving a goal. The technique of implementation intentions has been found to facilitate goal attainment. In the fourth phase (post-actional), an evaluation of the achieved outcomes may inform new action planning.

To conceptualize the already demonstrated behaviors and newly set intentions, we apply the WLB crafting concept (Sturges, 2012). WLB crafting is defined as proactive, goal-oriented, and therefore intentional, behavior that aims to enhance WLB. WLB crafting behaviors may emerge in patterns and create synergies, for example, the cognitive adjustment of prioritizing the need for switching off from work may facilitate the formation of a corresponding physical action (e.g., turning off the phone after work). In the present study, we expect clients who report a more diverse set of (a) already demonstrated WLB crafting and (b) WLB crafting intentions to show higher general and specific coaching outcomes. Further, studies suggest that plan enactment is higher in dyadic than in individual planners (Keller et al., 2017), thus, we investigate the role of the partner's supportive crafting.

#### Methodology

In total, 15 couple coaching sessions were observed, therefore, 30 individuals are in our sample. The mean age was 52 years, the participants were married for 18 years on average and around 13 people were employed in their small businesses.

The course of action entails (1) qualitatively identifying reported WLB crafting and the intentions to craft during the coaching and (2) quantifying those strategies (amount and diversity). The fourth (out of five) coaching session of the couple coaching was transcribed and rated. In this session, the coach asks the clients to reflect on already shown behavior changes towards a more satisfying WLB (post-actional phase). Next, the coach guides the clients to develop implementation intentions that help them to further enhance their WLB (pre-actional phase).

Transcripts were deductively coded with an adapted rating system based on qualitative research on WLB crafting (Sturges, 2012). The categories include physical, cognitive, and relational crafting.

The general coaching outcomes were self-rated goal attainment and coaching satisfaction (Runde, 2003, 2016) four months after the coaching ceased. As a specific outcome measure, we used the change in clients' WLB scores (Syrek et al., 2011) from the pretest to the test four months after the coaching ceased. Regression analyses will be performed to test the impact on general and specific coaching outcomes.

#### Results

We are currently in the coding process. Therefore, unfortunately, no reliable results can be reported at this stage. The results will be available in January.

#### Limitations

Limitations include the sample's homogeneity, the small sample size, and the dependent data.

#### Conclusions

The study offers a unique insight into a coaching for small business owners and investigates coaching success factors. Researching coaching processes is in high demand to make coaching more efficient as coaching is time and money-consuming. Business owners are often difficult to reach for health-promoting interventions, therefore such an investigation is critical to advance effective evidence-based interventions built on clearly defined drivers for change. Further, we contribute to the growing body of literature that highlights the social embeddedness of the creation process of WLB. This encompasses the interdependence within a person's WLB crafting and the interdependence between the partner's actions. Ultimately, the results may help coaches to guide their clients toward more effective action planning.

*Keywords: Coaching, Small business owners, Work-life balance crafting*

## Oral presentation OP803

### Coactive Coping Inventory (EAC): Development and validation for the Chilean population

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**Objectives:** In this framework, the main objective of this study is to develop a more accurate measurement instrument to diagnose coping strategies in the Chilean work context and to integrate it into the CALS battery for the evaluation of Subjective Work Climate. To this end, the psychometric properties of the new measurement instrument will be studied in relation to its internal structure, reliability, and evidence of validity in relation to other variables. Finally, the variables that make up coactive coping will be examined to help predict work-related burnout (emotional exhaustion, affective hardening, and personal fulfilment) and symptomatology (psychological and somatic).

**Theoretical background:** Co-active Coping (CA) is a fundamental construct in work and organizational settings, as it allows the exploration of individual and group behaviors within organizations. Thus, Co-active Coping accounts for the similar individual coping strategies that workers employ to cope with stressors, making it an organizational phenomenon. The aim of the present study was to develop a new scale called the Co-active Coping Subjective Work Environment Scale (EAC-ALS) in the Chilean context.

**Design/Methodology/Approach/Intervention:** The sample consisted of 1,442 workers with an average age of 30.48 years ( $SD = 11.13$ ). 55% were public sector workers, 34.5% were workers in private commercial organizations and 10.5% were in private non-profit organizations.

**Results obtained or expected:** Based on the exploratory and confirmatory approach, the Coactive Coping Inventory showed a good fit to a structure of five correlated factors (Reflective Action, Rational Action, Seeking Spiritual Support, Seeking Affective Support and Avoidance), demonstrating measurement invariance in terms of gender and type of organization. The different domains of coactive coping explain between 20% (emotional exhaustion) and 41% (affective hardening) of occupational burnout and about 3- 5% of workers' symptomatology, with Reflective Action being the most important variable. These results indicate that the new scale has adequate psychometric properties; it can assess coping strategies in the Chilean organizational context in a reliable and valid way. These coping strategies have shown some importance in relation to organizational and clinical variables.

**Limitations :** Regarding the dimensionality of the instrument, the results account for a multidimensional structure leading to a set of scales or score profiles to the detriment of a unidimensional solution, which would allow proposing the construction of a global score.

**Practical implications of the research:** The results suggest that in the face of collective stressors (organizational culture and climate according to the ALS model), organizations should promote problem- focused collective coping strategies, such as people development through training, participative management, effective task coordination and seeking affective support among co-workers, to reduce stressful work climate and individual stress. In other words, coping resources at the organizational level should focus specifically on the organization, design, and management of work. Furthermore, the leader's position of power within this organizational management influences coping strategies for the performance and well-being of co-workers and is relevant for strengthening leadership styles and the quality of leader- member exchange. The new EAC tool is a good starting point for assessing people's coping styles in relation to the stressors in their organization and can

lead to identifying areas for improvement in order to develop training workshops in these competencies, which should also improve the organizational climate of the company.

Relevance to the conference theme: This study presents a new instrument (Coactive Coping Inventory; EAC) to assess coactive coping in the Chilean general population, providing satisfactory psychometric properties. The appropriate use of personal resources, such as coping strategies, can reduce work demands and the associated physiological and psychological costs, being decisive in meeting work objectives or in stimulating growth, learning and personal development. In this same sense and given the scarcity of studies in this area in Chile, studies are required that contribute to the knowledge of the quality of life and working conditions of workers, which would allow the impact of human resource management strategies in organizations to be evaluated. On the other hand, it would be interesting to carry out organizational diagnoses using the EAC, and in this way improve the effectiveness of current interventions for burnout at work, influencing preventive programs and adjusting them to the specific characteristics of coping strategies to manage stress at work.

*Keywords: Coping; psychometric properties; assessment; occupational burnout; symptomatology*

## Oral presentation OP561

### **Cognitive job demands: the relation of their frequency and appraisals to self-reported stress in the field of education**

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science&practice

#### Research goals

Digitalization and intensification of work have led to pronounced cognitive demands in many fields of work. For example, requirements for attention, remembering, and flexible thinking can be intense. Nevertheless, few studies so far have focused on which specific cognitive demands are the most prominent, which ones are harmful, and which ones may conversely promote well-being at work. Our goal was to recognize those cognitive task and condition demands, in the field of education, that are prone to lead to chronic stress, and should thus be the focus of work environment risk factor assessments and stress management strategies in everyday work life.

#### Theoretical background

The Challenge–Hindrane Stress Model (CHM) and its latest refinements suggest that job demands can result in both negative and positive outcomes, depending on how they are experienced by the individual. Demands that are appraised as negative hindrances prevent employees from performing their job well, whereas demands that are positively appraised as challenges can produce positive feelings and outcomes. Previous research has not yet provided a comprehensive picture of the role of various cognitive job characteristics as hindrance or challenge demands. In our study, we studied occurrence of various cognitive demands. The main research question was whether the appraisal of 14 specific cognitive demands as a strenuous hindrance stressor or as an engaging challenge stressor mediates the relation between its frequency and the level of self-reported general stress.

#### Methodology

The cross-sectional survey data were gathered in 2020–2022 from 1507 participants working in various roles and organizations in many fields and settings of education. There were 39 cognitive demand (CD) items that were structured into 14 subdimensions of cognitive work, reflecting Basic cognitive demands (Language, Visuo-spatial, Visuo-Motor, Attention), Cognitive task demands (Remembering, Learning, Planning, Flexible Thinking, Teamwork, Participating), and Cognitive condition demands (Multiple Tasks, Time Pressure, Unclear Instructions, Distractors). Scores were calculated for the frequency of each of the 14 cognitive subdimensions and for the individual-level appraisal of the subdimensions as energizing/engaging (challenges) and straining (hindrances). A single-item measure of stress was included. The main research question was studied using 14 one-factor mediation models, each of which had CD Frequency as the independent variable, the associated CD Strain appraisal as the mediator, and Stress as the dependent variable.

#### Results

The results showed that basic cognitive demands and cognitive task demands at work were appraised as both hindrances and challenges. However, cognitive condition demands regarding multiple tasks, unclear instructions, distractors, and time pressure were mainly experienced as strenuous. The mediation models showed, first, that most relations between CD Frequency and the related CD Strain (Path a) were statistically significant: the higher the frequency of a specific cognitive

demand subdimension, the higher the level of appraised strain. Second, most CD Frequencies were related to Stress (Path c): the higher the frequency, the higher the level of stress. Third, most CD Strain were related to Stress (Path b): the higher the appraised strain, the higher the level of general stress. Moreover, the results indicated a partial mediation effect, especially for CD subdimensions of Attention, Flexible thinking, and Unclear instructions. That is, the frequencies of these cognitive demands were related to the level of general stress both directly and indirectly through the level of appraised strain. In contrast, the sizes of the estimated mediation effects regarding challenge appraisals were negligible.

#### Limitations

The main limitations of our study were related to the nature of the data. The study design was cross-sectional and the dataset was not representative in regard to work roles or educational setting in the field of education. Future studies with longitudinal or experimental data should validate the mediating role of appraisal in the relation between CD frequencies and stress.

#### Conclusions

Cognitive condition demands, such as multiple tasks, unclear instructions, and distractors are significant contributors to the self-reported general level of stress. Importantly, it is not only whether the demands are experienced negatively but also their frequency that underlies stress. Therefore, it is essential to develop work practices and conditions that control the occurrence of cognitively strenuous conditions at work.

#### Relevance to the Congress Theme

Cognitive factors at work are pronounced in the changing world of work. Our results indicate that the future of cognitively intense work is now, and cognitively strenuous conditions lead to harmful consequences.

*Keywords: job demands, cognitive, stress*

## Oral presentation OP458

### **Cold but competent: The paradoxical effects of solitude expression on social reputation at work**

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science

When someone says “I enjoy working alone”, what would you think about this person? A recent study showed that university students judge a peer who expresses a preference for solitude – the experience of being alone without in-person or virtual interactions (Long et al., 2003), would be rated as more competent or agentic, but less warm or communal (Ren & Evans, 2021).

With increasing remote work arrangements, it is important to test if the above finding applies in employee contexts for three reasons. First, remote work may trigger a sense of disconnection and ironically lead to a stronger preference for solitude (Ren et al., 2021). Second, the effect of solitude expression on social reputation may be more salient in virtual interactions (Pillemer & Rothbard, 2018), due to limited social cues in online settings. Third, employee reputation is consequential. The social evaluation of employee agency and communality has implications for how employees are perceived, for instance in terms of their leadership capability and productivity (Koenig et al., 2011).

Drawing on signalling theory (Connelly et al., 2011), we argue that the expression of a preference for solitude (high vs. low), would result in social evaluations of low communality, but high agency (Fiske et al., 2007). In remote work contexts, employees would use the expression of enjoying working alone as signals to infer behaviour and competence that are difficult to observe. We also explore if gender moderates the main effects, as previous results on social evaluations across gender are often inconsistent (Bowker et al., 2020; Coplan et al., 2019). Moreover, we test if solitude expression affects perceived productivity and leadership potential, as mediated by social evaluations.

#### Method

To test our hypotheses, we conducted three online experiments. We manipulated solitude expression by asking participants to read and form an impression of a fictional employee response to a survey about their solitude preference in remote work contexts (Ren & Evans, 2021). In Study 1 (pre-registered), we tested the main effects of (high vs. low) solitude expression on social evaluations. A total of 269 working employees were recruited via Bachelor students in a Dutch university. In Studies 2 and 3, we manipulated profile gender by specifying the name of the employees (Study 2: Greg/Emily; Study 3 [pre-registered]: George/Emily). Employees in the United Kingdom were recruited via Prolific for both studies, giving us final samples of 201 and 550 employees, respectively.

After reading the profiles, participants filled in questions about social evaluation (agency and communality) (Heilman & Okimoto, 2007), perceived productivity (Lerner et al., 2001) and leadership potential (Sczesny & Kühnen, 2004).

#### Results

Across three studies, we found support for the main effects of solitude expression: participants rated profiles expressing high solitude as more agentic (mean  $d = 0.50$ ) and less communal (mean  $d = -0.85$ ) than those expressing low solitude. We also found an interaction effect of gender on communality (mean  $\eta^2 = .19$ ) and agency (mean  $\eta^2 = .06$ ). Only in the condition of high solitude expression, female profiles are rated as more competent, and male profiles are rated as colder.

Moreover, high solitude expression led to higher productivity ( $d = 0.68$ ), but lower leadership potential ( $d = -0.20$ ), and these effects are mediated by agency and communality evaluations.

#### Limitations

First, there may be concerns about the realism and external validity of our profile manipulation of solitude expression. Future research may consider manipulating with simulated audio conversations. Second, we have yet to establish the causality between social evaluations and work reputations. Nevertheless, prior studies revealed that social evaluations would lead to individual reactions in societal contexts (Fiske et al., 2007).

#### Implications

Our study contributes to the literature in two ways. First, we contribute to signalling theory by showing that employees who prefer solitude are subject to evaluation biases in performance appraisals and (leadership) selection in organisations. Second, this study introduces solitude as a double-edged sword to the emerging literature of disconnectedness at work, including topics of loneliness, isolation, and ostracism. In particular, we shift the lens from an intrapsychic experience to the other reactions upon expressing disconnectedness.

#### Research Relevance

In our research, we found that the expression of solitude in remote work may be a double-edged sword at work. We believe our findings invite EAWOP participants to reflect on how remote work experience affects employees' social reputations, as more organisations are implementing remote work arrangements.

This research primarily addresses UN SDG 8: Decent work and economic growth and SDG3: Good health and well-being.

*Keywords: Solitude, social evaluation, remote work*

## Oral presentation OP270

### Comparative analysis of the mental states of different professional and social groups in Ukraine in the conditions of war

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science

Research goal and why the work was worth doing. The Russian-Ukrainian war has a significant impact on the mental health and well-being of the Ukrainian population. Acute and/or chronic stress caused by the war can be accompanied by negative mental states, such as depression, apathy, anxiety, aggressiveness, irritability, etc.

Research goal: to carry out a comparative analysis of negative mental states (anxiety, frustration, aggressiveness and rigidity) among various professional and social groups in Ukraine in the conditions of war.

Theoretical background . We used the approaches concerned the general characteristics and types of mental states (Bulgarelli, Henning, & Molina, 2017; Eysenck, 1967; Topolov, 2011). We also considered works related to the impact of traumatic events of war on mental health and well-being of the individual (Betancourt, 2020; Frey, 2012; Sagi-Schwartz, 2008).

Design . The study was conducted in May 2022. The sample was made up of 344 respondents from the Central region of Ukraine (the cities of Kyiv and Dnipro and Kyiv region), including 80.8% females and 19.2% males of average age  $M = 39.1$ ,  $SD = 15.8$ , of which 58.1% were single and 41.9% were married. 29.9% of the respondents were in business, 24.7% in education and science, 13.4% in health care, 8.2% in civil service, and 23.8% were unemployed. 62.5% of the respondents during the war didn't move to a safer place, 20.9% moved to a safer place in Ukraine, and 16.6% moved to a safer place abroad.

To analyze the respondents' negative mental states, H.J. Eysenck Self-assessment of mental states was used. The data related to the respondents' professional, socio-demographic characteristics as well as the characteristics of their location during the war were collected using a questionnaire specially developed by the authors. The data were collected through Google form.

Results. The sample as a whole had the negative mental state indicators at the average level: anxiety ( $M = 47.48$ ,  $SD = 11.16$ ), frustration ( $M = 43.80$ ,  $SD = 13.34$ ), aggressiveness ( $M = 46.73$ ,  $SD = 10.11$ ), rigidity ( $M = 48.50$ ,  $SD = 9.99$ ) with rigidity having the highest and frustration the lowest values.

There were statistically significant differences in the levels of anxiety and aggressiveness between the respondents of different professions. The highest level of anxiety was found among the unemployed, civil servants and businessmen, while the lowest level among educators and scientists ( $F = 3.06$ ,  $p < 0.05$ ). The highest level of aggressiveness was found among health care workers and the unemployed, while the lowest among educators and scientists ( $F = 2.40$ ,  $p < 0.05$ ).

It was found that women had higher anxiety ( $F = 20.33$ ,  $p < 0.001$ ) and frustration ( $F = 26.80$ ,  $p < 0.001$ ) than men.

Besides, unmarried respondents (those who have never been married or have divorced) had anxiety ( $F = 4.05$ ,  $p < 0.05$ ) and rigidity ( $F = 5.67$ ,  $p < 0.05$ ) indicators higher than married respondents.

The respondents who moved to a safer place abroad had higher anxiety scores ( $F = 3.37, p < 0.05$ ) than those who didn't move or moved to a safer place in Ukraine. At the same time, those who moved to a safer place in Ukraine had higher aggressiveness than those who didn't move or moved to a safer place abroad ( $F = 2.85, p < 0.05$ ).

Those who stayed in the hostilities zone, had higher aggressiveness ( $F = 5.11, p < 0.01$ ) and rigidity ( $F = 3.19, p < 0.05$ ) than those who were in a more peaceful or occupied territory.

Limitations. Since the sample consisted of the residents of the Central Ukraine, which is more socially stable compared to other regions, the sample cannot be considered a representative of the entire population of Ukraine.

Conclusions/Originality/Value. It was established that the population groups most susceptible to negative mental states were the unemployed, civil servants, entrepreneurs, women, single people, individuals from the hostilities zone, as well as refugees. The conducted research deepens the understanding of the mental states of various population groups during the war. The knowledge of the most vulnerable professional and social groups provides the basis for the creation of psychological support groups and interventions aimed at improving population's mental health during the war.

Relevance to the Congress Theme. The study is within the 'Mental health' sub-theme of the Congress 'Well-being' theme (item 18).

Relevant UN SDGs. The research findings can contribute to the promotion of mental health of various professional and social categories during the war, which meets the UN Sustainable Development Goal 'Good health and well-being'

*Keywords: Mental states, professional group, social group*

## Oral presentation OP370

### Compassion at Work: Process Evaluation of an Online Intervention in a Spanish SME

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science&practice

**Research goal and why the work was worth doing:** The study investigates the interaction between the different phases of an individual-level Compassion intervention conducted in a Spanish SME. The study will present the preliminary results of a Context, Mechanism and Outcomes (CMO) configuration using quantitative process evaluation measures. We are particularly interested in examining the link between contextual factors (i.e., employee context participation, support climate and communication) and training design mechanisms as prompts of individuals' intention to transfer the training acquired in their daily activities.

**Theoretical background:** Interest in studying compassion as a personal resource has increased (Strauss et al., 2016). Despite this interest, there is a lack of studies of Compassion interventions at the workplace. Furthermore, research on interventions focuses on a methodological approach that strives to standardize outcomes and disregards the value of context, process and fit between the intervention and the organization (Gilbert et al., 2018). This study is part of the H-WORK European project (De Angelis et al., 2020), which aims to validate the evaluation and intervention toolkits to promote mental health in the workplace. The study design is based on the Realistic Evaluation theoretical approach (Nielsen & Abilgaard, 2013) which seeks to describe how interventions work from whom and in which circumstances.

**Design/Methodology:** One cohort of employees in one Spanish business performance consultancy (N=24), are participating in an ongoing online intervention called "Compassion at Work", that aims to strengthen intra- and interpersonal skills related to (self-)compassion and pro-social behaviours towards others to optimize psychosocial well-being and relationships between employees. The intervention consists of three online group sessions (2 hours each) over three months. Between sessions, a digital platform is available with activities and practices to apply to their daily work. To evaluate the process, quantitative measures at different time points (T1-T5; baseline 6 months before intervention, post-intervention, every 3 months after baseline) are still being collected and will be available between January and February 2023. Measures included Contextual factors, Mechanisms, and Outcomes. Data will be analysed using Structural Equation Modelling, with R software to test mediation and moderation effects.

**Expected Results:** We expect that contextual factors, such as context of participation, support climate, and communication climate will prompt participants to intent to transfer the training acquired to their daily work (mechanisms). As a result, employees will experience increases in their levels of self-compassion, compassion towards others and the quality of service, which in turn will positively impact their mental health and well-being. Work demands and readiness for change will act as moderators in the interaction between contextual factors and mechanisms.

**Limitations:** First, the sample size will be small regardless of the number of respondents of the questionnaires, which may create biases in the analysis and interpretation of the results. Second, even though the study design includes a follow-up evaluation time (6 months after finishing the intervention), we won't be able yet to show these results during the presentation, because we will have these data on June 2023.

**Conclusions:** This study provides knowledge about the importance of developing Compassion at the workplace. Moreover, conducting interventions in Compassion will strengthen and develop compassionate skills in employees, reduce levels of stress and perceived demands at work, and increase levels of wellbeing. The results may provide practitioners with recommendations on how to implement individual interventions based on Compassion, considering the conditions and mechanisms that lead to the intended outcomes, for whom and under what circumstances.

**Relevance to the Congress Theme:** The study proves to be innovative in two ways, as it is an online intervention with a digital platform, where it is easy for the participants to access, and secondly, the design of the study based on the Realistic Evaluation. In addition, with this type of intervention based on Compassion, people are given the necessary tools to cope with daily life situations in the best possible way, thus trying to reduce stress and discomfort levels.

**Relevant UN SDGs:** The research could be included in the framework of objective 3 (good health and well-being) and 8 (decent work and economic growth), as these types of interventions aim to promote mental health and wellbeing at work and developing compassion as a personal resource also has a positive impact on a personal and professional level. Furthermore, with the results obtained, organisations could develop and implement policies and practices to further promote the mental health and well-being of their employees.

*Keywords: compassion, realistic evaluation, well-being*

## Oral presentation OP519

### Complex effects of ideology on labor union activism

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science

Research goals and why the work was worth doing

Despite the recent surge in the unionization of workers around the world, it is still unclear why most people do not unionize, despite experiencing poor working conditions and violations of fundamental worker rights. Our research aimed to address this issue from the perspective of psychological aspects of ideology. Here, we would like to present the results of two studies on the relationship between political ideology and willingness to support and engage in labor union actions.

Theoretical background

Past research suggests that labor union membership is motivated by attitudes and ideologies regarding unions and ideological perspectives on work (Deshpande & Fiorito 1989, Barling et al. 1991). Literature also suggests that general political ideology is related to engagement in labor unions, as more left-leaning people are also more frequently members of such organizations (Toubol & Jensen, 2014). However, the literature (especially more recent) on relations between ideology and union activism is relatively scarce and inconclusive, as it shows different relations between political attitudes and union membership in different countries (Jensen, 2017). We hypothesize that ideology will be related to attitudes toward unions and labor union membership.

Design/Methodology/Approach/Intervention

The first study was conducted among workers (N = 1653) from Poland, the United States, and India. It was a cross-sectional study conducted on a representative sample of workers in these countries through online panels. The results were analyzed with linear regression.

The second study is based on existing datasets from opinion polls conducted worldwide and locally, namely with European Social Survey, World Values Survey, and GSS. We analyze the relationships between questions about various aspects of ideology, support for labor unions, and union membership. The analysis was conducted with multilevel modeling, allowing to observe country-level relations between variables of interest.

Results obtained or expected (if not available, it must be made clear when they will be)

The first study's findings are only partially consistent with the predictions since ideological factors were not always related to union membership. Contrary to our predictions, union members were significantly more right-leaning compared to non-members in all countries.

The results of the second study confirm the overall relationship between ideology and attitudes towards labor unions, but not union membership. Interestingly, the observed effects vary between countries.

Limitations

The majority of the presented data is cross-sectional, what possibly undermines reasoning about causal relations between ideology and labor union engagement.

## Conclusions – research and or practical implications/Originality/Value

First of all, we present important results suggesting a nuanced relationship between ideology and union membership, discussing the importance of conducting research on large datasets, including data from many countries and time points. In terms of practical implications, we believe that union organizers could find our results interesting as we contribute to the knowledge concerning motivational factors facilitating union engagement.

## Relevance to the Congress Theme

In recent years, we have observed a revival of labor union participation around the world and we see that it has become a strong trend. We believe that labor unions are an important part of the future of work.

*Keywords: labor unions, ideolo*

## Oral presentation OP657

### Conflict at work: A survey

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practice

#### Purpose and goals

Where there is a difference of opinion, conflict occurs. Often seen negatively, conflict can lead to new insights, especially when people are aware of how they typically deal with conflict, and have the ability to flex their style when needed. Getting the best from conflict also matters to organizations; a constructive approach to conflict can reduce costs and make positive outcomes likelier.

This study investigates how people see workplace conflict, and to produce recommendations as to how individuals can use a knowledge of their own conflict style. The paper will present an overview of the findings.

#### Theoretical background

The study uses the TKI framework developed by Thomas and Kilmann. This defines five conflict modes depending on the extent to which, when there is a difference of opinion, a person is co-operative (trying to satisfy the concerns of another person) and the extent to which they are assertive (trying to satisfy their own concerns). The five modes are Competing, Collaborating, Compromising, Avoiding, and Accommodating.

#### Methodology

271 people completed one of two online surveys. One was distributed to individuals who had previously completed the TKI assessment; the other contained the assessment items, allowing their conflict modes to be calculated.

#### Results

Most respondents felt they managed conflict well, had high job satisfaction, and felt included at work. Those with the most positive view of their skills had higher levels of job satisfaction, felt more able to be their authentic self at work, and felt more valued by and at home in their organization.

On average, respondents spent 4.34 hours per week dealing with work conflict, a significant organizational cost. The more time that an individual spent dealing with conflict, the lower their job satisfaction and the less included they felt.

Poor communication and lack of role clarity were seen as the most common causes of conflict at work, followed by heavy workloads and personality clashes.

When asked who was responsible for managing work conflict, the most common response was 'my line manager' closely followed by 'everyone'. 98% of respondents said that conflict handling is was extremely or very important as a management skill.

There was a slight increase in perceived conflict due to COVID and its after-effects. Non-remote workers were the most likely to say that conflict had increased, remote workers the least.

52% of respondents felt that workplace conflict gave a mix of positive and negative results, 31% that it always or generally gave negative results and 17% that it always or generally gave positive results. The most frequently mentioned positive benefit was the opportunity to build relationships and

increase collaboration and co-operation. The most frequently mentioned negative outcome was poorer relationships, loss of trust, and decreased co-operation.

When asked 'How does conflict at work make you feel?', the most frequent answers were around the theme of feeling anxious, depressed, fearful, or stressed.

Respondents tended to think that their direct supervisor or manager managed conflict well. Female managers were more likely to be seen as managing conflict very well than were male managers, and less likely to be seen as managing conflict very poorly.

The results provide a rationale for helping managers to improve their conflict-handling skills. While 35% felt there was nothing more their supervisor or manager could do, 65% mentioned one or more actions.

Those who perceived their manager as having a Collaborating, and to some extent a Compromising style, had the most positive experience. Those who believed their manager had a Competing, and to some extent an Avoiding, style had the least positive experience.

An overview of the findings will be presented at the Congress, with a link to a full report.

#### Limitations

The study relies on self-report and uses a convenience sample.

#### Conclusions

Conflict takes time, is expensive and can have a negative effect on individuals. It may be useful for organizations, departments, or teams to review each of the causes, in particular poor communication, lack of role clarity, and heavy workloads and how the effects might be mitigated. To reduce personality clashes, increasing individual self-awareness via personality or conflict style assessments may be useful.

A positive view of one's ability to manage conflict has several positive outcomes. Training in handling conflict may be useful for all, but especially managers.

Those who saw their manager as having a Collaborating conflict style had the most positive experience. In practice, a Collaborating style may well be the most suited in some situations or interactions, but a different style in others. It is important that a manager is aware of their own typical approach ability to flex and take another approach when needed.

#### Relevance to the Congress theme

With change comes the possibility of conflict. Understanding workplace conflict is important for the future.

*Keywords: conflict, TKI, conflict mode*

## Oral presentation OP223

### Connecting the digital dots: Development of a measurement scale for employee digital disconnection

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science

#### Introduction

An number of scholars suggest that digital disconnection – which refers to putting intentional constraints on the use of digital devices, features, and applications (Nguyen, Büchi & Geber, 2022) - could foster employees' focus during work and benefit their overall wellbeing. Despite the rapidly expanding research around employee digital disconnection, a valid and reliable measure to assess this construct is still lacking. With this paper, we address this void by developing and validating a scale that captures the variety of employee-owned disconnection behaviors. As such, we advance the field in several ways. First, this study is one of the few that puts employees on the map of digital disconnection research. Second, by encapsulating different employee digital disconnection behaviors into one comprehensive instrument, we contribute to a more unite and total view on the topic, while we recognize digital disconnection as a phenomenon that is more than the mere opposite of digital connection. Finally, we answer calls in the literature to make methodological progress in the field.

#### Methodology

We follow an established multistep procedure, consisting of an item generation phase, a scale development phase, and a scale evaluation phase (Boeateng et al., 2018). More specifically, study 1 entails interviews with employees (n = 39) to specify the domain of the construct, to define its main dimensions, and to inductively compile an initial item pool. We then adhere to interviews with experts (n = 10) and employees (n = 7) to review the candidate items' face validity, content validity, and clarity. Study 2 is a quantitative evaluation of the scale. Using a first sample (n = 486), we examine its dimensionality and using a second sample (n = in progress ) we examine reliability, construct validity and nomological validity.

#### Results

The scale covers three relevant contexts of disconnection. First, digital disconnection from work-related ICTs outside work (DD WOW) implies that employees refrain from using ICTs for work purposes outside regular working hours, such as during evenings or weekends. Second, individuals can disconnect from private ICTs during work (DD PDW), through a reduction in the use of devices, applications, and features for private purposes during their worktime. Third and finally, employees can actively limit the use of selected work-related ICTs during work, by disconnecting from work-related ICTs during work (DD WDW).

For each of these three contexts, the qualitative data pointed at three different types of strategies. More specifically, we distinguish between technology-oriented strategies (i.e., limiting the use of devices, programs, or features), communication-oriented strategies (i.e., notifying others about unavailability) and time-oriented strategies (i.e., organizing time slots for being disconnected). Based on this, we constructed an item pool of 42 items (i.e., 14 items per disconnection context), which were reviewed and adapted with experts and employees. In the next phase, exploratory factor analyses confirmed the hypothesized dimensionality, except for two items that loaded poorly on the expected factor and were therefore re-worded.

The adapted version of the scale is currently being administered to a new sample, on which we will perform confirmatory factor analyses (CFA's) and validity tests. Regarding the latter, we expect digital disconnection to correlate with various individual characteristics (e.g., segmentation preference), job characteristics (e.g., workload, availability demands) as well as individual and work outcomes (e.g., concentration, exhaustion).

#### Limitations

Developing a valid scale requires testing many of its psychometric properties. Given there is considerable debate about the antecedents and outcomes of digital disconnection, predictive validity has not yet been tested in this study. Using our scale, future research could further unravel whether factors such as focus or workload are to be considered as disconnection antecedents, outcomes, or both.

#### Conclusion and contribution

In conclusion, our scale could serve a broad spectrum of empirical studies surrounding digital disconnection, thereby clarifying important questions with respect to the importance of 'switching off' for improving employees' (digital) wellbeing and performance at work. Overall, the evolving research line around this topic is extremely relevant in view of recent societal developments - such as the digitalization of workplaces - which was accelerated by the Covid-19 pandemic. If we want to minimize negative health consequences of hyperconnectivity (e.g., stress, fatigue), research on digital disconnection to avoid or to cope with possible technological drawbacks seems fundamental. Therefore, our contribution perfectly ties into EAWOP's conference theme 'The changing world of work' and the UN's third SDG 'Ensuring healthy lives and promoting well-being'.

*Keywords: digital disconnection, scale development*

## Oral presentation OP522

### Context matters: Varying preferences for decision-support levels by artificial intelligence in personnel planning

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science&practice

Artificial intelligence (AI) now makes decisions and takes over tasks that used to be done by humans, thereby changing the way humans work and how entire industries operate. In AI research, scientists distinguish between different levels of AI support known as the level of autonomy (LoA) – the higher the LoA, the more autonomy has the AI and the less control remains with the human decision-maker (DM). AI can either pre-process data for further processing by a DM; it can process data and give the DM suggestions; or the AI can process data and make final decisions without involving the DM. LoA has been primarily examined in the context of robotics, aviation and autonomous driving. Comparatively little is known about users' preferences for a differential LoA in human resource management (HRM), although AI may also support DMs in HRM with personnel selection, planning, or evaluations. This study focusses on personnel planning (PP) decisions. Within this context, most research so far examined what factors affect the users' trust, acceptance, or fairness perceptions of AI systems, some of which are situation-specific or decision-specific factors. User preferences for a system's LoA in the PP context might also strongly depend on such factors, e.g., the availability of decision-specific information, the perceived workload, or whether a team that is decided upon rejects decisions made by the AI. The goal of this study is to investigate whether DMs' LoA preferences vary with situational settings of personnel planning decisions.

Researchers and practitioners alike argue that the use of AI will improve business performance, work experiences, and thus may contribute to more decent work and economic growth. To support a human-centered design of AI in HRM, empirical research on user preferences and LoA may guide developers and practitioners to reflect contextual factors and allow to flexibly adapt the AI's LoA to these.

104 participants made fully manual PP decisions (no AI support) for a fire brigade in a computer simulation. Thereafter, the participants were asked to put themselves into the situation of the DM in several PP decisions (vignette study design). Participants rated on a 5-point Likert scale (e.g., 1=fully manual, 3=AI support with human decision, 5=fully autonomous AI) what LoA they preferred in each of two variants of six situations: (1) A situation where the DM's goal was either to follow a personal efficiency or a personal development goal; (2) a situation where relevant information was either lacking or fully available; (3) a situation with high versus low workload of the DM; (4) a situation where the described problem was either clear or unclear; (5) a situation where the PP decision either has or does not have negative consequences for the team; and (6) a situation where the team either accepts or does not accept decisions made by an AI.

We examined whether LoA preferences differed within subjects between the two variants of each situation using paired t-tests and OLS regressions.

The preferred LoA differed statistically significantly (all p-values <.000) between the two variants of each situation. Higher LoA was preferred when (1) the personal goal was efficiency (vs. development); (2) information about the situation was insufficient (vs. fully available); (3) the perceived workload was high (vs. low); (4) the problem of the situation was unclear (vs. clear); (5) the AI's decision did not result in conflicts (vs. conflicts were unavoidable) within the team; and when (5) the team was highly accepting (vs. not accepting) of AI decisions.

First, this study was done with students who were asked to imagine various situations they likely never experienced in real life. To counter this problem in part, we specifically hired only participants who at least had some experience with a similar decision in a computer simulation. Second, the vignette study design might artificially elicit differential LoA preferences due to the way the study was framed (framing effects, experimenter demand effects). Third, without actual consequences for the decisions made by the participants, the answers could be interpreted as only tentatively suggestive evidence. Therefore, future research is needed. Especially studies that observe decisions with real consequences of people with real-world experience in PP would be laudable.

This study suggests that designers of an AI must consider the situational context and allow the AI to be adaptable to this context for it to be used effectively by the intended DM. To ensure a human-centered work environment and economic growth, AI systems will be necessary, but it will also be necessary to design those by carefully considering the context in which the AI will operate.

*Keywords: artificial intelligence, level of autonomy, human resource management*

## Oral presentation OP664

### Contextualising lawyers' wellbeing: a synthesis review and integrative theoretical approach

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science&practice

**Review goals and rationale:** Lawyers perform an integral role in society. Yet industry reports describe a profession ostensibly under strain. Contextualising lawyers' wellbeing is pertinent. The path to qualification is competitive and arduous. Commercial law firms compete for the best talent by offering elevated salaries for high workloads and long working hours. Financial incentives are constrained in legal aid practice, but heavy workloads, tight deadlines, and administrative backlogs arise from evolving socio-political agendas. Law firms face mounting pressure to protect and promote lawyers' wellbeing, yet knowledge remains fragmented across different disciplines hindering research development and progress in practice. Thus, our review aimed to determine, by way of a systematic map and synthesis of the published and grey literature, what we know and what we do not know about lawyers' wellbeing, specifically how lawyers' wellbeing is conceptualised and influenced by work context.

**Theoretical background:** Prominent work stress theories (e.g., job demands-resources theory) propose relationships between work demands, resources, and psychological stress. However, they may be insufficient for consideration of contextual nuances thus presenting a theoretical challenge.

**Methodology:** We adopt systematic review methodology and a pragmatic realist approach. We performed a global cross-disciplinary review of 143 publications from the scholarly and grey literature spanning the past 50 years. We also engaged a purposively established stakeholder advisory panel to review our a priori review protocol to ensure appropriate scope and relevance.

**Review findings:** Despite wellbeing's positive facets, we find lawyers' wellbeing is disproportionately conceptualised as a state of ill-being. Few studies have applied theory to situate and explain findings. There is also scant consideration of the contexts to which findings apply. We confront the theoretical challenge of considering wellbeing through the lens of work context by proposing the novel integration of Bourdieu's (1977) theory of practice and Hobfoll's (1989) conservation of resources (COR) theory. Our explanatory synthesis adopts an abductive approach.

Guided by Bourdieu's concepts of field and habitus, we infer two subfields of legal practice from the reviewed literature, each with different work structures, conditions and predispositions: commercial law practice with tightly managed performance and productivity measures, and legal aid practice with high emotional demands and emotional labour. Different types of symbolic capital (resources) are valued by different lawyers contingent on their subfield and habitus (i.e. their context). Drawing on COR theory, we suggest that threats to, or actual loss of, these valued resources is the mechanism by which context influences wellbeing.

While some resource losses may affect both subfields: low job autonomy, work-life conflict, and reduced social connectedness, we find unique resources are at risk of loss depending on context. For commercial lawyers, these include recognition and career growth, perceived professionalism and competence, and organisational support; for legal aid lawyers, they include social purpose, utility, work meaningfulness, and financial stability.

Stress, anxiety, depression, and burnout are common negative wellbeing outcomes. Unique outcomes for commercial lawyers include low motivation and job/life dissatisfaction, whereas legal

aid lawyers are distinctively susceptible to emotional dysregulation, trauma symptoms, and moral injury arising from the emotional valence of their work.

Limitations: More studies may exist than were retrieved owing to language and database limitations. Stakeholder engagement helped us to refine our population and concept search terms into as relevant a list as possible; however, lawyer titles and wellbeing synonyms vary considerably across countries meaning some studies may have been missed.

Conclusions: Our review is the first to systematically map and synthesise the scholarly and grey literature on lawyers' wellbeing that has developed across disciplines over the past 50 years. It is also, to our knowledge, the first to propose the theoretical integration of Bourdieu's theory of practice and COR theory to understand how work context impacts wellbeing. Identifying resources at risk of loss within specific contexts may help organisations develop more targeted and effective wellbeing interventions.

Relevance to the Congress Theme: The changing world of work has placed increased importance on understanding how context affects work-related wellbeing. We demonstrate, in relation to lawyers, the application of an integrative theoretical approach, which may be usefully applied to other professions and occupations.

Relevant UN SDGs: Good health and wellbeing.

*Keywords: systematic review, conservation of resources theory, wellbeing in the legal profession*

## Oral presentation OP637

### Coping with homeworking in the post-pandemic era: the role of home office quality and flexitime in enhancing job performance

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science

Research goals and why the work was worth doing

This study examines if perceptions of home office quality affect homeworking performance. It is also hypothesized that employees' ability to cope with homeworking mediates this relationship and that flexitime moderates the relationship between the ability to cope and homeworking performance.

Theoretical background

Many organizations are continuing to use remote work as a crucial resource after its massive adoption due to the COVID-19 emergency (Kosteas et al., 2021). However, the quality of employees' home workstations often varies by case. Despite the limited research on the ergonomic aspects of working at home, the relationship between comfort aspects and work outcomes is crucial (Carayon, Smith, 2000). A suitable workstation, in fact, improves to perform their tasks (McAllister et al., 2022) and may help employees to manage work problems, thus contributing to their ability to cope with their work, which in turn can improve homeworking outcomes (Toscano et al., 2021).

In addition, homeworkers can either work during canonical office hours or adopt independent time schedules (ILO, 2021). Thus, flexible work arrangements provide employees the needed flexibility in scheduling their work which seems to improve their job performance (Rosen et al., 2013; Toscano & Zappalà, 2020).

Moreover, the possibility to manage their job schedules can help employees to meet their daily needs in terms of both personal and work-related demands (Miglioretti et al., 2021). For this reason, we argue that flexitime boosts the relationship between coping with homeworking and homeworkers' performance.

Methodology

A cross-sectional study took place in the middle of 2022. Data were collected to evaluate the organizational well-being of an Italian national research institute that introduced remote work two years before. The sample consists of 493 homeworkers. Most of them (39.8%) reported working at home about three days per week. All participants gave their consent to the data collection.

Results obtained

The PROCESS macro, used to test the hypothesized model, confirmed the relationship between quality of home office and coping ( $B = .25$ ;  $p < .01$ ) and between quality of home office and homeworking performance ( $B = .33$ ;  $p < .01$ ). Results also showed that coping was significantly related to performance ( $B = .50$ ;  $p < .01$ ). In addition, the relationship between coping and performance was moderated by flexitime ( $B = .16$ ;  $p = .01$ ). These results, together with the index of moderated mediation (index=.04; 95% CI = [.01, .06]), confirm the positive mediating effect of coping in the relationship between the quality of home workstation and performance and show that the mediating effect is stronger in employees that can manage their worktime more flexibly.

## Limitations

The present study has limitations. First, it is a cross-sectional study, thus the indirect effect would benefit from a longitudinal study. Second, because the measurements are self-reported, employees could have considered their ability to cope with homeworking as equivalent to their ability to perform homeworking, thus the two measures should be more extensively distinguished. Third, data were collected in a single Italian research organization. So, generalizing the study results might be risky. Finally, the measure of quality of home office can be enlarged by including a larger number of workstation ergonomic aspects.

## Conclusions

This study encourages organizations to support workstation quality at home by considering specific resources for the worker, such as training on how to set up an efficient workstation, or economic incentives to cover home expenses. Furthermore, it is suggested to evaluate the introduction of flextime for homeworkers, as it acts as an enhancer of homeworking productivity.

## Relevance to the Congress Theme

In the face of changes stimulated by the pandemic, we believe that homeworking is a resource chosen, not suffered, by organizations and workers. As the congress emphasizes, we are convinced that homeworking should be adapted over time to meet changing needs. Flexible scheduling and quality of home workstations can be a powerful resource for today's and tomorrow's work.

## Relevant UN SDGs

Sustainable development goals here examined: decent work and economic growth, reduction of inequalities, responsible consumption, and production.

*Keywords: home office quality; flextime; remoteworkers' job performance*

## Oral presentation OP124

### Could a psychometric test be a self-confrontation tool?

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science&practice

Research Goals and why the work was worth doing

We aim to show how a psychometric test could become a valid psychological instrument in a self-confrontation – based activity analysis. As this type of analysis normally requires video recordings, which could be hard to produce depending on work conditions, it is worth finding out alternative items for self-confrontation interviews.

Theoretical background

Our perspective is the French-specific clinical approach to activity (Clot, 2008), based on Lev Vygotsky's historical-cultural theory (1978). The clinical approach theorizes that there are hidden elements in a subject's activity, which are inaccessible while living a first-person work experience. By watching himself/herself in videos of his/her own activity, and being questioned at the same time by the psychologist, the subject "doubles" his/her work experience, having the chance to catch these "invisible" elements and thus to better understand and develop his/her work. We call this co-analysis methodology self-confrontation. Co-analysis with the subject is the work core in our clinical approach. No further analysis without him/her afterward is of interest, in our perspective, in order to help him/her improve his/her activity.

The psychometric test is HEXA 3D®, a vocational guidance questionnaire designed by Pierre Vrignaud and Bruno Cuvillier in 2006 on the basis of the RIASEC model (Holland, 1966). HEXA 3D® is composed of three parts, each one dedicated to a category of items: activities, personal qualities and professions. There is a total of 168 items. Three types of answers per item are possible: I'm interested/I own this quality (2), I'm indifferent/I don't know if I own this quality (1), I'm not interested /I don't own this quality (0). The score obtained reveals one main profile and up to two or three associated profiles, among the six RIASEC Types (Realist, Investigator, Artistic, Social, Enterprising, Conventional).

Design/Methodology/Approach/Intervention

Self-confrontation interviews are normally conducted with video recordings of a subject's activity. We applied this co-analysis methodology using the psychometric test HEXA 3D® instead of activity videos. The test was administered to a French male swim coach aged 27 at time, after the 2021 Covid-19 lockdown and during an employment transition period.

One week after the test administration, we performed the self-confrontation interview: it was a semi-structured interview based on test results and how these were meaningful to the subject. Our questions were focused on the relationship between subject's profiles characteristics and his own actual work tasks. The interview was conducted in a distant mode configuration, via a videoconference platform. We recorded the entire session via the platform.

Results

Test performance - The subject completed the test in a short time (22 minutes). Personal qualities part was where it took longer to him to answer.

Confronting the results - The subject was surprised to discover that the Social Type is not his main profile. The Artistic Type is, in the end, the main profile, with Investigator and Social as associates. The coach finds the Conventional profile more reassuring and he estimates himself as Enterprising, wondering why these are not among his profiles.

Re-evaluating his activity – The subject realizes that Enterprising and Conventional Types characteristics are meaningful to him just because they're functional to the establishment of good work conditions. Even his choices on activities are all intended to improve his swim coach craft. Finally, the subject also understands that his attitude of letting swimmers free in their practice comes probably in reaction to his strict parental education.

#### Limitations

The number of items is limited, so are the choices for the subject. The standardization, somehow necessary to every psychometric test, is a limiting factor concerning the complexity of human work activity.

#### Conclusion, practical implications and value

Thanks to HEXA 3D® results discussion, the subject was confronted to his own work activity and was able to think it differently. We experimented this psychometric test for a clinical usage. We thus could think of vocational guidance as a new way to accede to subjective work reality in our clinical approach.

#### Relevance to the Congress Theme

We identify this topic as relevant to the congress theme “Research methods”, and more specifically as a “Research design” topic. Our suggestion is to identify a new use for a well-known psychology tool such as a psychometric test.

#### Relevant UN SDGs

Analysing one's own vocational path could contribute to wellbeing and thus mental and physical health. Analysing it through work tasks means recognising work craft as a health factor.

*Keywords: Vocational, Test, Clinical*

## Oral presentation OP112

### **Crafting Jobs and Careers: A Cross-lagged Analysis on the Moderating Role of Career Adaptability**

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science

Research goals and why the work was worth doing

Nowadays, frequent and unpredictable economic and organizational turbulences increasingly push employees to take a proactive stance with regards to both their jobs and careers in terms of heightened flexibility, adaptability, and customization. This study deepens the individuals' understanding of how to take charge of their own career and strive in turbulences. Thus, with the aim of examining the reciprocal associations between the individual orientations to customize one's own career vs. one's own job as well as the boundary conditions due to the levels of adaptability, and drawing on Career Construction Theory, we examined: (a) the potential bidirectional relationship between protean career orientation (PCO) and job crafting; and (b) the moderating role of career adaptability on their relationship over time.

Theoretical background

The protean individuals are more likely to engage in job crafting behaviors as they translate their propensity to personalize and self-direct their career to their job. Whereas in reciprocity, the reflection of job crafting behavior among employees lead them towards a higher protean career orientation. The CCT emphasizes how individuals discover their passions and construct a life-career that provides sense and meaning to their lives, also allowing them to re-creating themselves to cope with environmental turbulences (Arastaman, 2019). The career adaptability, as the main concept of CCT (Savickas, 2013), is positively associated with several positive outcomes both directly (Maggiori et al., 2013) and as a mediator (Jia et al., 2022).

Design/Methodology/Approach/Intervention

We collected cross-lagged data in three waves (one-month) from a sample of employees in Poland as part of a larger research project. The participants were Master's program students, at least 18 years old and currently employed for at least 20 hours per week. Besides, they were informed about voluntary participation, confidentiality and anonymity. Survey at Time 1 included demographics, items related to PCO, job crafting, and career adaptability. At Time-2 (one-month later) we used the same survey, excluding the demographics and finally at Time 3 (one-month after Time 2), career adaptability was also excluded from the survey. The questionnaire was administered in the English language. We used the measures of Protean career orientation, the 7-items scale proposed by Porter et al. (2016), Job crafting, the 9-items scale (by Slemp and Vella-Brodrick, 2013) and career adaptability, 12-item shortened version scale (by Maggiori et al., 2017). Cross-lagged path analyses were conducted using structural equation modelling (SEM) in AMOS, whereas the moderation analysis was conducted using Hayes PROCESS macro.

Results obtained

Out of 400 participants, we received 333 completed surveys at the Time 1 (response rate of 83.3%). At time-2, 211 participants completed the survey (attrition rate = 36.6%), and 168 participants at Time 3 (attrition rate = 20.3%). Our findings fully supported our hypotheses. The higher protean career was positively associated with higher job crafting behaviors at a subsequent time; at the same

time, higher job crafting behaviors positively contributed to ensuing protean career. Moreover, career adaptability proved to be a significant moderator in these relationships.

#### Limitations

There are some limitations to consider when interpreting our results. Since this study is based on the self-reported measures using questionnaires, there may exist some common method bias concerns. Addition to that, one of the limitations occurs when generalising this model, this study is not cross-cultural, the results may vary when the data is conducted from different cultures other than Polish. Moreover, the data was conducted during pandemic, there is a slight chance that individuals might experience increased or decreased association towards their career and job crafting in normal (less stressed) situations. Along with that, the longer duration between the data collection may help future researchers explore more in depth understanding of individuals' behaviours towards their vocation.

#### Conclusions – research and or practical implications/Originality/Value

We provide that there is a bidirectional relationship between PCO and job crafting. Also, our results confirmed the moderating role of career adaptability and showed that the relationship between PCO and job crafting was stronger for employees with higher career adaptability resources. We contributed to the literature by showing the reciprocal relationships over time between PCO and job crafting which reinforce each other and by highlighting the amplifying role of career adaptability.

#### Relevance to the Congress Theme

As jobs are continuously changing, individuals need to be proactive and able to customize both their job and careers. At the same time, adaptability is another valuable resource to make careers more sustainable.

*Keywords: Protean career, job crafting, career adaptability*

## Oral presentation OP673

### **Crafting leaders for people and organizational adaptability: A preliminary validation of the Crafting Leadership Questionnaire (CLQ)**

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science&practice

Research goals. What kind of leadership is needed for the transition to more agile organizations is still a matter of debate. The Complexity Leadership Theory (Uhl-Bien et al., 2007) addresses how leaders may enable potential to adaptively address shifting environments. However, a specific tool applicable to employee management is still lacking. Hence, this study aims to propose a conceptual and measurement model (CLQ) that specifically interprets the enabling function of leadership for coworkers management.

Theoretical background. Enabling leadership is the process that allows adaptability, creative problem-solving and learning to emerge within organizations (Uhl-Bien & Arena, 2018). Starting from Uhl-Bien et al. (2017) and from behavioral models (e.g., Yukl, 2012), we declined the concept into competencies. Crafting leaders adjust their style to the characteristics of coworkers (to activate their capability to shape the work environment and its outcomes) and manage the organization-coworkers interface (to provide consistency with the organization's strategic mission and to stimulate innovation throughout the organization). The concept naturally resonates with a situational approach to leadership (Hernandez et al., 2011). Indeed, by crafting we mean the leader's shaping of an adaptive context in which coworkers are able to explore and nurture their diverse skills/talents/needs and to contribute to organizational development (Tims et al., 2021; Tummers & Bakker, 2021). Although transformational leadership (TL) involves a top-down approach of managing employees (Northouse, 2016), we expect the two perceived styles to be positively correlated as they converge on employee's development. Moreover, we expect significant associations between CL and coworkers' job crafting (JC; proxy of adaptability; Bindle et al., 2019), as well as with engagement (WE) and exhaustion (EX) based on previous research (Tummers & Bakker, 2021).

Design. A total of 1507 employees from different organizations completed an online survey. Measures: CLQ (21 items), assessing CL as an higher-order construct derived from three behaviours (as perceived by coworkers), namely Person-Organization Alignment (POA; managing the organization-to-coworkers interface by strenghtening the comprehension of the organizational strategic and operational context), Tailoring (TAIL; valuing heterogeneity by seeding the conditions to engage co-workers in exploring, nurturing and integrating their characteristics) and Catalysing (CAT; managing the innovation-to-organization interface by facilitating the implementation and dissemination of innovative products). Transformational Leadership (TRL; 16 items, Avolio & Bass, 2004;  $\alpha=.93$ ); Promotion-oriented JC (PRO-JC; 9 items, Tims et al., 2012;  $\alpha=.79$ ). Prevention-oriented JC (PRE-JC; 6 items, Demerouti & Peeters, 2018  $\alpha=.72$ ). The distinction between PRO-JC and PRE-JC is in line with Lichtenthaler and Fischbach (2019); WE (3 items, Schaufeli et al., 2019;  $\alpha=.66$ ); EX (3 items, Mazzetti et al., 2022;  $\alpha=.81$ ). We employed an investigator triangulation approach for the item development (Denzin, 1978). Confirmatory factor (CFA) analyses were performed to test CLQ factorial validity (1-factor, 3-factor, the hypothesised higher-order and bifactor models; Credè & Harms, 2016). Reliabilities were estimated. The discriminant validity of CL with regard to TL was tested, with the specification of a common method factor (Marsh, 1996). Then, we tested for predictive validity by estimating latent associations between CL, TL and outcomes (PRO-JC, PRE-JC, WE and EX). Multicollinearity indices (i.e., VIF and TI) were checked (Markoulides and Raykov, 2019).

Results . The higher-order model fitted the data better than alternative models according to fit indices and  $D\chi^2$  test ( $\chi^2 = 1187.04$ ,  $df = 186$ ,  $CFI = .96$ ,  $TLI = .95$ ,  $RMSEA = .06$ ,  $SRMR = .03$ ). The scales showed good reliability (POA  $\alpha = .87$ ; TAIL  $\alpha = .91$ ; COD  $\alpha = .93$ ; CLtotal  $\alpha = .96$ ). As expected, the correlation between CL and TL was strong and positive ( $r = .75$ ). Both CL and TL correlated with PRO-JC (CL  $r = .46$ ; TL  $r = .38$ ), PRE-JC (CL  $r = .32$ ; TL  $r = .25$ ), WE (CL  $r = .60$ ; TL  $r = .57$ ) and EX (CL  $r = -.35$ ; TL  $r = -.28$ ). Moreover, CL outperformed TL in all regressions (with the latter resulted as nonsignificant). To be sure, VIF and TI values did not indicate the presence of multicollinearity between CL and TL.

Limits. This cross-sectional study employed self-report measures. Divergent and predictive validity of CL should be further investigated.

Conclusions. This study provided a valid and reliable model for reconsidering leadership in the contemporary scenario. Notably, CL uniquely associated with proactive behaviours, motivation and strain. The model may help practitioners to design developmental paths for leaders.

Relevance to the Congress Theme. As organizations face increasingly changing and complex scenarios, we proposed a leadership model for enabling people and organizational adaptability.

*Keywords: enabling leadership; job crafting; work attitudes.*

## Oral presentation OP39

### Creating High-Quality Coaching Conversations: What We Can Learn from Experienced Executive Coaches

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science&practice

**Purpose.** Researchers agree that it has been adequately demonstrated that executive coaching does indeed work, but that questions of “how” and “why” coaching is effective, have not been adequately answered (e.g., Athanasopoulou & Dopson, 2018). What is missing is a holistic view of coach behaviors and the systematic analysis of how these behaviors actually affect different aspects of conversation quality and outcomes (Pandolfi, 2020). One research approach to answering these questions is based on investigating the coaching process. Process-analytical studies providing insights into the active ingredients in coaching remain scarce – even more so when these studies are based on a representative sample of mature coaches.

**Goals.** The present study addresses this gap analyzing video recordings of 90 executive coaching conversations forming part of an accreditation process for professional, experienced coaches (average age 50, at least 90 hours of coaching experience). Based on behavioral observation, the study aims to explore which specific coach interventions and interpersonal behavior support different aspects of the working alliance (bonding, goal/task agreement) and the coach’s overall performance as assessed by senior members of the profession.

**Theory.** Our hypotheses regarding high-quality coaching conversations are based on social psychological and humanistic theories (interpersonal, client-centered), and earlier findings on coach behavior demonstrably related to coaching effectiveness (e.g. Ianiro et al., 2014). Additionally, we focus on specific coaching interventions that have either been put forward in standard coaching works (e.g., De Haan, 2008), or in recent systematic reviews on executive coaching (Bozer & Jones, 2018), or that are demonstrably effective, at least in the context of process-analytic counseling research (e.g., Klonek et al., 2020). We propose that a coach’s non-verbal dominance and friendliness, as well as “here-and-now”-interventions (addressing client’s thoughts, feelings, the current relation, disclosing own emotions), and supporting and challenging interventions (contracting, reflections, humor, appreciation, supportive and challenging feedback) are crucial for high-quality coaching conversations in terms of initiating a positive working alliance and overall coaching performance.

**Methodology.** The recorded sessions  $N = 90$  ( $N = 27$  online,  $N = 63$  face-to-face) each lasted 20 minutes and were part of a professional accreditation process for coaches at a British center for executive coaching. Four raters were trained in behavioural observation and the use of the Mangold INTERACT software until interrater reliability was reasonably high ( $\kappa = .74-.91$ ; ICC = .98). One rater duo focused on interventions. One rater pair focused on the coach’s interpersonal behavior, i.e., the duration of demonstrated dominance and affiliation. The other rater pair assessed the frequency of different coaching interventions (here-and-now, supporting and challenging). Additionally, the working alliance (WAI, Horvath & Greenberg’s, 1989) and coaching performance were assessed independently as quality criteria. The coaching performance score was assigned by accreditors. It was based on seven evaluation criteria (e.g. contract and boundaries) and included a questioning of the

coach after the session, the feedback from peer candidates and the perceptions of the client. We then investigated the link between the behavioural categories and coaching quality criteria.

**Results.** Regarding interpersonal behavior, the present study replicated earlier findings on the importance of coaches' dominance and friendliness: effective coaches tended to behave in a neutral to dominant manner and were friendlier – particularly during online coaching. With regard to the coaches' interventions, simple and complex reflections were found to be positively and significantly related to coaching performance. However, this did not apply to online coaching – here, negative effects of complex reflections occurred. The coaches' sense of humor made a difference, significantly predicting working alliance bonding and coaching performance. Taken together, relevant coach behavior predicted 29% of coaching performance.

**Limitations.** Although the behavioral data only concern a relatively small part of any coaching process, clear differences between coaches emerged. In addition, the recording situation differs somewhat from practice, as it took place within the framework of an accreditation process. This may have led to the coaches being more excited than usual.

**Conclusion.** We contribute to the existing coaching literature by providing empirical evidence on how to distinguish between effective and less effective executive coaches. The results can be used for an evidence-based and specific design of coaching trainings. They also offer starting points for practical coaches, who can orient themselves here on successful, experienced peers.

*Keywords: executive coaching, coach interventions and interpersonal behaviour, video-based process analysis*

## Oral presentation OP549

### Creation and validation of shortened, revised versions of a Polish mobbing test (SDM Questionnaire)

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science&practice

**Research goals:** This project's aim was to revise a Polish 64-item mobbing test (called SDM Questionnaire) to create and validate new, shortened and more economical versions of the test and prepare them for international mobbing research.

**Theoretical background :** The vast majority of mobbing studies have been conducted with the implementation of behavioural tests, like the internationally most recognizable bullying/mobbing tests, at the top of which are: the Negative Acts Questionnaire (NAQ/NAQ-R; Einarsen, Hoel & Notelaers, 2009) and the Leymann's Inventory of Psychological Terrorization (LIPT; Leymann, 1990, 1996). However, this kind of tools have some limitations. The most crucial of them is that they do not reflect sufficiently comprehensive, interactional mobbing models and mobbing definitional criteria; the behavioural methods neglect important indicators of mobbing experience: negative emotions, appraisals, and psycho-somatic symptoms. Interestingly, the Polish SDM mobbing test, which was developed in phases (since 2006) in reference to international mobbing literature (mostly Leymann's approach) and clinical work with mobbing victims, consists both of behavioural as well as of emotional, cognitive and psycho-somatic mobbing indicators. The Polish method, grounded in theory and clinical practice, reflects a more comprehensive, interactional mobbing model that served as the theoretical framework for the development of the test.

**Design/Methodology :** The basic, 64-item version of the SDM Questionnaire (Durniat, 2008; 2020) was used in a study conducted in 2022 on a heterogenous sample of 2500 Polish employees. The EFA, CFA, IRT, correlation, and regression analyses were conducted to revise the test structure, shorten the instrument, and examine the psychometric properties of the abbreviated versions of the test. The incremental and convergent validity of the new versions of the questionnaire was explored in relation to the NAQ-R and three self-report measures of job stressors: The Interpersonal Conflict at Work Scale (ICAWS), the Quantitative Workload Inventory (QWI), and the Organizational Constraints Scale (OCS) (Spector & Jex, 1998).

**Results :** The results of EFA and CFA indicate that the SDM test consists of three theoretically consistent factors indicating: (a) exposition to personal mobbing behaviours (called PMS), (b) exposition to work-related mobbing behaviours (called WMS), (c) experience of negative emotions, appraisals and psycho-somatic symptoms (called NES). Aiming to create a more parsimonious version of this instrument, three shortened versions were developed: (a) 38- item version (14 PMS+9 WMS+15 NES/respectively, Cronbach's  $\alpha$ : .945/.888/.956) (b) a 24-item version (8 PMS+8 WMS+8 NES, Cronbach's  $\alpha$ : .920/.880/.929), and (c)18-item version (6 PMS+6 WMS+6 NES, Cronbach's  $\alpha$ : .901/.855/.912). The factor structure of the new, revised versions of the SDM test was confirmed with an appropriate fit in confirmatory factor analysis: CFI = 0,911, TLI = 0,905, RMSEA = 0,06, SRMR = 0,037 for SDM 28-item version; CFI = 0,936, TLI = 0,924, RMSEA = 0,065, SRMR = 0,036 for SDM 24-item version and CFI = 0,935, TLI = 0,925, RMSEA = 0,074, SRMR = 0,039 for SDM 18-item version.

**Limitations :** The revised, shortened versions of the original Polish mobbing test were created and validated in specific Polish socio-organizational circumstances. To test the universality of the new, more advanced, and comprehensive approach to measuring and diagnosing mobbing further, international test adaptations, research, and validations are necessary.

Conclusions : The shortened versions of the SDM test are valid, reliable, and parsimonious yet comprehensive psychometric tools for measuring and diagnosing workplace mobbing.

Relevance: Given the presently dominating mobbing research methods, the original Polish mobbing tool offers an innovative and psychologically more comprehensive approach to measuring and diagnosing mobbing in the workplace. The SDM test reflects better than strictly behavioural questionnaires mobbing definition criteria and theoretical, interactional models of the mobbing phenomenon.

*Keywords: mobbing/bullying research methods, SDM Questionnaire, validation*

## Oral presentation OP644

### Critical incidents during the application process shaping the candidate experience

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science

Theoretical background. Prior research extensively studied candidates' reactions toward application procedures. Research shows that recruiter behavior, feedback, and reasons given for rejection, among others, are important in understanding candidates' behavior and explains why these reactions might occur (e.g., Applicant Attribution Reaction Theory: Ployhart & Harold, 2004; Fairness Theory: Gilliland, 1993). Yet, candidate reactions to these 'touchpoints' have been studied independent of one another. In reality, touchpoints do not occur in isolation. Scholars emphasize the need for a holistic view of the entire candidate journey and lasting experiences (McCarthy et al., 2017; Miles & McCamey, 2018).

This study examines candidates' overall experience with the recruitment process, and relates this experience to their wellbeing and decision-making. While approaching the overall experience as an unfolding process, we aim to gain insights into the mechanisms and crucial (although interrelated) touchpoints at play in its development. For that purpose, we combine theoretical insights from behavioral economics, cognitive psychology, marketing and organizational behavior in an attempt to understand the antecedents of this overall unfolding experience. This paper reports the results of a first, exploratory study in which we collect critical incidents during the application process. This approach allows us to identify experience-building events that are most influential in determining the overall candidate experience and might yield novel guidelines to optimize application procedures.

Methodology. The critical incident technique has been widely applied in organization studies and service marketing, and is considered a suitable method when a phenomenon lacks documentation (Gremler, 2004). Critical incidents are events of extreme (in)effective behavior with respect to the general aims of the activity (Flanagan, 1954) but can relate to anything of critical importance to the participant's context (Butterfield et al., 2005).

We collected critical incidents at three organizations (a governmental institution, a consumer brand, and a recruitment agency) for which all candidates received our survey upon completion of their application. Candidates were asked to think back about the most memorable moment (positive or negative) during the application process and how it made them feel. Next, they could provide a second incident of the opposite valence. Afterward, candidates rated their overall experience, attitudes and behavioral intentions. At the time of writing, we already gathered 145 critical incidents from 104 respondents who were accepted (14%), rejected (76%) or decided to withdraw from the application/job offer (10%). Respondents are between 21 and 66 years old ( $M = 37$ ,  $SD = 12.29$ ), and 81% is male.

We developed an initial candidate experience measure for the purpose of this research. Preliminary analyses indicate the reliability of this scale ( $\alpha = .89$ ) and the relevance of considering critical incidents as indicative of the overall experience. Data analysis followed a content analytic strategy during which the critical incidents were placed in categories that reflected practice (Flanagan, 1957). Subsequently, statistical analyses were performed on the outcomes of the incidents.

Results/Discussion/Implications. Results reveal the importance of timeliness and personalization of feedback and communication, followed by honesty, a supportive attitude, information sharing and

expertise of recruiters. These actions made candidates feel more 'comfortable' and 'relaxed' and were associated with powerful feelings of gratitude and appreciation (Kranzbühler et al., 2020).

The valence of the critical incident (0 = negative, 1 = positive) was significantly associated with the overall candidate experience ( $\beta = .468, p < .001$ ). There was also a significant positive effect of incident valence on candidates' wellbeing (i.e., perception of applying,  $\beta = .543, p < .001$ ; self-confidence to reapply,  $\beta = .506, p < .001$ ; general self-confidence,  $\beta = .499, p < .001$ ) and on perceptions of the employer brand (i.e., image of the employer,  $\beta = .555, p < .001$ ; image of the brand,  $\beta = .582, p < .001$ ).

In addition, we find age and gender to moderate the effects of valence of the incident on self-confidence of applying ( $\beta_{\text{age}} = -.540, p = .049$ ;  $\beta_{\text{gender}} = -.454, p = .021$ ) and general self-confidence ( $\beta_{\text{age}} = -.485, p = .079$ ;  $\beta_{\text{gender}} = -.392, p = .047$ ). In other words, positive critical incidents resulted in higher self-confidence for younger job candidates but less so for older candidates, and the valence of the incident had a stronger impact on women's self-confidence.

This study has uncovered critical touchpoints that affect candidates' overall experiences, highlighting what employers should devote additional attention to. Future research is needed to further deepen our understanding of how these touchpoints interrelate toward a holistic candidate experience.

*Keywords: candidate experience; candidate perceptions; applicant reactions*

## Oral presentation OP808

### Cross Cultural Differences in Net Promoter Score Feedback on Online Assessment Candidate Experience

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#### Introduction

Applicant reactions have gained relevance in personnel selection research and practice, with research indicating their relations to behaviors such as acceptance of job offers, as well as test and job performance (McCarthy et al., 2017).

With the adoption of online assessments increasing as technologies further develop, personnel selection processes are becoming more globalized, making cultural differences an important factor to consider in research and practice as they shape people's values and influence their behavior (e.g., Straub et al., 2002).

An initial search for literature revealed surprisingly sparse research on cross-cultural differences in the context of the candidate experience of online assessments. Much of the present research is thus of exploratory nature. Our goal is to gain a better understanding of possible associations between characteristics of online assessment processes and candidate experience across different cultures.

#### Methods

This study uses a dataset including 1,030,928 applicant reactions collected in 32 countries around the world, across 2837 assessment projects, each of them using different combinations of online assessment instruments from Aon Assessment Solutions' portfolio. Each country included between 888 (Israel) and 256,399 (U.S.A.) candidates.

We have included cultural dimensions scores at country level using archival data from Geert Hofstede's personal website (Hofstede, 2015).

Applicant reaction was operationalized as Net Promoter Score (NPS) (Reichheld, 2003; Crispin, 2014; Verhoeven, 2016, 2020). NPS captures the willingness to recommend potential employers based on experiences in a selection process as score between 1 to 10.

For each assessment project we extracted the following information: median time of completing the assessment (MT), number of ability tests (Ability), number of personality tests (Personality), number of integrity tests (Integrity), proportion of gamified assessments (PGA), and proportion of customized assessments (PCA).

#### Analysis and Results

Due to the complexity of the research questions, we used several different methods. A Mixed Linear Model (MLM) using assessment characteristics as fixed effect, country as random effect, and applicant reactions as dependent variable, showed significant positive effects of PCA (.13), Personality (.04), and PGA (.01), and significant negative effect of MT (-.03) and Integrity (-.01). The model was run again for each individual country, saving each equation coefficient. We correlated the coefficients with the cultural dimensions of the countries.

Secondly, we ran an MLM with cultural dimensions as fixed factors, Country as random factor, and Projects as random factors nested in Countries. We found a significant positive effect of uncertainty

avoidance (.03), a nearly significant negative effect of individualism (.08,  $p = .087$ ), and a negative, nonsignificant effect of long-term orientation (-.05,  $p = .21$ ).

Thirdly, we ran a moderation MLM where the cultural dimensions, the assessment characteristics, and their interactions are the fixed effects, the country level is the random effect and the candidate reaction is the outcome variable. We found positive significant effect for PCA (.13), a negative significant effect for median time (-.06), and significant negative moderation effects for indulgence and personality (-.05) and uncertainty avoidance and integrity (-.03).

#### Limitations and Further Research

One downside of the NPS as candidate reaction measurement is its use of a single question, which limits reliability. Future research should use more psychometrically sound measurements of applicant reactions (e.g. Patterson et al., 2011). Also, we did not use for this study other potentially relevant variables such as candidates' personalities, values, and score to the cognitive assessments.

Due to the way Aon's assessments are usually embedded in clients' selection processes and branded using a company logo and colors, candidates may be under the impression of communicating directly with the company they are applying to through the NPS comment field. Reviews of Aon NPS qualitative data have shown a small number of candidates using this comment field for self-promoting messages, predominantly provided alongside an NPS score of 10. It seems reasonable to assume this might have a small positively distorting effect on quantitative analyses of NPS scores in this study.

#### Conclusions

Cultural differences are important to consider in globalized personnel selection, extend well beyond simple translations of items, and have far-reaching implications for fairness, equal opportunities, and ethical HR-practices. While limited by the structure of the data, our analyses reaffirmed that candidate reactions depend on a variety of factors including cultural differences. Culture also influences the effect test characteristics have on candidate experience, suggesting that the culture-specificity of design decisions in assessment should be considered in international personnel selection. We hope to prompt and enable further research on candidate experience and the NPS-method in cross-cultural settings by highlighting various avenues that might be worth exploring in subsequent, more targeted studies.

*Keywords: Candidate Experience, Cultural Differences, Net Promoter Scores*

## Oral presentation OP441

### Cross-cultural validation and measurement invariance of the Short Grit scale (Grit-S): initial results

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science&practice

Research goals and why the work was worth doing

The present study aims to determine the validity, reliability, and measurement invariance across five European countries of the Short Grit Scale (Grit-S).

Theoretical background

Duckworth and Quinn (2009) elaborated the Short Grit Scale (Grit-S). According to the authors, grit comprises two separate, yet related dimensions: (a) perseverance of effort and (b) consistency of interest. The Grit-S measure is a short self-report scale that relies on a previous Grit scale, namely the Grit-Original scale (Duckworth et al., 2007, Grit-O) which has shown room for improvement. The Grit-S considers only 8 out of the Grit-O's 12 items that appeared to have the best overall predictive validity. The validation of the scale reported that the Short Grit Scale (Grit-S) improved psychometric properties if compared to the first original version (Grit-Original scale), with higher levels of internal consistency, test-retest stability, and predictive validity. Since that, Grit-S has been validated in different countries, yet the literature lacks cross-cultural validation.

Design/Methodology/Approach/Intervention

To determine the validity, reliability, and measurement variance of the Grit-S across countries, we gathered from previous international validations of the scale; Italy (n=235), Germany (n=350), Poland (n=570), Spain (n=1826), and the United Kingdom (n=264). A series of traditional confirmatory factor analyses (CFA) and less restrictive exploratory structural equation modelling (ESEM) models are used to determine the best factorial structure of the Grit-S Scale across countries.

Results obtained or expected (if not available, it must be made clear when they will be)

According to the literature, we expect results to show good reliability and validity indexes of the Short Grit Scale (Grit-S) across the nations we have considered. That is, a bifactor ESEM model, with one general factor of overall grit and two specific factors (i.e., consistency of interest and perseverance of effort).

Limitations

Limitations of the study can be reconducted to the fact that this study only includes European countries and therefore cultural differences among participants might be limited. Moreover, the scale was not compared to other scales measuring the same construct, which could have permitted the measurement of the discriminant component validity. In addition, individual differences such as age, gender, and social background had not been explored. It could be interesting, in the future, to investigate cultural differences in a wider range of countries including non-European, and to investigate whether demographic differences can have an impact on the validity of the scale. Moreover, it could be helpful to use another scale to compare the results, such as for example the previous version of the scale: the Grit-O Scale.

Conclusions – research and or practical implications/Originality/Value

The construct of grit has given proof to be a predictor of success in one's own personal and working life. Therefore, a valid instrument that measures grit in diverse cultural environments can be useful for academics and practitioners interested in such a positive construct. [FT1] What is more, the originality of this study lies in the fact that it is the first cross-cultural validation of the Short Grit Scale (Grit-S).

Relevant UN SDGs

Decent work and economic growth

*Keywords: grit assessment; cross-cultural validation*

## Oral presentation OP286

### CROSSOVER OF ENGAGEMENT AMONG ACADEMIC STAFF AND STUDENTS DURING COVID-19

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science

**Why the Work was Worth Doing:** Globally, the pandemic had adverse consequences on the work engagement and overall well-being of university academic staff that in turn may have adversely influenced university students' emotional engagement. This study explores the crossover of engagement from academic staff to students during times of disruptive change.

**Research Goals and Theoretical Background:** This study drew on the premises of crossover theory and Kahn's theory on personal engagement to explore engagement linkages among academic staff and students. Given that lecturers can be important role models to their students or serve as a salient example, the present study operationalised the leader-member exchange (LMX) theory as a process that underlay and explained the crossover of engagement from lecturer to the student. This study utilised interpersonal processes of social interaction and exchange, such as reciprocity, to explain the mechanisms that underlay the crossover of engagement from lecturers to students to vice versa. Subsequently, the study explored the positive outcomes of engagement for both academic staff and students.

**Design, Methodology, and Approach:** A purposive, non-probability sample was employed and a cross-sectional survey research design was used. The sample consisted of a total of 1 594 students who were nested within 160 academic staff members. The average cluster size was 9.9 members. Multilevel structural equation modelling was conducted.

**Results:** The study's findings revealed non-significant relationships for both the crossover relationships proposed between academic staff and students. Although the results did not reveal crossover effects from academic staff to students and vice versa, the findings highlighted the positive influence of interpersonal factors such as high student leader-member exchange among students on student engagement. Findings further highlighted the negative impact of students' lack of reciprocity on the emotional engagement of academic staff. In exploring the outcomes of engagement in a crossover setting, findings revealed that student engagement was positively related to a deep-learning approach, and negatively related to a surface-learning approach. This suggested that when students were engaged, they tended to be intrinsically motivated to understand the meaning of the material they studied, and not to follow rote learning strategies. Furthermore, this study found a positive significant association between emotional engagement and the psychological well-being of academic staff.

**Limitations:** This study employed a cross-sectional design and measured all variables using self-report instruments. Subsequently, the study was limited in terms of testing the causality underlying the research hypotheses and was subjected to the possibility of common method bias. The university lecture sample size was another limitation.

**Contribution, Implications, and Conclusion:** Through the use of theories on personal engagement, crossover, and the LMX theory, as a theoretical lens through which to conceptualise the lecturer-student relationship, this study answered the call of scholars to address the scarcity of studies investigating mutual influences between students and academic staff within HE. This study further addressed the scarcity of studies on the crossover of positive constructs. This study further built on previous studies that highlighted the positive outcomes of engagement by exploring these outcomes

in a crossover setting during the COVID-19 pandemic. The study's findings highlighted the importance of the lecturer–student exchange relationship in addressing engagement and well-being-related aspects in respect of academic staff and students. The study further highlighted that engagement played a key role in supporting psychological well-being among academic staff, and in fostering a deep approach to learning among students. Against the backdrop of the COVID-19 pandemic and the priority of employers to reduce the negative psychological and behavioural challenges resulting from this pandemic, the present research intended to inform policy-makers in higher education institutions on how to approach aspects such as the engagement of both academic staff and students in a holistic manner and as a core institutional strategy.

Relevance to the Congress Theme : In the context of the challenges that organisations world over experienced as a result of the pandemic, it seems imperative to better understand and improve engagement as a positive psychological construct. The present study advocated the need for educational institutions to recognise the importance of engagement and mutual influences among academic staff and students.

*Keywords: LMX-theory, reciprocity, well-being,*

## Oral presentation OP431

### **Cultivating Personal Growth Outside of Work: A Daily Investigation of Affiliation Resources Provided by the Leader and Nonwork Mastery**

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science&practice

**Purpose:** Mastery – the experience of personal growth during nonwork time – is a core recovery experience that emerges from off-job activities that include challenges and opportunities for learning (Sonnentag & Fritz, 2007). Despite the importance of mastery to day-to-day recovery, we know little regarding the day-level work-related antecedents of mastery experiences. Drawing on conservation of resources (COR) theory (Hobfoll, 1989) and resource exchange perspectives, this study aims to shed light on the role of affiliation resources provided by the leader (i.e., demonstrations of warmth, care, and positive regard) during the workday in promoting mastery during after-work time.

**Theoretical Background:** Based on COR theory, we propose that the affiliation resources provided by the leader during the workday will not in and of itself generate mastery experiences but rather serve to increase self-esteem and work engagement, which helps employees experience mastery during after-work time. Resource theory of social exchange (Foa & Foa, 1974), which suggest that people attribute more value to affiliation resources that they receive from someone with whom they have a high-quality relationship, allows us to identify leader-member exchange (LMX) quality as a boundary condition. Based on this idea of particularism, we argue that employees in high-quality LMX relationships benefit more from affiliation resources in terms of self-esteem and work engagement than do employees in low-quality LMX relationships.

**Design/Methodology:** We collected daily diary data from 198 employees (768 days), and we tested the proposed model using Bayesian multilevel path analysis.

**Findings:** The results showed that on days when employees perceived that their leader provided more affiliation resources, they reported higher levels of self-esteem and work engagement and, in turn, experienced higher levels of mastery during after-work time. Additionally, we found that LMX quality had a cross-level moderating effect on the relationship between day-specific affiliation resources and day-specific work engagement. Specifically, the indirect day-level relationship between affiliation resources and mastery via work engagement was stronger for employees with higher LMX quality.

**Limitations:** One limitation of this study is the correlational and self-reported nature of the data, which raises concerns regarding common method variance and reverse causality. Furthermore, we note that the high degree of work-related activation involved in work engagement might also interfere with nonwork experiences, and we recommend that future research examine other recovery experiences to explore potential adverse effects.

**Conclusions:** The findings of this study contribute to recovery research by identifying the day-level work-related factors and psychological processes that are associated with mastery during after-work time. By highlighting the interplay of day-specific resources and general perceptions of LMX quality, we advance the understanding of LMX as a dynamic phenomenon and provide a more nuanced understanding of the relative value of resources provided by the leader to employees.

Relevance to the Congress Theme and Contribution to the UN Sustainable Development Goals: In their 2030 Agenda for Sustainable Development, the United Nations Member States committed to work towards ensuring healthy lives and promoting well-being. With the adverse impact of the COVID-19 pandemic on the global workforce, the importance of this goal has even increased. Indeed, there is growing recognition that the future of work is through employee well-being. We believe that rethinking the role of organizations in improving employee well-being should move beyond employee optimal experience and functioning at work to place greater emphasis on the nonwork domain. Day-to-day recovery is a key factor in sustaining employee well-being. This work highlights that the provision of resources provides a promising avenue for organizations to improve employee recovery and well-being and sheds light on the important role of leaders in helping employees unwind from work.

*Keywords: resources, leader-member exchange, recovery*

## Oral presentation OP314

### Current and anticipated demands impact on work break behaviours: a field experiment

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science

#### Goals

The aim of this study is to examine how pre-break and anticipated post-break task characteristics influence work break behaviours, e.g., recovery, rumination. Knowing under which conditions workers will engage in different break behaviours can lead to a better understanding of the break process.

#### Background

Work break activities can be broadly divided into being mentally detached (i.e., relaxation) from and being mentally engaged (i.e., thinking about work) in work during breaks (Cropley & Zijlstra, 2011; Fritz et al., 2011). Break activities are important because they impact well-being and performance (Lyubykh et al., 2022; Vahle-Hinz et al., 2017). However, little is known about how task characteristics influence engaging in different break activities. We consider this an important omission because fit and recovery theories suggest that employees need to tailor their resting time to their demands to maximise recovery (de Jonge et al., 2012; Venz et al., 2019). Thus, we consider examining the impact of task demands on break crucial to further our understanding of break processes and to better develop break interventions.

Based on recovery research, we propose that pre-break task demands influence the type of activities employees engage in during their breaks. Specifically, employees who experience emotionally demanding tasks (i.e., experiencing unpleasant emotions while performing a task; Van Veldhoven & Meijman, 1994) should be more likely disengage from work during their breaks in ways that foster positive affect, such as relaxation, to improve their mood. Alternatively, experiencing negative affect usually narrows the attentional focus to the source of the negative affect (Hamesch et al., 2014). Thus, experiencing emotional demands before the break could also lead to ruminating about negative work events during the break. However, past research has argued that workers not only anticipate future job demands, but also prepare for them (G. Feldman & Hayes, 2005). Thus, in the same way pre-break task demands affect break activities, we argue that post-break task demands should also influence break behaviours. Specifically, employees anticipating cognitively demanding tasks (i.e., high levels of concentration and attentional focus; Van Veldhoven & Meijman, 1994) should be more likely to mentally engage in work in the form of anticipatory problem-solving pondering to pre-emptively reduce stress (M. S. Feldman & Worline, 2011). Thus, we argue that both experiencing and anticipating emotional and cognitive demands at work should influence what workers do during their breaks in terms of relaxation, rumination, and problem-solving pondering.

#### Design

We recruited 306 participants working full-time to conduct a field experiment involving two surveys: one immediately before any break and one immediately after that break. In the first, participants were randomly assigned to one of three groups that nudged participants to describe their current task (group 1), anticipated task (group 2), or general work (control group) in terms of dislike, cognitive demands, and emotional demands. In the second survey, participants reported the extent

to which they engaged in relaxation, problem-solving pondering, and affective rumination during the break. In this way, we were able to compare how focusing on pre- and post-break task characteristics influence what workers do during breaks.

### Results

As hypothesised, employees who completed emotionally demanding tasks were more likely to engage in affective rumination during the break. Further, employees who anticipated cognitively demanding tasks were more likely to engage in problem-solving pondering during the break. However, completing emotionally demanding tasks did not predict engaging in relaxation during the break, but performing a disliked task was.

### Limitations

The treatment is closely related to priming behaviours which has been critiqued for its low replicability. Thus, future studies should aim to manipulate task characteristics to have more internally valid results. Another limitation is the self-report nature of the scales.

### Conclusions

We conclude that pre-break and post-break task demands affect break activities. From a theoretical perspective, this study helps understand how workers can engage in different break activities depending on their job demands, and, to the best of our knowledge, this is the first study that addresses how anticipated demands can affect work breaks.

### Relevance

Workers are facing new demands based on the new post-pandemic world, and our work can be crucial to help employees rest. Specifically, we show that instead of adopting a 'one break fits all needs' approach, common in many break interventions (e.g., Schulz et al., 2017), we suggest understanding what workers require to feel better based on their demands.

### Relevant UN SDGs

The paper contributes to the UN SDGs by aiding our understanding of work breaks can contribute to 'Good Health and Well-Being'.

*Keywords: Work Breaks, Task Characteristics, Field Experiment*

## Oral presentation OP35

### Customized leadership practices: Do they work with Millennials?

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science&practice

#### Research Goals

The study focused on customized leadership practices – a new construct that refers to those practices that are most effective in managing a population with particular characteristics or a cohort - with reference to “millennials” or Generation Y (Gen-Y) that is people who were born from 1980 until the mid-1990s. The study was conducted in a national setting that is different from the “western” settings where most conceptual work on leadership has been conducted, but also from which most references to the Gen-Y are drawn. It took place in Romania where early millennials were socialized in the Soviet era, characterised by an egalitarian environment, marked by the utopic idea of a planned economy, scarcity, and an omnipresent totalitarian government. The fall of the communist regime in 1989 and the tumultuous years that followed saw young millennials growing in a struggling economy that transitioned from a socialist to a capitalist structure. These events mark a distinct experience, very different from that of the “western” Gen-Y ((Raiu, 2021; Shaw, 2018).

#### Theoretical background

Being one of the most delved into subjects, many theories to address best styles and practices of leadership have emerged. However, leadership is not static, it needs to evolve and adapt in line with cultural and societal changes (Anderson et al., 2017; Northouse, 2021). Generations are linked with different values, expectations and life views; hence, to optimize the effectiveness of leadership practices it is necessary to understand the values, motives, and stances to life of each generation (Graybill, 2014; Omilion-Hodges & Sugg, 2019). Gen-Y already compose a large part of the work force, and they will become the dominant workplace generation in the years to come. Evidence suggests that no major leadership approach fits into the leadership preferences of Gen-Y (Graybill, 2014; Putriastuti & Stasi, 2019). Consequently, authors recommend combining elements of various leadership approaches along with translating generational characteristics into leadership traits and styles in order to find the optimal approach to leading Gen-Y (Farhan, 2021; Putriastuti & Stasi, 2019). In the present work, therefore, we considered customized leadership practices as those leadership approaches that are most effective in managing Gen-Y professionals. Farhan (2021) developed a comprehensive such framework by means of identifying extant approaches that matched best with the values, habits and expectations of Gen-Y: servant-tolerant, authentic-stringent, and ethical-tournament.

The aim of the study was to test the validity of the customized leadership practices (as above) using the Romanian Gen-Y as reference. It did so by testing their relationships with key work attitudes and outcomes. Additionally, the study aimed at identifying whether Gen-Y favours any leadership practice in particular.

#### Method

The setting was the Romanian software industry, and participants were 256 Gen-Y software developers (out of the 320 respondents who provided valid responses, the rest did not belong to Gen-Y) from 11 companies that are active the software business in the Cluj-Napoca area, the second

largest metropolitan area of Romania. Data were collected using validated scales that were made available in both Romanian and English (the original) language.

### Results

Results showed a strong relationship between the total customized leadership practices with all outcomes (employee engagement, workplace well-being, job performance and turnover intentions) in Gen-Y participants (range of explained variance 26% - 37% beyond the controls). These relationships (amounts of variance) were stronger than the corresponding relationships for the non-Gen-Y participants. Each of the three leadership practices (servant-tolerant, authentic-stringent, and ethical-tournament) was significantly related with all outcomes. Of the three practices, it was the authentic-stringent that showed the strongest relationships with outcomes, alluding to the fact that this may be the preferable leadership approach for these Gen-Y representatives.

### Limitations

The study was conducted within a particular culture, hence, generation to Gen-Y globally must be avoided at this stage. Furthermore, due to the design, definite conclusions about causality cannot be made.

### Conclusions

The results attest to the validity of the customized leadership practices approach. This is one of the first studies to test this approach with respect to the Gen-Y generation. Furthermore, conducting the study in a country with a different historical course than “mainstream” countries addresses one of the limitations of generational theory (Parry, 2011; Rauvola et al., 2018).

### Relevance to the Congress Theme

The submission is suggestive of the need to adapt our leadership style to the characteristics of each generation; hence, it is highly pertinent to the Congress theme: The future is now: The changing world of work.

*Keywords: customized leadership; work well-being; generations*

## Oral presentation OP332

### **Daily recovery and performance outcomes in academia: The mediating role of work engagement and the moderating role of perceived supervisor support**

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science

**Research goals and why the work was worth doing:** In this diary study we focused on academics with the aim to investigate the role of state of recovery in the morning for daily task performance and organizational citizenship behavior (OCB) towards colleagues and students, through work engagement. We also aimed to examine whether these mediating effects depend on perceived supervisor support (PSS). In this way, this study contributes to the literature in the following ways. First, we add to the literature on the beneficial effects of recovery for work engagement and, in turn, performance-related outcomes for the specific occupational group of academics, who find it hard to recover due to the nature of their work. Next, we investigate whether PSS can act as an additional resource for academics that may determine when recovery is more likely to bring beneficial outcomes. Last, we extend existing literature on the context-specific performance-related outcomes of work engagement for academics, namely organizational citizenship behavior towards colleagues and students.

**Theoretical background:** In congruence with COR theory, we hypothesized that academics' state of recovery in the morning will relate positively to work engagement because state of recovery indicates availability of resources that may be invested at work. In turn, work engagement will have a positive association with task performance, OCB towards colleagues and OCB towards students as academics who demonstrate high levels of work engagement reinvest their resources to achieve higher performance-related outcomes. Furthermore, we hypothesized that PSS offers a surplus of resources which can boost the positive impact of state of recovery on work engagement and the latter's positive effect on performance-related outcomes, namely task performance, OCB towards colleagues, and OCB towards students.

**Methodology:** Our study focused on academics from a Greek university, who were invited to participate via the university's e-mailing list. Those who expressed interest in participating, first, completed a general questionnaire concerning their demographics and perceived supervisor support. Then, participants were asked to fill in an electronic diary for five consecutive workdays, twice a day: In total, 36 academics (46% men) participated in the diary study. Most participants (40%) were Full Professors.

**Results:** Multilevel analyses did not support the positive relationship between state of recovery in the morning and work engagement during work. However, PSS was found to moderate this relationship. Specifically, the relationship between state of recovery and work engagement was positive and significant only for higher levels of PSS and non-significant for lower levels of PSS. Furthermore, work engagement was found to related positively with task performance and OCB towards students but it was unrelated with OCB towards colleagues. PSS was not found to moderate these relationships. Finally, the Monte Carlo Method for assessing mediation showed that state of recovery related positively and indirectly with task performance and OCB towards students via work engagement but only for those academics perceiving higher levels of PSS.

**Limitations:** The small sample size and use of self-report data only are important study limitations.

Conclusions: The results of the current study are relevant for theory and organizational practice because they highlight the role of PSS as a boundary condition that determines when state of recovery may translate into higher work engagement and better performance at work. Our findings show that a supportive supervisor is necessary in order for successful recovery to facilitate optimal functioning at work on a daily basis.

Relevance to Congress Theme: Our study demonstrates relevance to the Congress Theme because examining academics' state of recovery affects performance-related outcomes.

Relevant UN SDGs: The area of this study is relevant to the Sustainable Development Goals of the United Nations because it demonstrates ways in which academics can promote their well-being.

*Keywords: State of recovery, performance outcomes, moderated mediation*

## Oral presentation OP792

### **Daredevils in Suits? The Relationship of Managers' and Employees' Risk Preference Profiles with Gender and Social Class**

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science

Individual risk preferences play a crucial role in managerial decision-making. Thus, knowledge of valid measures and correlates of risk preferences is important.

While research, in general, has found that women are more risk averse than men (e.g. Croson & Gneezy, 2009), some research findings indicate different patterns of gender differences in risk preferences of managers and employees without managerial responsibility. Johnson and Powell (1994) found no differences in risk-taking behaviour of male and female manager, but found gender differences in a non-managerial population. Adams and Funk (2012) found that female managers showed more risk-loving behaviour than male managers. Research on social class in organizations, e.g. managers, and on social class and risk preferences is emerging but still at the beginning (Kish-Gephart et al., 2022). The first findings indicate that an executive's social class origins affect their risk preferences (Kish-Gephart & Campbell, 2015).

This study investigates how gender and social class as demographic characteristics relate to the risk preference of managers in comparison to employees. More specifically, it incorporates a comprehensive view of risk preferences based on the psychological risk-return framework. This framework proposes domain-specificity of risk preferences (financial, social, recreational, health, ethical) (Blais & Weber, 2006; Weber et al., 2002). Based on the framework, Frey et al. (2020) developed a typology of four risk preference profiles: the "cautious", the "recreational adventurers", "the financial gamblers", and the "daredevils".

The current study investigates whether similar profiles are found in a population of German managers and employees. Data were collected in November and December 2020 using an online survey via a panel provider (N = 652). Individual risk preferences in the domains of finance, social, recreational, health, career, and driving and a general factor of risk preference (Frey et al., 2017; Highhouse et al., 2017) were measured using single items (Dohmen et al., 2005). Participants indicated their gender, age, managerial responsibility, and social class as education of the parents (UNESCO Institute for Statistics, 2012). Latent Profile Analysis and a 3-step ML auxiliary variable integration approach (Garber, 2021) were used to estimate the risk preference profiles and the relation to covariates separately for an employee (N = 437) and a managerial (N= 215) subpopulation.

The results of the data analysis are preliminary. Fit indices and theoretical reasoning suggest a model with four profiles. Results indicate two similar profiles for the managerial and employee subsample: one profile with overall low risk preferences termed the "cautious" (28.88% of the managers; 21.97% of the employees), and one profile with overall high risk preferences, termed the "daredevils" (18.55% of the managers; 4.37% of the employees). In the employee subsample, the third profile with overall slightly higher risk preferences than the "cautious" is called the "moderates" (41.58%). The fourth profile, "the recreational adventurers" (32.08%) has overall slightly higher risk preferences than the "moderates", with the highest being recreational and general risk preferences. In the managerial subsample, the third profile shows low risk preferences for driving and health but high on everything else ("health cautious", 27.76%). The fourth profile shows in general medium but slightly higher health and lower financial risk preferences ("moderates", 29.81%).

Analyses of covariates indicate that in comparison to all other profiles, the “cautious” are significantly more likely to be female (except in comparison to “moderate” employees). “Daredevil” managers are significantly more likely to have a father with higher education. Employee “recreational adventurers” and “daredevils” are more likely to be male and younger than the “cautious” employees.

The main limitation is the small sample size (Nylund et al., 2007). In a follow-up study, conducted until the conference, data from the SOEP will be used to replicate the risk profiles within a larger, population-representative sample and test whether the profiles are stable over multiple time points, also to account for possible COVID-19-related effects.

Overall, the current study underscores the need of investigating managerial risk-taking in comparison to employees. Gender differences in risk profiles seem to be quite stable across subpopulations. Further, paternal education can affect managerial risk preferences.

The research relates to the congress theme as it investigates who and how is making relevant business decisions that will impact our work life in the future. It is relevant to the UN SDG of decent work and economic growth by contributing to the understanding of the individual characteristics which influence managerial decision-making.

*Keywords: Risk preference, Managers, Gender*

## Oral presentation OP38

### Dark side of top-management communication: ideologies, biases corruptions, distortions, mistrust

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**Problem setting:** At the beginning, entrepreneur (initiator-owner) creates his own concept of organization – value-cognitive-actional pattern, which is socialized, coming into conflict with top-manager's and manager's (senior staff) individual interests (moral disengagement, A. Bandura). For this purpose, they use various distortion styles of organizational reality (K.Weick) in their interpretations of values, cognitions and actions, thereby destroying organizational productivity.

**Purpose:** To explore wide-spread distortion styles in interpretations of organizational reality (with top-manager's and manager's (senior staff) ).

**Method:** we obtained 95 organisational self-descriptions from top-manager's and manager's (senior staff)(A.Kiezer)of companies (numbering 50-1500 workers) and classified them (key topics, actors, intention). Then we discovered interpretation styles in this organisational self-descriptions and have grouped them according to a specially developed hierarchical model of organisational self-descriptions on several levels (formal: procedures and rules of behavior; content (statics: objects, agents and their attributes; dynamics: processes, algorithms and technologies); sense-logical: purposes, causes, values and beliefs).

**Results :** We identified among top-manager's and manager's (senior staff) the following distortion styles of the entrepreneur's value- cognitive-actional pattern: Procedural (formal) - formal following of rules, norms, instructions, personnel follows formal rules. Authoritarian (static) – the power of guarantor, authority and enactor of rules; personnel is obedient and loyal. Participative (dynamic) – interaction, rules and hierarchies are the result of negotiations; the head of organisation is a moderator; personnel is a part in negotiations.

**Conclusions:** Destructive distortion styles of top-manager's and manager's (senior staff) interpretations lead organizations to: Moral disengagement – avoidance of values in relationships, decisions and actions. Guilt instead of responsibility – feeling guilt or self-justification. Closed mindedness – insisting on one's own vision and ignoring environmental feedback.

*Keywords: mistrust, values, organisational culture*

## Oral presentation OP249

### **Daydreaming at work: An experience sampling study of the frequency, content and characteristics of mind-wandering**

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science

Research goals and why the work was worth doing:

Daydreaming or Mind-wandering describes thoughts that are unrelated to our immediate environment or task. Research on mind-wandering while working is emerging, but we currently know relatively little about what people mind-wander about (contents of mind-wandering) and the characteristics of mind-wandering, such as its intentionality and temporal orientation. The goal of the present study is to shed light on the contents and characteristics of mind-wandering at work, when compared to focused thoughts at work and to mind-wandering outside of work. Greater insight into the contents and characteristics of mind-wandering is important because scholars have just started to discuss the consequences of mind-wandering on our productivity and creativity, but not all types of mind-wandering may have the same implications.

Theoretical background:

While there is consensus on the detrimental effects of mind-wandering for attentional demanding tasks (e.g., supervising processes or driving) (Smallwood & Schooler, 2015), the idea that mind-wandering could benefit performance in, for example, creative tasks has begun to flourish (Dane, 2018). Arguably, the effects of mind-wandering depend not only on the task at hand but also on the characteristics and content of the ongoing thought. For example, it is known that unintentional mind-wandering is associated with diminished performance on memory tasks, while intentional mind-wandering is not (Seli et al., 2017). However, to the best of our knowledge, no study has previously described, in a naturalistic scenario, the nature and characteristics of our mind-wandering when working. Therefore, and taking into account the suggestions of Eronen and Bringmann (2021), to better understand the consequences of mind-wandering for work and develop theoretical models around it, we conducted this study to understand how mind-wandering takes place while people are working.

Design/Methodology/Approach/Intervention:

In this exploratory study, through experience sampling methodology (five consecutive days, three times a day), we asked 131 workers about the contents and characteristics (intentionality and temporal orientation) of their current thoughts while working and when doing other activities.

Results obtained:

We used inductive content analysis to derive categories or emergent themes from people's responses (Hsieh & Shannon, 2005). We found that most thoughts reported were about current concerns (e.g., work, food, health and well-being etc.). Using logistic regression, we found that people mind-wander less while working and more unintentionally than they do while not working, but they also mind-wander about work more than any other content. Also, mind-wandering thoughts are very similar in content to focused thoughts when people are not working. However, focused thoughts at work are notably different in content and characteristics from mind-wandering thoughts.

#### Limitations:

While this study has many strengths (e.g., using experience sampling and allowing people to describe their thoughts instead of imposing categories), it also has some weaknesses. For example, we got much fewer responses when people were working, perhaps because of the burden on participants' time due to having to write about the contents of their thoughts. Future studies could include other ways to acquire data, like using voice-recorded messages.

#### Conclusions – research and or practical implications/Originality/Value:

We conclude that the context (i.e., working vs not working) exerts noticeable influences on the nature of people's thoughts. It seems that people are able to regulate the frequency and characteristics of their thoughts depending on their surroundings. People report fewer instances of mind-wandering when working but also having more unintentional mind-wandering thoughts at work than outside of it. These findings are relevant because they tell us that mind-wandering varies significantly at the individual level and is mainly associated with current concerns. Future models about mind-wandering should consider concomitant variables like self-regulatory abilities and measures of current concerns.

#### Relevance to the Congress Theme:

Considering the propositions of Weiss and Rupp (2015), we believe that it is critical for the future of our discipline, taking into account the experience of workers. While part of our most intimate experience, the stream of consciousness has been mostly neglected in the organisational literature. This study highlights the importance of considering the subjective experience of working, which is pivotal in order to develop future sound theories that enable us to understand the relationship between people at work and their changing environment.

*Keywords: Personality and emotions, Well-being, Work patterns and conditions*

## Oral presentation OP521

### Demographic change in companies: Encouraging age diversity to benefit businesses - A Practice Report on an Austria-wide project

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practice

Research goals and why the work was worth doing

As the population ages, and people are required to work for longer, a consulting project, funded by European Social Fund and the Austria Federal Ministry for Labour, is making it easier for Austrian companies to attract and retain staff, by helping them to create better working environments for everyone. Over the course of 5 years (2017-2022) 1800 companies in Austria took part in the consulting program. The aim is to maintain long term employment, high performance across all age groups and recognize demographic change and use its potential to an advantage over the long term.

Theoretical background

Throughout Austria and Europe, the retirement age is elevated, which means that working lifetime will be extended and companies as well as employees have to take actions to retain workability and performance. Demographic change and specifically the lack of utilisation of the labour potential of older people in Austria have a major impact on the constantly changing labour market. Accordingly, the last 10 years the employment rate of 15-24 year olds decreased by 2.3% (up to 10.7%), while the number of over 55 year olds increased from 10.1% to 16.1% (Statistik Austria, 2021). Possible illnesses and a lack of suitable jobs, as well as the strong trend towards digitalization, also make it difficult for older people to keep up with the increased flexibility requirements and the constant new training requirements (Eur-Lex, 2022; Leoni, & Thomas, 2018). In this context, preventive measures need to be taken such as age(ing)-appropriate work conditions to maintain employees' ability to work.

Design/Methodology/Approach/Intervention

To address the issue of demographic change the project was created to prepare companies to overcome the future challenges like shortage of skilled workers, a lack of knowledge transfer, a greater number of retirements in the future and lack of age-appropriated and lifecycle-oriented working conditions and in the need of prevention of illnesses caused by workloads.

Together with companies from various sectors and of different sizes, instruments were developed, tested and tailored in order to raise awareness of the challenges of demographic change and to identify possible solutions in the areas of: Work design, human resources management, knowledge management, leadership and health. These experiences were shared in inter-company practical forums and information events in order to sensitize other companies. Tools such as reverse mentoring, age-appropriate workplace maps and job crafting were tailored together with the companies to strengthen the path to a change-resilient organization.

Results obtained or expected

In a survey conducted after the end of the program (N= 622) the results show a very high level of satisfaction with the consulting services, a significantly increased awareness of demographic change

and significant improvements of the possibilities for adapting jobs and the conditions for ageing-appropriate working.

#### Limitations

Evaluation of the program didn't include pre-measures and therefore no casual conclusions on the effect of the program can be drawn. Data was obtained through self-reports which may have caused common method bias.

#### Implications for research and practice

The program developed tools for companies to face the challenges of demographic change and age-appropriate work. On the one hand, we would like to address practitioners who are looking for impulses on the topic of demographic change for their consulting practice and share our lessons learned. On the other hand, we would like to encourage researchers to integrate these experiences from practice into their research for systematical exploration further how age-appropriate work can be achieved.

#### Originality & value

Demographic change is one of the challenges of our time. The noticeable effects on society and labor market are undisputed. The project shows a variety of practical solutions based on application-oriented tools, an agile approach in the development of these tools and possibilities to sensitize companies. It follows two principles: Sustainability and applicability. Companies are empowered to meet challenges on their own challenges at an early stage and to act effectively in the long term in order to remain agile and competitive.

#### Relevance to the Congress Theme

The topic of demographic change needs to be considered when we talk about the changing world of work. Actions need to be taken sooner rather than later to deal with certain issues. Through our practical insights we give valuable information how to address challenges and handle the demographic change in companies.

*Keywords: demographic change, age-appropriate work*

## Oral presentation OP373

### **Designing Decent Human-Machine-Systems: Experimenting with Human Characteristics and Facilitating Conditions in a High Job Decision Latitude Context**

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science

#### Research goals

For more than half a century, ‘job decision latitude’ – the number of decision-making opportunities workers have to design their work – was considered a job resource workers could not get enough of, according to work- and sociotechnical systems designers. Recently, an increasing amount of evidence indicates that workers can be burdened by too many job decision latitudes, leading to stress or even burnout due to suboptimal work design.

Scholars noted that each job decision latitude requires workers to master certain capabilities (i.e., knowledge, skills, and attitudes) before constructive work design decisions can be made. Furthermore, workers’ stance towards their own capabilities (i.e., self-efficacy), uncertainty (i.e., entrepreneurial mindset), and technology (i.e., user intention) tend to be relevant characteristics too.

We built further on this reasoning and propose that the concept of ‘facilitating conditions’ – the organizational and technical infrastructures to support the use of a system – could enable workers to leverage their job decision latitudes more constructively when lacking the required characteristics. We consider the design of a highly interdependent human-machine-system to be a constructive use of job decision latitudes by workers. In such a system, workers use the machine to acquire necessary, reliability-enhancing, and/or efficiency-enhancing task support. We aimed to uncover which combinations of human characteristics and facilitating conditions relate to highly interdependent human-machine-systems.

#### Design

We used an experimental design since it provided a controlled method, allowing us to uncover how specific sets of conditions related to their outcome. In the experiment, subjects participated in a simulated bin-picking activity. Their goal was to accurately gather materials at a sustainable pace. All subjects worked in two simulations: a manual simulation and a collaborative simulation. In the manual simulation, subjects completed the orders by themselves. In the collaborative simulation, subjects could use a pre-programmed collaborative robot arm (cobot). All subjects were provided with high job decision latitude, allowing them to choose from nine cobot applications and fully control the cobot’s speed. Subjects were encouraged to use the cobot if it would support their goal achievement.

We adopted a 2x2 design, comprising two levels of education and two types of facilitating conditions. Level of education consisted of secondary vocational education and professional education. Facilitating conditions were either present or absent and ascribed randomly. Only subjects with facilitating conditions were provided with scripted design advice and technical support. We included 50 students enrolled in a technical vocational education track and 50 students enrolled in a professional education track that either had a technical profile and/or educated students on how to design decent work systems. The sample was appropriate since it comprised individuals with exclusive educational backgrounds and, assumably, different characteristics, allowing us to test our configurational causality.

The simulations were videotaped and validated questionnaires were administered to estimate subjects': self-efficacy, entrepreneurial mindset, and user intention. Time logs are currently being created and will be inserted in an interdependence calculation tool. Between and within-group differences are to be calculated and by using fuzzy qualitative comparative analysis, necessary and sufficient conditions are to be uncovered.

#### Results, Limitations, Conclusions

Given that we are currently running our experiment, we are confident that we can present our results, limitations, and conclusions during the EAWOP congress in May. Irrespective of the experiment's outcomes, it provides an innovative perspective on worker involvement in the design of human-machine systems. Furthermore, this contribution could provide practitioners, such as Human Resource professionals and line managers, with specific recommendations on how to manage high job decision latitude at an operational level.

#### Relevance to the Congress Theme

Our contribution is highly relevant to the Congress Theme "The Future is Now: the changing world of work" since it studies the prerequisites for workers to flourish in a state-of-the-art human-machine-system. Our study relates to recent contributions about the negative side effects of high job decision latitude. Sound conceptualizations and validated instruments from a broad range of literature streams, including applied psychology, are used in our experiment design. We also respond to a growing call for research studying the design principles of socio-technical systems, such as high job decision latitude, in modern work contexts.

#### Relevant UN SDGs

The outcomes are relevant to help safeguard decent work and economic growth (UN SDG 8) and pertain to fostering responsible consumption and production (UN SDG 12).

*Keywords: Human-Machine-Systems; Socio-technical Systems; Experimental Design*

## Oral presentation OP341

### Detecting Faking On Personality Inventories Using Machine Learning Algorithms

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science

Theoretical background & research goals. Self-report personality inventories are a popular assessment tool for personnel selection. However, their vulnerability to faking threatens the validity of the selection decisions made based on these inventories (Donovan et al., 2014; Mueller-Hanson et al., 2003). Faking is defined as distorting one's answers to provide a more favourable image in order to obtain a desired outcome (Fell & Konig, 2016; Griffith & Robie, 2013; Ziegler et al., 2011). Various approaches have been proposed to identify faking, including the use of social desirability scales and within-person correlations. Most of these methods assume that faking is largely uniform across items (Burns & Christiansen, 2011). However, theoretical models and recent findings suggest that faking is an item-based decision process dependent on perceived item characteristics (Goffin & Boyd, 2009), resulting in heterogeneous responses across items (Krammer et al., 2019; Holden & Marjanovic, 2021). In this light, machine learning (ML) approaches may offer new possibilities. ML algorithms make no theoretical assumptions about faking behaviour, can model non-linear relationships (Marsland, 2014), and may therefore be better suited for the heterogeneous nature of faking.

In two instructed faking studies, ML approaches showed promise for faking detection (Calanna et al., 2019; Mazza et al., 2019). However, methodological limitations of these studies limits the generalizability of these findings. In addition, the ML algorithms were compared to one another, not to multiple traditional indices of faking. Clearly, more research is needed to evaluate the utility of ML algorithms. Therefore, in this study, we compare the accuracy of various ML algorithms to multiple traditional indices in the detection of faking on the HEXACO personality inventory (Lee & Ashton, 2018) and the Work-related Personality Inventory (WPI; Rusthoven et al., 2012).

Methodology. The accuracy of the ML algorithms and traditional techniques will be compared for both personality inventories across three data sources: 1) in independent test sets of Monte Carlo simulations; 2) in instructed faking data (intended N =500); 3) in job applicants and non-applicants data from Anglim et al. (2017; N =3226) and test publisher Ixly ( N =8882). In the Monte Carlo simulations, responses on the HEXACO ( N =3226) and WPI ( N =8882) are simulated for  $4 \times 3 \times 3 = 36$  (1000 replications) faking conditions that differ in faking prevalence, magnitude and variability. A unique feature of these simulations is that the faking probability will depend on the item-level social desirability. ML algorithms including Extreme Gradient Boosting (XGBoost) will be trained and cross-validated on these simulated item responses. The accuracy of ML algorithms is compared to traditional faking detection methods, e.g., social desirability index (SDI; Konstabel et al., 2006), standard error of measurement band (SEM; Griffith et al., 2007) and blatant extreme responding (BER; Landers et al., 2011).

Preliminary results. Preliminary analyses were conducted for four HEXACO simulation conditions (100 replications each) for a subset of the detection techniques. When the faking prevalence was low, the XGBoost ML algorithm performance was equal to or slightly less than the performance of traditional methods SDI, SEM and BER. In contrast, the ML algorithm outperformed these traditional methods when faking prevalence and magnitude were both high.

Limitations . The ML algorithms were trained on HEXACO and WPI responses; therefore, these results may not generalize to other personality inventories. Furthermore, in the job applicant sample the prediction accuracy of ML algorithms vs traditional techniques cannot be evaluated since the true prevalence of faking is unknown.

Conclusions. These preliminary results suggest that ML algorithms can compete with traditional methods in the detection of faking on personality inventories. Therefore, ML algorithms could be valuable in improving the detection methods for faking in personnel selection practices. The current study contributes to the literature by evaluating the performance of multiple ML algorithms and traditional techniques in the detection of faking across diverse datasets. Hence, the present study provides unique insights into the generalizability of ML algorithms for faking detection.

Relevance. This paper is highly relevant to the conference theme, as it ties in with recent trends in selection and assessment of applying artificial intelligence, such as ML algorithms, in selection procedures. The current study could be relevant for the SDG 'Decent work and economic growth'. By exploring the utility of novel ML techniques for the detection of faking within personnel selection, this study could contribute to improving person-job fit by safeguarding the validity of self-report personality inventories and the selection decisions made based on these inventories.

*Keywords: Faking, Personality, Machine Learning*

## Oral presentation OP208

### Determinants of creative thinking of IT employees in the light of empirical research

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science

We are functioning in the era of the fourth industrial revolution, and this means advanced technological transformations in almost all areas of life. Organisations that use Industry 4.0 solutions rely on innovation and entrepreneurship. In this way, they seek to build their competitive advantage. There would be no innovation by companies without the creative behaviour or creative thinking of employees, which is why they have become the subject of research. In the literature, many researchers have dealt with identifying and describing creative personality traits (e.g. Rogers, Maslow). This study not only looks for personality conditions, but also situational ones, as in interactional concepts of creativity, its context plays an important role.

Therefore, the aim of the analyses was to find out what determines creative thinking, and the group involved in the research process was IT employees, specifically programmers. Their work is strongly based on creative thinking when they write code, plan, anticipate the effects of their actions, and look for out-of-the-box solutions. Identifying personality factors in interaction with contextual ones can significantly enhance or inhibit creative thinking in organisations, not only high-tech, but in general all companies concerned with their competitiveness. As a result, the knowledge gained can be translated into training programmes addressed to individuals who wish to develop their creative potential; on the other hand, it can create an organisational culture conducive to innovation. The concept of creative thinking was defined with reference to Urban's concept of creativity. In turn, the personality conditions were described using Costa and McCrae's five-factor model of personality, and environmental conditions – Kolb's organisational climate approach.

The group of 224 programmers participated in the study and were asked to complete the following research tools with validated psychometric properties: Urban and Jellen's Test for Creative Thinking – Drawing Performance, Costa and McCrae's NEO-FFI Personality Inventory, and Kolb's Organisational Climate Questionnaire. The survey was conducted using the snowball method and was based on direct contact with programmers. The choice of this group was dictated by the specific nature of their work and related competences. The subjects, after giving their consent, left completed questionnaires in sealed envelopes, which were systematically collected by the researcher. The procedure was carried out in accordance with the principles of the Declaration of Helsinki. Respondents were informed that their participation was voluntary. They were given full information about the purpose and conduct of the study. They were assured of anonymity and that the results would only be used for group analyses.

As it was expected, the results indicated associations of creative thinking with openness to experience, conscientiousness and agreeableness. Moreover, the autocratic climate undermined the creative thinking of the programmers, for whom it appeared important to work with the possibility of independent decision-making and good social relations. The most important achievement, however, was the determination that only the joint consideration of personality traits with situational dimensions yielded the best results in explaining the variability in programmers' creative thinking. In an attempt to look at the results obtained, it should be noted that openness to experience is mentioned as a major component of creativity. Regarding the negative association of conscientiousness with creative thinking, the answer should be sought in its characteristics. Personality determinants complement the two dimensions of organisational climate. Programmers

emphasise the importance of a climate that supports effective creative work in the form of encouraging participation in challenging tasks and projects, maintaining high standards of work. An important role is played by management. The inclusion of gender deepened the analyses. This is because the list of determinants of creative thinking of female and male programmers contains certain determinants in common; others are indicated only by one group studied. Accordingly, the 'gender-universal' creativity simulators were openness to experience and conscientiousness, indicating that these are subjective traits common to people of different cultures or professions. Differences emerge at the level of situational conditioning of creative thinking.

The knowledge gained can be translated into training programmes addressed to people who wish to develop their creative potential; on the other hand, it can create an innovation-friendly organisational culture. As for the limitations and future directions of the research, it should be noted that the whole procedure is correlational in nature, without a control group, and it is reasonable in this case to speak of relationships, explanation rather than determination.

*Keywords: creative thinking, personality, organisational climate, programmers, gender*

## Oral presentation OP487

### **Determinants of networking behaviors: Subjective norms and self-efficacy are more important than attitudes toward networking.**

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science

Research goals and why the work was worth doing

Research into the determinants of networking behaviors is important to identify levers to support people in developing and increasing their networking behaviors. In this research we seek to provide a broader coverage of malleable determinants of networking behaviors using a theory of planned behavior (TPB, e.g., Ajzen, 1991) lens. We expand prior research on attitudes towards networking (e.g., Kuwabara et al., 2020) and examine the full TPB model including subjective norms (SN) and perceived behavioral control (PBC) as additional determinants and intentions as a mediator.

Theoretical background

Networking is an important career self-management strategy that is associated with subjective as well as objective career success. While many studies have focused on personality traits as determinants of networking, scholars have recently turned to examine more malleable determinants. For example, Kuwabara et al. (2020) showed that attitudes toward networking play an important role in explaining people's beliefs about networking. However, studies across a wide range of behavioral domains have shown that next to attitudes, subjective norms and perceived behavioral control are important determinants of behavioral intentions and behaviors. We hypothesize that all three constructs positively determine networking and examine whether they differ in their relative importance.

Design/Methodology/Approach/Intervention

We recruited a sample of N = 340 working individuals for a two-wave longitudinal study. We assessed predictors (attitudes, SN, PBC) and intentions at the first wave. Three months later we assessed networking behaviors as our primary dependent variable at Wave 2. All constructs were measured using multi-item scales with adequate internal consistency (i.e.,  $\alpha > .90$ ).

The study design and hypotheses were preregistered at [https://osf.io/7tbpw/?view\\_only=e3f20e32680b429e88545c149c5ad865](https://osf.io/7tbpw/?view_only=e3f20e32680b429e88545c149c5ad865). We limit the focus of this conference presentation to a subset of these hypotheses.

Results obtained or expected (if not available, it must be made clear when they will be):

While all three TPB constructs exhibit significant bivariate correlations with networking intentions and behaviors, multiple regressions indicate significant effects of SN and PBC, but not attitudes. Relative weights (RW) analyses further corroborate this finding: Subjective norms (rescaled RW: 39%) and perceived behavioral control (rescaled RW: 55%) are the major determinants of networking behaviors. The rescaled RW for attitudes was not significant (5%).

Limitations:

Although our longitudinal study provides evidence for covariation and temporal precedence, it does not provide causal evidence. Moreover, the time lag we chose may affect the strength of the

reported relationships and attitudes might predict networking intentions and behaviors with closer temporal proximity.

Conclusions – research and or practical implications/Originality/Value:

This research shows that attitudes may not be important predictors of networking behaviors. In fact, organizational or professional norms and culture might play a role in the adoption of networking and therefore a lever to increase networking. Furthermore, networking trainings ought to focus on control perceptions. As PBC and self-efficacy are highly similar concepts (cf. Ajzen, 1991), training concepts that incorporate self-efficacy (e.g., behavior modeling, Taylor et al., 2005) may be better suited than those aiming to improve attitudes.

Relevance to the Congress Theme:

Scholars have suggested that networking has become more important in boundaryless career environments or protean careers. With the changing nature of work, for example, increases in project work and the “gig economy”, networking may become indispensable to secure a satisfying and affluent career.

Relevant UN SDGs:

Target 8.5. of the goal “Decent work and economic growth” includes notions of employment and salary. Next to institutional regulations and legislation, individuals need to be prepared to navigate a complex economy, update their KSAOs, maintain their employability, and have a successful career. Networking is an important skill to obtain these goals.

*Keywords: Networking, Theory of planned behavior, careers*

## Oral presentation OP538

### **Developing and accompanying Italian student athletes enrolled in university: the challenges of employability and skills development**

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science&practice

The topic of careers and career transitions in sport takes on specific significance (Stambulova, 2000). In recent years, there has been increasing attention within the sporting context to the concept of Dual-Career (DC), understood as the possibility for athletes to successfully initiate, develop and finish a high-level sporting career in combination with the pursuit of education, employment and other important goals at different stages of life. DC is seen as a challenge for athletes and their environment (De Knop, et al. 1999), but it can be a protective factor for their identity definition during the delicate time of transitions, particularly at the end of their careers (D'Angelo et al., 2017). Dual Career pathways allow for the development of 'other' identities besides the sporting one, favoring the elaboration of future projects, as well as activating processes of awareness with respect to the skills that a dual career path enhances and trains.

In the face of such reflections, it seems interesting to look at the dual career paths of athletes through the lens of employability, defined as “the human capital, social capital and individual behaviours and attributes that underpin an individual’s perceived employability in a labour market context and that, in combination, influence employment outcomes” (Clarke, 2018). Literature on employability specifically targets graduates students for their imminent transition into the labour market. Student-athletes in Universities’ DC-Programmes are part of this target group, with some specificities. Within this contribution, we intend to apply this lens of “employability”, considering it interesting to design and develop support services for student-athletes, especially within the university context.

This contribution starts from the experimentation of the first 4 years of a Dual Career service for student athletes at the university where the authors work. The service from 2018 to date has involved 119 student-athletes, belonging to more than 20 different sports federations and attending 9 different faculties.

The study aims to explore and learn about the experiences and perceptions developed by the student-athletes with respect to the DC pathway at the University, with a specific focus on the employability skills developed during this experience.

To this end, using an IPA approach (Smith et al, 2009), 27 student-athletes (who were in or had recently completed the DC Programme) and 3 sports career psychologists (who initiated and developed the DC Service) were involved in semi-structured interviews between June 2021 and June 2022. At the end of the interviews with the athletes, the Performance Profile (Butler & Hardy, 1992) and the Dual Career Competency Questionnaire for Athletes (DCCQ-A, De Brandt et al, 2018) were proposed and used qualitatively for a reflection with the student-athletes themselves on the topic of competencies.

Thematic analysis of the interviews have revealed how the experiences of the student-athletes strongly emphasize the value of personalized coaching, which makes it easier for them to plan their academic and sporting commitments and facilitates their time management. Among the most

developed skills, on the other hand, the ability to organize and plan and problem solving stand out, confirming their proximity to the demands of today's working world.

It is also interesting to reread this data of student-athletes through Clarke's (2018) integrated model of graduate employability, which highlights a conception of employability not only as competences or skills to be possessed, but according to a more holistic and expanded view.

This study doesn't intercept Clarke's (2018) 'graduate employability' level as it does not refer to the actual entry of graduates into the labour market and their career outcomes. Future research could be structured longitudinally, with the aim of capturing these outcomes as well. Furthermore, they could involve student-athletes from different universities' DC Programmes to explore possible variability related to the structuring of the Services themselves.

Re-reading the experiences, stories and representations of student-athletes through the lens of employability and the skills developed makes it possible to think of increasingly effective and valuable DC projects, responding to an ever-increasing demand in the target audience. In conclusion, the research is in line with the congress theme 'The future is now: the changing word of work'. By activating awareness of one's educational, sporting and life paths and of the demands of the environment, entry into the labour market becomes of value to the individual and to the receiving work environment.

*Keywords: dual career / student-athletes/ employability*

## Oral presentation OP216

### Developing Skills for the Future: The Role of Internships in the Changing World of Work

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science

Research Goal : Societal and technological changes over the past decades have critically transformed the world of work, leading to new skill demands of the future workforce (Greiff et al., 2015). In particular, organizations are calling for 21st century skills that are competencies for lifelong learning, including soft skills such as critical thinking, adaptability, and collaboration (Kember et al., 2007). The development of 21st century skills has thus become a priority in higher education as universities aim to set students up for future career success. Beyond classroom experiences, many universities are using internships as an experiential learning strategy for the development of such skills. However, there are surprisingly limited investigations into the actual effectiveness of internships for this purpose (Gamboa et al., 2013). This omission is concerning given that about half of university students in Canada, the US, and the European Union complete an internship each year (Canadian University Survey Consortium, 2021; European Commission, 2013). The goal of this research is therefore to investigate the role of internships in students' development of 21st century skills.

Theoretical Background : To better understand the impact of internships on students' learning, we draw from the literature on organizational learning, which emphasizes the importance of supportive learning contexts for individuals to be motivated and able to continually learn and adapt (Chadwick & Raver, 2015). Specifically, there are three building blocks required for creating learning organizations: a supportive learning environment, concrete learning processes, and leadership that reinforces learning (Garvin et al., 2008). Despite extensive theoretical and empirical support for this model, the internship literature has not benefited from its insights. Research on internship effectiveness has instead focused on individual characteristics of interns as drivers of their learning, ignoring the role of contextual factors. To extend this literature, we hypothesize that interns' development of 21st century skills is positively influenced by a learning environment that is safe for interpersonal risk-taking and by leadership that provides support for career development.

Methodology : Participants were undergraduate students at a francophone Canadian university enrolled in management programs that included internships. Data were collected using online self-report questionnaires administered at 3 time points: before the beginning of the internship (T1), around the mid-point of the internship (T2), and at the end of the internship (T3). We assessed 21st century skills developed in university (T1) using the scale developed by Kember et al. (2007), psychological safety (T2) using the scale developed by Edmondson (1999), supervisor mentoring behaviors (T2) using the scale developed by Viator and Scandura (1991), and 21st century skills developed during internship (T3) using Kember et al.'s (2007) scale adapted to the internship context. We sent invitations to 296 students and received responses to all 3 questionnaires from 146 (49.32%) of them.

Results : Results indicated that both psychological safety and supervisor mentoring behaviors were positively related to students' 21st century skills developed during internship. These positive relations remained significant and similar in magnitude even after controlling for baseline levels of these skills (i.e., 21st century skills developed in university). Collectively, these findings suggest that internships play a significant role in developing students' 21st century skills beyond the classroom.

Limitations : In terms of external validity, our research was based on management students from a francophone Canadian university, and so it is possible that our findings may not generalize to other types of students or national contexts. In terms of internal validity, the correlational nature of our study prevents us from making causal claims. However, given the operationalization and measurement of

our variables, reverse causality seems unlikely. Moreover, controlling for students' baseline levels of 21st century skills accounts for key individual differences that might have affected the relations of interest. Conclusions : Our research highlights the critical role of internships in helping students further develop their 21st century skills. Theoretically, it suggests that the organizational learning literature is a helpful framework for helping us better understand students' internship experiences. Practically, it points to the importance of ensuring that interns are immersed in psychologically safe work groups and receive mentoring from their supervisors in order for them to further develop their 21st century skills. Relevance to Congress Theme : Internships are an experiential learning strategy intended to help prepare the future workforce for the "the changing world of work." References : Available upon request.

*Keywords: skills development, internship, school-to-work transition*

## Oral presentation OP258

### Development and Validation of a Scale for Measuring Psychological Well-Being in the Work Context (PsyGesA)

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science&practice

Over the past decades, psychological well-being received more and more attention in the work context (Roczniewska et al., 2022). Organizations strive towards maintaining and improving employees' psychological well-being. Therefore, economic and also comprehensive instruments to assess psychological health of employees are needed. The present paper describes the development and validation of the PsyGesA Scale (Psychische Gesundheit im Arbeitskontext, engl: psychological well-being in the work context).

Building on the job demands and resources (JDR) theory (Demerouti et al., 2001), we first conducted an extensive literature research and qualitative interviews with 46 leaders and employees from diverse companies in order to identify demands and resources affecting psychological health at work. Initially, we created 194 items and 30 dimensions which were further tested. First, we assessed face validity using five independent raters. Following, item selection and construct validity were conducted, based on a German sample (N = 976) recruited via a panel provider. Exploratory and confirmatory factor analyses led to a final model with a very good fit (cfi = .96, tli = .95, RMSEA = .03, SRMR = .04), consisting of 28 dimensions, reflecting resources and demands, with 3 items each.

Further data sets collected via the panel provider (N ranging from 1000 to 1009) aim at testing different validity scores. Regarding convergent validity, we assume the PsyGesA demands and resources scales being positively related to the respective subscales of the FGBU (Dettmers & Krause, 2020), KFZA (Prümper et al., 1995) and COPSOQIII (Lincke et al., 2021). At the same time we expect that the PsyGesA demands subscale can be discriminated from depression (Beck et al., 2006; Bianchi & Schonfeld, 2020) and job anxiety (Linden et al., 2008), whereas the PsyGesA resources subscale should be discriminated from job satisfaction (Thompson & Phua, 2012) and resilience (Soucek et al., 2015).

We furthermore hypothesize that the PsyGesA scale explains variance in work-related outcomes (i.e., emotional exhaustion (Demerouti et al., 2003), depression (Bianchi & Schonfeld, 2020), rumination (Cropley et al., 2012), work engagement (Schaufeli et al., 2006), motivation at work (Gagné et al., 2010), and job satisfaction (Thompson & Phua, 2012)) beyond the KFZA and the FGBU. Additionally, we hypothesize that the PsyGesA demands subscale (T0) is positively related to emotional exhaustion (Demerouti et al., 2003), depression (Bianchi & Schonfeld, 2020), irritation (Mohr et al., 2005), negative affect (Watson et al., 1988), counterproductive work behavior (Spector et al., 2010) and rumination (Cropley et al., 2012) three months later (T1), whereas the PsyGesA resources subscale should be positively associated to sleep quality (Buysse et al., 1989), work engagement (Schaufeli et al., 2006), energy (Kessler & Staudinger, 2009), positive affect (Watson et al., 1988), motivation at work (Gagné et al., 2010), job satisfaction (Thompson & Phua, 2012), life satisfaction (Diener et al., 2018) and psychological detachment (Sonnentag & Fritz, 2007). Validity scores will be presented during the talk.

So far, our analyses are based on a German version and should be replicated with samples from different countries. The scale can be completed in a short amount of time (approx. 15 minutes) and is

comprehensive. Based on the PsyGesA scale scores, health promoting programs and incentives can be chosen and offered, to help people to cope with the changing world of work.

We believe that the development of our scale contributes to the goal “Good health and wellbeing” from the Sustainable Development Goals (SDGs) of the United Nations (UN) by offering an easily conductable diagnosis tool, upon which further health promoting programs can be executed.

*Keywords: well-being*

## Oral presentation OP451

### Development and validation of a scale measuring sexual identity disclosure and the reaction of the audience at work

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science

#### Research goals

This research aims to develop a valid instrument to examine the disclosure dynamics of lesbian, gay, and bisexual (LGB) individuals at work, taking into account the role that the audience plays in disclosure. It is relevant because it considers sexual identity disclosure not as a personal and voluntary decision, as traditionally conceived, but as a preference that necessarily involves the audience receiving the information.

#### Theoretical background

Sexual identity disclosure has been pointed out as a factor that promotes a sense of inclusion in the workplace for LGB individuals (Bell et al., 2011). Considering disclosure as an act of revealing personal information that is invisible to others, it has been assumed that LGB people have the control over disclosure (Lidderdale et al., 2007), conceiving it as an individual choice that is impacted by factors of the organizational context (e.g., diversity climate, industry context, legal protections), the interpersonal context (e.g., characteristics of other colleagues), and individual differences (Clair et al., 2005). As such, various authors have developed scales measuring disclosure as a set of voluntary behaviours or measuring the extent to which individuals consider themselves 'out' at work (Wax et al., 2018).

In contrast to the literature, Di Marco (2022) proposed that LGB individuals have a preference to disclose or to conceal their sexual identity to others, yet they have to further deal with the targets' willingness to respect and/or support their preferences. Thus, the extent to which one is 'out' would not only depend on one's behaviors towards concealment/disclosure; disclosure is also shaped by supervisors, coworkers and clients who are part of the dynamic.

Drawing from Boundary Theory (Kreiner, 2006), Di Marco suggests that disclosing one's sexual identity or keeping this information back at work can be considered a way of merging or separating personal and work domains (Di Marco, 2014). According to LGB individuals' wish to integrate/segment domains and third parties' behaviors, LGB individuals encounter four different situations at work: segmentation, integration, distance violation, and intrusion violation (Di Marco, 2014; Kreiner, 2006). Segmentation and integration represent a successful and desired concealment or disclosure of LGB people's sexual identity, respectively. Distance violation occurs when there is a desire to disclose but third parties force concealment (e.g., not asking further about personal life). Finally, intrusion violation occurs when LGB people wish to conceal their sexual identity at work, but others force it into the spotlight (e.g., spreading rumors, asking non-wanted personal questions). The extent to which individuals' sexual identity is disclosed/concealed, therefore, would not only rely on LGB individuals' choice, but would also involve others that shape the process.

#### Design and methodology

We developed a scale of the described disclosure dynamics. The generation and reduction of items was both based on the literature and on the information from a previous study (Di Marco et al., 2022). A set of 18 items were administered to  $n = 743$  LGB workers collected through crowdsourcing

together with other scales to test convergent, discriminant and concurrent validity. We performed exploratory and confirmatory factor analyses, correlational analyses between the developed scale and external measures and measurement invariance tests.

### Results

The EFA showed that the scale is comprised of 18 items that load into a 4-factor solution, representing the four disclosure dynamics. The proposed model showed an acceptable model fit to the data in the CFA and acceptable reliability indexes for both EFA and CFA samples. Correlational analyses also showed evidence of convergent validity, discriminant and concurrent validity.

### Limitations

Participants worked from different English-speaking countries. The mean age was around 30 years old, and age can impact experiences.

### Conclusion

This study expands the boundaries of the concept of disclosure, extending it from the personal decision to disclose to the reaction of others who may support or hinder this decision. The use of this scale can show new indicators of the mechanisms involved in the disclosure of sexual identity. Our study shows it is important to consider both the boundaries that LGB people set around their sexual identity at work and how others respond to disclosure preferences.

### Congress theme

The world of work is increasingly diverse. Organizations have made efforts to manage diversity in the past decade, although sometimes in a superficial way. This study provides an instrument to understand the complexities of the experience of sexual diversity at work for a better management in organizations.

### UN SDGs

This study is related to goal 10 (reduced inequalities) as it promotes adequate management of sexual diversity, which empowers and promotes their social, economic and political inclusion.

*Keywords: validation; disclosure; workplace*

## Oral presentation OP318

### **Development of the Model of Enabling Employment Guidance (MEEG) - conceptualization, practitioner toolkit, and employability metric**

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science&practice

**Research goals and why the work was worth doing:** This research aimed to conceptualise the career and employment guidance components of welfare-to-work practice, with a particular focus on their well-being enhancing aspects and the extent to which they enable sustainable work-life outcomes for people experiencing unemployment. The research challenges the dominant activation discourse that 'any job is better than no job' and provides a praxis-informed framework for contemporary practice.

**Theoretical background:** The psychological impact of unemployment has been well documented (Paul & Moser, 2009; Wanberg, 2012) with studies showing negative impacts on wellbeing and re-employment. Yet government responses rarely focus on these challenges, concentrating instead on job search outcomes and monitoring behaviour. Over the past 30 years international trends in labour market policy have shifted towards reinforcing the regulatory and disciplinary aspects of policy, while de-emphasising their enabling aspects (Brodkin & Marston, 2013). Career and employment guidance aims to bridge this gap, but little is known about its implementation, effectiveness, or its enabling mechanisms within labour market activation contexts. Drawing on previous developments in employability approaches (e.g. Dean, 2003; Lindsay, McQuaid & Dutton, 2007), and building on capability informed career counselling conceptualisations (Robertson & Egdell, 2018), this research goes beyond traditional approaches to supporting the unemployed by proposing an expansion of theory informed employment guidance (e.g. Fugate et al. 2004; Robertson & Egdell, 2018; Duffy et al. 2016 ) in national Public Employment Services (PES) towards sustainable work-life employability, and its practical application.

**Design/Methodology/Approach/Intervention:** The study was conducted in two stages: First, a theory based realistic evaluation approach was used to observe, document and map practice in a sample of community based contracted public employment guidance services ( n=8 ). A series of practitioner ( n =20) and stakeholder ( n =8) focus groups, and practitioner and client semi-structured interviews ( n =16) were conducted to detail client needs, the guidance approach, and service goals. Second, informed by an extensive literature review, and feedback from employment guidance practitioners, a 50-item questionnaire was designed to identify distance travelled towards employability. Questionnaires were piloted with unemployed clients ( n =98) at T1, with follow up questionnaires ( n =33) completed at T2. Factor analysis and reliability studies were conducted to establish factor structure and reliability estimates.

**Results:** Analysis enabled the development of 1) a capability-led work-life inspired employment guidance conceptual framework; 2) a six-stage (Building Trust;Personalised Assessment;Career Exploration;Decision Making;Planning and Implementation;Follow-on support) Model of Enabling Employment Guidance (MEEG) toolkit for practitioners; 3) an outcome measurement tool for use in practice measuring five macro work-life factors: Career self-knowledge and decision making; Person focused employability strengths (self-esteem, hope, adaptability, self-value); Work related behaviour; Job search; and Job readiness.

**Limitations:** Refinement of the employability questionnaire is ongoing and while practitioner training in the model is currently being piloted, accreditation is not likely until Spring 2023.

Conclusions: research and or practical implications/Originality/Value: MEEG provides practitioners with a framework and associated tools for person-centred practice in a PES context. It moves beyond restrictive work-first models and human capital approaches, offering instead a holistic model where peoples life needs are considered as part of the re-employment process. It seeks to contribute towards the Psychology of Working research (Blustein, 2008; Duffy et al., 2016) by advocating for decent work, and for equality in opportunity in a dynamic, complex, and fast changing world of work, for people who experience intersectional challenges to sustainable employment. In this post-covid era where many will have experienced unemployment related distress, understanding how services can promote positive mental health, re-employment, and career sustainability for all job seekers is fundamental in PES design and labour market policy.

Relevance to the Congress Theme: To build strong resilient labour forces, PES must be ahead of changes occurring in the labour market. This means access to quality lifelong career guidance including information on new forms of working (e.g. hybrid working), skill shortages etc., while also recognising the often intersecting challenges faced by job seekers, the impact of unemployment and poor quality work on wellbeing and re-employment, and the approaches, skills and tools used by practitioners. MEEG offers a new way to think about person centred and future oriented PES.

*Keywords: Employability, Sustainable Careers, Practitioner Toolkit*

## Oral presentation OP801

### Deviate from which norm: Antecedents of constructive deviance in organizations

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science

#### Research Goal

From one million to two million protestors, in 2019, a quarter of the inhabitants in Hong Kong took the street to protest against the amendment bill on extradition to the mainland of China. The peaceful demonstration escalated quickly to battle-like situations with Molotov cocktail and homemade shield in response to the violence crackdown from the police force. While some police officers comply to the orders from commander, some resigned from their positions during the protest. The Hong Kong Police Force also recorded a historical low of new recruits in 2020. In disciplinary forces, members have restricted options in response to commands, i.e., compliance or exit; however, in business organizations, employees are more flexible when confronted with supervisors' orders that conflict with one's own preferences. In this study, we explore how individuals with different personality combinations would react identity conflicts between self and organizational, and how it might develop into constructive deviance.

#### Theoretical framework

In general, people desire to hold positive beliefs about themselves, the groups they belong to, and the system they situated in. The main principle of System Justification Theory (SJT) was that individuals would justify the existing system as legitimate and fair even when they are disadvantaged in it (Jost, 2019). There are four common triggers of system justification, (1) perceived inescapability of the system, (2) strong personal dependence on the system, (3) low personal control in the system, and (4) perceived threat to the system (Jost, 2019). Individuals will then be motivated to rationalize or even reconstruct the preferences to make situation less unfavorable (Laurin et al., 2013). That is, even when the evaluations of self and group identities misaligned with the system identity, sometimes people will lean towards justifying the disadvantages they experienced under the system.

However, from the sociological lens, Bourdieu suggests that indeed people might be consumed by their immediate environment because of foreseeable rewards, such that they would be unable to reflect on their situation and became blind to alternatives (Mergen & Ozbilgin, 2021). Nevertheless, if they experience tensions between their predisposed ways of actions and the rules implemented in that particular social context (e.g., organization), the resulting dissonance from such tensions could accumulate overtimes to shaken one's perception (Mergen & Ozbilgin, 2021). Individuals would then begin to challenge existing norms and regulations. That is when the self and group identities surpass the system identity.

#### Methodology

Survey data will be collected from dyads of leader-follower in organizational context (estimated N = 400). Two surveys will be distributed to leaders and followers respectively. We will measure moral and organizational identities, personality, normative conflicts, and constructive from followers. In addition, we will measure perceived voice behaviors of followers from the leader's perspective to minimize common method bias.

#### Results

The results will be ready in January 2023.

#### Limitations

While survey data has strong external validity to understand how various identities influence the perception of constructive deviance, it lacks ability to make casual conclusion. However, we are planning for an experimental follow up on the results derived from this initial study to further explore situations that would induce strong self and group identities, and to what extent would that override the urge to justify the existing system, and thus, resulting in constructive deviant behaviors.

#### Relevance to the Congress Theme

Engagement and Motivation. Even though constructive deviance involve breaking rules of the organization, it is for the better of the organization or the broader stakeholders. Understanding the motivation of individuals to engage in such behaviors helps management to utilize them to identify problematic areas in the organizations.

#### Relevant UN SDGs

Going against the practiced norms in organizations is risky. Understanding what motivate individuals to engage in constructive deviance (a broad term that include actions like voice and whistleblowing) can help challenge existing hierarchy. At the very least, it increases information accessibility to the public, which could form the basis of collection actions.

*Keywords: personality, identity, constructive deviance*

## Oral presentation OP730

### Diagnostic Sensitivity and Specificity of a Burnout Hetero-Assessment Instrument Using Bayesian Latent Class Analysis

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science&practice

#### Research goals

Our primary aim was to illustrate the use of Bayesian latent class modelling to assess the diagnostic accuracy of measurement tools in the absence of a gold standard.

#### Theoretical background

Burnout is mostly assessed using Patient-reported Outcome Measures (PROMs). In 2020, the Belgian Public Service for Employment, Work and Social Dialogue (BPSEWS) developed the first hetero-assessment instrument intended to assess burnout by healthcare professionals (i.e., psychologists and physicians). Researchers attempted to evaluate the diagnostic accuracy of this Burnout Hetero-Assessment Instrument (BHAi) by estimating its sensitivity and specificity in comparison to a valid burnout PROM; Oldenburg Burnout Inventory (OLBI) in two recent papers (Leclercq et al., 2021; Nguyen Huynh et al., 2021). However, in the absence of a gold standard for burnout measurement, the assessment of diagnostic accuracy for newly developed tools remains challenging and can lead to either over or underestimating their accuracy, especially using frequentist statistics. Therefore, the latent class model approach was proposed to assess the performance of diagnostic tests in the absence of a gold standard using Bayesian statistics. We thus aimed to evaluate the sensitivity and specificity of the BHAi in comparison to OLBI using Bayesian latent class modelling.

#### Methods

We analysed the results of two groups of patients that were included in the studies of Nguyen Huynh et al., 2021, and Leclercq et al., 2021. The Swiss population included patients that had a "Work and Suffering" Consultation at the Centre of primary care and public health (Unisanté) between 2010 and 2013. The Belgian population included patients who had complaints regarding suffering at work and asked for a consultation with a general practitioner or occupational physician and their clinical judgement can be linked to the BHAi. Finally, in our analysis, we included the results of 65 Swiss and 123 Belgian patients who filled both BHAi and OLBI. The reported diagnostic sensitivity (se) and specificity (sp) of the BHAi was (se=0.88, sp=0.29) in the Swiss study and (se=0.76, sp=0.60) in the Belgian one. However, these diagnostic sensitivities and specificities were estimated by comparing the BHAi to a comparator (i.e., OLBI) using frequentist statistics.

For OLBI, both studies used a cut-off of 44, which means that scores higher than 44 represent high-severity burnout. For the Bayesian latent class modelling, we applied the Hui-Walter framework to two tests and two populations and used minimally informative priors in models with or without conditional dependency. We further performed sensitivity analysis by replacing one of the minimally informative priors with the distribution (2,1) at each time for the six minimally informative priors. We also performed the analysis using informative priors for OLBI from the literature when compared to Maslach Burnout Inventory and Psychological Distress Questionnaire.

#### Results

Using the Bayesian latent class modelling without conditional dependency, the sensitivity and specificity of the BHA1 were 0.91, and 0.82 respectively. The sensitivity analysis yielded no change in the BHA1's sensitivity and specificity. In all models, the sensitivity was never below 0.82 and the specificity was never below 0.78.

#### Limitations

The first limitation of this study is that we assumed that the sensitivity and specificity of the two tests are the same in Swiss and Belgian populations. The small sample size is the second limitation of this study. However, we aimed to present the concept of Bayesian latent class modelling using the available data to enable future studies to re-examine the diagnostic accuracy using representative samples. The third limitation is that the posteriors of this study cannot be later compared with the posteriors of future studies if these studies will be conducted using a gold standard. This study can be therefore considered a preliminary study.

#### Conclusions

The reported sensitivity and specificity of the BHA1 in this study are higher compared to the previous studies conducted using frequentist statistics. These findings suggest that the use of Bayesian latent class modelling is preferred in the absence of a gold standard to avoid underestimating the diagnostic accuracy of the tested measure.

#### Originality/Value

To our knowledge, this is the first study conducted using Bayesian latent class modelling to assess the sensitivity and specificity of burnout assessment instruments. The findings of this study encourage the use of Bayesian latent class modelling in future studies with larger sample sizes and better informative priors.

Relevance to the Congress Theme Researchers may benefit from introducing this novel approach in testing the diagnostic accuracy in burnout research . Researchers and practitioners may benefit from the use of the new reliable BHA1 to assess burnout.

*Keywords: Burnout, Bayesian Latent Class Analysis , Diagnostic accuracy*

## Oral presentation OP574

### Different jobs, different people: occupational personality profiles and the role of job situations and job characteristics

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science

Many models of person-environment transactions suggest that people both select themselves into social roles that fit their personality and that their personality is moulded by those social roles (ASTMA model; Robert, 2006). One implication of these models is that we would expect clear personality profiles amongst different occupational groups. The notion of the existence of occupation-specific personality profiles is central to organizational HR practice in employee assessment and selection as well as employee training and development. However, empirical evidence on the existence or nature of such profiles is surprisingly weak.

This study aimed to provide a definite answer on whether different occupations consist of homogenous pools of individuals with similar personality characteristics, and if so, how these occupation-specific personality profiles look like for five selected occupational groups. Further, this study set out to examine the potential relationship between individual's personality characteristics and characteristics of their occupational environment (i.e. situational and job characteristics).

Theories focusing on individuals and their occupational environments share the assumption that different jobs consist of different situations and job characteristics, and therefore expose job holders to different, occupation-specific, characteristics of the respective job. These different and occupation-specific sets of occupational characteristics impose different demands upon job holders regarding adequate or ideal personality expression on the job. These demands are, like the situational and job characteristics, occupation-specific. The ASTMA model provides mechanisms (attraction, selection, transformation, manipulation, attrition) by which job holders' personality profiles would be a result of the transactions between the individual and the environmental characteristics of their occupation.

We examined to what extent occupational profiles exist, comparing 1,270 professionals from five different occupational groups, in personality (BFI-2), psychological situations (CAPTIONs), and job characteristics. First, we established measurement invariance using ESEM. Second, we used a series of ANOVAs to compare occupational groups regarding their mean levels of personality, traits, situations, and experienced job characteristics. In the last step, we employed multiple regression models to examine potential relationship between personality traits and situational and job characteristics, regressing each of the five personality traits on situational dimensions and job characteristics, respectively.

Results supported several theory-driven differences between occupational groups. We found distinct profiles for three of the five occupations: Artists, Health Professionals, and Law Enforcement Officers. We further examined whether situations or job characteristics explained the trait profiles observed. Although both situational and job characteristics did predict personality, the variance explained was typically moderate ( $R^2 = .075-.199$ ).

In summary, 12 out of 18 hypotheses regarding occupational group differences in average levels of trait personality, perceived situations and job characteristics were supported, suggesting occupation-specific profiles for job holders' personalities as well as the experienced situational and job

characteristics. Further, analyses suggested that situational characteristics explained between 7.5%-14.1%, and job characteristics accounted for around 13.6%-19.9% of the variance in personality traits. With this in mind, and considering the profiles identified for personality traits, situational characteristics, and job characteristics as well as the correlations between these characteristics, the findings of this study suggest that either one or potentially multiple mechanisms of the ASTMA model are in place and operate as described by Roberts (2006).

As for limitations, samples of occupational groups ranged between 247 and 259 participants. Despite being an improvement over large parts of previous research and satisfying initial power analyses, we wish for large-scale studies in the future. Second, despite being a convenient method of data collection, using a third-party data collection tools reduces the amount of control the investigators have over the collected data.

In the future, we hope to see studies to examine possible causal relationships between situational characteristics, job characteristics, and individuals' personality traits. Testing potential causal relationships between personality and situational and job characteristics in an occupational context can shed light on the transformation mechanisms of the ASTMA model and provide insights in the areas of personality adaptation on the job. Answering these questions could help improve our understanding of person-occupation transactions which are relevant for HR practitioners in the areas of employee selection and training.

*Keywords: Personality, Situations, Job Characteristics*

## Oral presentation OP73

### Digital remote working in the digitalization era: A cross-lagged study of attitude, behavior, and work engagement

Marjan Shamsi, Tatiana Iakovleva & Espen Olsen | University of Stavanger (UiS); Richard P. Bagozzi, University of Michigan

science&practice

#### Research goals

Over the past few years, unpredictable changes in the business environment due to the COVID-19 pandemic have led to rethinking employees' traditional ways of working. These fundamental changes have forced organizations to introduce new ways of working, such as digital remote work, which we define as using digital technologies in the remote work context. The present study investigates a longitudinal model of reciprocal relationships between digital remote workers' attitudes, behavior, and work engagement as a work well-being facet during and after the pandemic lockdown. Therefore, the study proposes and empirically tests a cross-lagged structural equation model to explore the relationship between digital remote work attitudes, behavior, and work engagement over time.

#### Theoretical background

We explore the relationship between employees' digital remote work attitude and behavior within the framework of the Technology Acceptance Model (TAM). The TAM posits that individuals' perceptions and attitudes toward technology use affect their acceptance of that technology, which results in explaining users' behavior (Davis, Bagozzi, & Warshaw, 1989). This study first proposes that employees' attitudes toward digital remote work during the pandemic will affect their post-pandemic decisions to continue working remotely using digital technology. In addition, building on the Job Demands-Resources (JD-R) theory, we address the relationship between digital remote work behavior and work engagement. JD-R theory posits that job resources help overcome job demands, accomplish job goals, and decrease the chance of health disorders (Bakker & Demerouti, 2007). This study proposes that digital remote work during the pandemic will positively impact post-pandemic work engagement by providing employees with greater locational and temporal autonomy. therefore, this study considers technology use in the remote work context as a job resource and, therefore, as a predictor of work engagement over time.

#### Design

We conducted a two-wave panel study with time lags of six months and collected the data from 670 employees (at both T1 and T2) using online self-report questionnaires. A cross-lagged longitudinal analysis was conducted using structural equation modeling (SEM) to test the study's research hypotheses. Multiple well-established measurement sources were used as measuring instruments, and their validity and reliability were assessed before performing SEM.

#### Results

Our findings show a positive lagged effect of attitude toward digital remote work during the pandemic on digital remote work behavior in the post-pandemic era. The results also revealed that digital remote work behavior during the pandemic influenced post-pandemic work engagement.

#### Limitations

Although the present study makes several contributions to the existing literature, its findings should be treated with caution. First, Since relying on self-reports may result in common method biases, studies should consider using multiple data sources. However, we tried to minimize this issue by collecting data at different times and controlling for autoregressive effects. Moreover, the first wave of this study was conducted during the COVID-19 pandemic, and new studies should explore the generalizability of findings in typical situations.

#### Conclusions

This study provides new insights for organizations regarding essential factors related to employees' digital remote work behavior over time. It shows that, in predicting digital remote working behavior, organizations should not only be aware of individuals' attitudes but also know about other work-related concepts, such as work engagement. In addition, results confirm that digital technology use in the remote work context could be perceived as a job resource by employees and improve their work engagement. This research is the first cross-lagged study on digital remote work behavior, reflecting its reciprocal relationships with digital remote work attitude and work engagement in the same framework. While the relationships between employees' digital remote work behavior and attitudes have been investigated in previous studies, there is no research with a cross-lagged panel design examining the reciprocal relationships between these two concepts. In addition, although few studies focused on the effect of digital remote working on work engagement, their reciprocal relationship has never been investigated.

#### Relevance to the Congress Theme

This research is related to the congress theme in two ways. First, it has focused on the changing work environment by considering digital remote working as a new way of working in the age of digitalization. Second, it addresses the long-term relationships between digital remote work behavior and work engagement, which can show us how we can make constructive changes in the future using current findings.

#### Relevant UN SDGs

This study will address the good health and well-being of employees as one of the SDGs.

*Keywords: digital remote work; technology acceptance model; work engagement*

## Oral presentation OP466

### Disparities in Job demands and Job resources in teams as potential meta-demands

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science

**Purpose:** The goal of the research is to conceptualize and empirically investigate the role of disparity in job demands and job resources within teams and how this affects both team and individual level outcomes.

**Theoretical background:** According to the job demands-resources model, the configuration of job demands, and resources are responsible for employee motivation, strain, and productivity (Demerouti et al., 2001). However, these job resources and demands do not exist in a vacuum: employees tend to be embedded into social structures such as work groups. This embeddedness adds a social layer to how demands and resources are divided and experienced (Festinger, 1954; Foa & Foa, 2012). Consequently we need to take into account the emergent properties that arise out of this social embeddedness (Kozlowski & Klein, 2000). The distribution of job demands and resources among team members might differ between teams, resulting in some teams having higher and others having lower disparities when it comes to team members' job demands and resources and thus reflect an emergent property. This paper will theoretically reflect on the implications of these disparities at both the team and the individual level by investigating its impact upon motivation, strain and productivity. We build on the theoretical frameworks of justice theory (Colquitt, 2012), social resources theory (Foa & Foa, 2012), thereby looking at job demands and resources from a deep level diversity perspective (Harrison & Bell, 1998). We argue that - in line with the basic premise of JD-R theory - at the individual level, perceived resources positively affect outcomes, whilst demands will negatively affect outcomes, but that the individual level effects will be more pronounced in teams with high disparities in resources and demands. We expect this because there will be a status hierarchy (Knight & Mehta, 2014) with respect to demands and resources which becomes clearer the higher the disparity is. Subsequently employees will experience relative deprivation when they are at the 'bad end' of the job demands-resources distribution in the team (Beshai et al., 2017). Consequently, the relative place in the demands resources hierarchy will compound effects of job demands and resources and make relations between JD-R and outcomes more pronounced, thus acting as a cross level moderator. Furthermore, at the team level we expect that teams with higher disparities in perceived demands and resources will show more negative outcomes in terms of motivation, strain, and productivity because of increased intragroup distrust and the instantiation of subfactions with respect to demands and resources (the 'haves' vs the 'have-nots').

**Design:** We are employing a multi-level design where we are surveying employees from different teams in two organizations, using the team as a reference point for investigating the effect of emergent properties from the individual to the team level. The data are currently being collected, the targeted sample consisting of 50 teams, with at least 6 employees per team. We will analyze results using multi-level analysis to disentangle team from individual level effects.

**Limitations:** We will employ a cohort design so we will not be able to infer causality.

**Relevance to UN SDG's and congress themes:** the theme of our research fits in well with the goals of offering decent work and also reduction of inequalities since we are investigating the influence of disparities on 'soft' job characteristics on motivational, strain and productivity outcomes.

**Keywords:** *Group processes, Organisational justice, Job demands*

## Oral presentation OP531

### Diversity climate measurement across generations: A test of measurement invariance.

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science&practice

Research goals and research importance: Age-related diversity is considered an important feature for organisations, especially when employees are tasked to supply a wide range of services and products to a diverse age market. In this regard, organisations are very keen on ensuring their employees feel valued and are considered part of an inclusive environment, regardless of age. To develop diversity and inclusion-related interventions, it would be important for organisations to understand the current views of their diversity-related policies and practices, even across generational cohorts. The challenge, however, is that generational cohorts (Baby Boomers - born between 1945 and 1964; Generation X - born between 1965 and 1981; and Generation Y - born between 1982 and 2000 also known as millennials) display unique characteristics and behaviours due to certain values and priorities that might have persisted during their development. Managing age diversity may have several challenges among generational cohorts due to differences in values, attitudes, and behaviours. These challenges can include common misunderstandings and interpretations, a need for recognition versus status in the workplace, intergenerational conflict, and internal competition during times of change. Therefore, the primary objective of the present study was to conduct a measurement invariance test for a diversity climate measurement across three generations to examine the psychometric properties of a one-dimensional diversity climate instrument.

Theoretical background: We consider diversity climate as the shared perceptions on how well an organisation is managing diversity and creating a sense of inclusivity. The assessment of an organisation's diversity climate has shown to be a valuable indicator of diversity-related interventions. However, groups within the organisation may view diversity climates differently. This is mainly due to matters such as social identity and Faultline theory, whereby subgroups may form strong allegiances based on common characteristics and then influence each other, which in turn might have an impact on personal views of an organisation's efforts to manage diversity effectively.

Generation shares similarities formed by specific historical events. For example, Baby boomers are considered hard-working but less susceptible to technological change. Generation X are professional individuals but are less likely to express disagreement in team environments. Generation Y, also known as millennials, is very competent with technology developments but struggles to operate in a team environment. These distinct characteristics of each generational cohort due to different personal beliefs, values and behaviours pose diversity management challenges. Due to expected different views on diversity-related matters amongst generational cohorts, it remains important to apply an instrument considered universal across generational cohorts. The present study aims to examine this research opportunity.

Methodology: The quantitative cross-sectional study collected 324 responses from a South African convenience sample. Respondents completed a one-dimensional diversity climate measurement. We analysed data with the lavaan package, which was installed in RStudio. The first step was to assess the reliability and validity of each generational cohort. We set traditional CFA fit indices as minimum thresholds. The next step was to examine measurement invariance across generational cohorts. We compared a configured model against models with increasingly strict equality constraints across

generational cohorts. To conclude on measurement invariance, the  $\Delta$ RMSEA should not exceed 0.015, while the  $\Delta$ CFI should not exceed -0.01 across constrained models.

Results: The results showed that the diversity climate assessment for each separate generation can be considered reliable and valid. The change in RMSEA and the change in CFI did not exceed the minimum set thresholds when comparing the strict equality constraint models. This indicates that generational cohorts considered the one-dimensional diversity climate assessment in a similar manner.

Limitations: We only collected data from South African organisations.

Research/Practical Implications: Organisations who wish to enhance a diversity climate across generational cohorts, can apply the one-dimensional measurement with confidence to determine the shared perceptions of how well the organisation is managing and valuing diversity.

Value: A study of a similar nature does not yet exist. Therefore, the findings contribute to the body of knowledge for diversity climate studies.

Relevance to congress themes: A conducive diversity climate is manifested in how well an organisation can manage diversity. A validated assessment tool to measure diversity climates across generational cohorts (age diversity) can assist both practitioners and scholars in establishing a foundational view before designing interventions.

*Keywords: Diversity climate, generations, measurement invariance.*

## Oral presentation OP765

### **Do followers mind the pay gap? The impact of vertical pay inequality on followers' organisational identification and contribution to group goals**

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science

#### Research Goals

This research aims to shed light on the impact of leaders' pay on other group members' identification with an organisation and motivation to contribute to organisational goals. While incomes of senior leaders have risen substantially in recent decades, we have little understanding of how such vertical pay disparities affect the functioning of organisational groups.

#### Theoretical background

Theorising in the social identity tradition suggests that high vertical pay disparities may undermine group members' identification with their organisations and reduce their contributions to organisational goals. Specifically, recent empirical work suggests that vertical pay inequality can introduce psychological divisions in the workplace, reducing the sense that all organisational members are 'in it together'. Importantly, according to social identity theory, if this pay inequality reduces organisational members' tendencies to identify with their organisation then we can also expect that it will reduce their willingness to work hard on its behalf. In line with this, there is evidence that people who identify more strongly with their organisation are more likely to prioritise its goals over their own more self-interested ones, increasing their tendencies to contribute to the common good. On the basis of this theorizing, we expect that when leader pay is relatively high (versus relatively equal), workers will (1) contribute less to the common good, (2) be less responsive to leader instructions and (3) identify less with (a) their organisation and (b) their leader.

#### Design and Methodology

We recruited 318 participants from Prolific.co to participate in a study on multi-tasking in organisations. The design was a 2-way between participants' design, such that participants were allocated to work in a high or low pay gap organisation. We randomly allocated participants to companies that had high or low vertical pay inequality and measuring their contributions to the common good, their followership and organisational identification. Specifically, groups of 3 participants were allocated to companies that consisted of one leader and two workers. Workers were responsible for producing Widgets and for repairing the machines that make Widgets while leaders were responsible for monitoring worker performance and providing feedback. The pay was set up such that while workers earned a sure wage from making Widgets, the organisation benefitted when they repaired machines. By examining how hard participants work to produce Widgets versus repair machines, we can see how willing they are to sacrifice their own personal interest for the collective good. Importantly, the pay of leaders was set up so that they are either received relatively equal or much higher pay than the workers. After participants had worked for the organisation for a number of periods, they completed a measure of their identification with the organisation and leader. We also included exploratory measures of workers' perceptions that their pay was fair as well as their affective wellbeing and stress.

#### Results

We tested our hypotheses with mixed effects models with random effects at the individual-round and group-round level and robust standard errors clustered at the group level to account for any intertemporal correlation of errors within groups. Contrary to expectations, we found that the level of vertical pay inequality had no effect on workers' contributions to the common good,  $t(104)=0.001$ ,  $p=0.999$ , or to their responsiveness to leader requests that they make more widgets,  $X^2(1) = 2.85$ ,  $p=.091$ , or do more repairs,  $X^2(1) = 0.66$ ,  $p=.416$ . However, responses to the subjective measures indicate that participants were sensitive to pay disparities, and were less satisfied with their pay when vertical pay inequality was high. Importantly, in line with expectations, workers identified less with the organisation ( $b=-.80$ ,  $p < .05$ ) and their leader ( $b=-1.04$ ,  $p < .010$ ) when pay inequality was high. Exploratory analysis also suggested that workers' affective wellbeing was negatively affected by high vertical pay inequality. In sum, these suggest that working in an unequal pay environment may have negative consequences for worker wellbeing. This study did not provide evidence that vertical pay disparities will negatively affect worker behaviour.

#### Limitations

The major limitation of this study was its lack of ecological validity and the relatively short time span over which the company operated.

#### Conclusions

This work suggests that vertical pay disparity may harm group functioning by undermining group members' wellbeing.

#### Relevance to Congress Theme

The last 5 decades have seen a rise in unequal pay in many organisations, such that those in formal leadership positions have seen their pay rise much more than other organisational members. It is imperative that we understand the implications of this vertical pay gap in the changing world of work.

*Keywords: Pay inequality, followership, organisational identification*

## Oral presentation OP369

### **Do Gender Equity policies of companies affect perceptions of barriers to women's promotion? A preliminary study.**

Jose Ramos, IDOCAL, University of Valencia (Spain) and IVIE (Spain); Felisa Latorre; Amparo Ramos  
science

#### Research goals and why the work was worth doing

Women continue to face barriers that hinder their access and promotion to managerial positions. Gender barriers affect not only women, but also society as a whole, and labor organizations. Barriers influence negatively the perception of organizational fairness and organizational outcomes. To cope with gender barriers and promote females to managerial positions, companies have developed different Equity Gender Policies. Regarding their efficacy, we don't know studies analyzing the relationship between women's perceptions towards these policies and their perceptions of gender barriers. This paper aims to analyze the relationships between both kinds of perceptions to improve Equity Policies and their efficacy.

#### Theoretical background

Women continue to find obstacles in accessing and remaining in managerial positions. Previous literature show agreement regarding the main barriers found by women regarding promotion: work-life balance barriers, inequal HR policies, inequal performance appraisal, barriers to access influential networks, organizational culture and gender stereotypes. Gender barriers affect negatively organizational attitudes and results (organizational justice, job satisfaction, organizational commitment, performance, OCB). Different gender equity policies had been developed to cope with such barriers. Gendermainstraining, as a strategy to integrate a gender perspective in all public policies, has given rise to actions such as policies for work-family balance (Stratigaki, 2005); recruiting, training and mentoring programs to promote women into the boardrooms, campaigns to sensitizing about gender balance (Szydlo, 2013); explicit commitments related to hiring women for key positions of power, ensuring salary equity, encouraging women to be involved in networking opportunities (Johnson et al., 2015); and the Plan of Equal Opportunities for Women (Bustelo, 2016). However, despite the widespread use of such policies, barriers to the advancement of women remain. There are different ways to check if such policies achieved their goals but it is no clear evidence of how these equity policies are effective in removing such barriers. This study is focused on analyzing the relationship between the gender equity policies and barriers to women's promotion. We expect that positive perception of equity actions will contribute to the perception of fewer gender barriers, so we can know which actions are more effective and on which barriers they have the most effect.

#### Design/Methodology/Approach/Intervention

To analyze the relationship between equity policies perception and gender barriers perception a structural equation analysis was carried out in a sample of 539 female employees in a Spanish financial group, using MPlus. Measures used include a scale of five points of frequency of Gender Equity Policies developed in the company (20 items) and three barriers to women's promotion dimensions from the TOP WOMAN scale on a seven-point Likert-scale (Ramos et al., 2022): Unfair human resources policies and practices (4 items;  $\alpha=.83$ ), Unequal performance appraisal (4 items;  $\alpha=.96$ ); and Barriers related to the work-life balance and family responsibilities (6 items;  $\alpha=.81$ ).

## Results obtained

The exploratory (EFA) and confirmatory factor analysis (CFA) of Gender Equity Policies scale identified three factors: gender awareness (8 items;  $\alpha=.90$ ), gender equity in HRM (9 items;  $\alpha=.91$ ), and work-life balance (3 items;  $\alpha=.79$ ). As expected, the three factors of gender barriers perceptions appear negatively correlated with equity policies' perceptions, but these policies do not affect with the same effectiveness to each barrier. The more perception of the HRM gender equity policies, the less perception of the three barriers analyzed. However, the perception of work-life balance policies only reduces the perception of barriers related to unequal HR practices. Thus, women value the presence of gender equality policies, but women's perceptions of barriers seem to be mainly related with equity policies in HRM.

## Limitations

This is a cross-sectional design, with a sample formed by female employees from only one organizational group.

## Conclusions – research and or practical implications/Originality/Value

Our findings point out the relevance of equality policies in improving the gender balance in the labor market. To the extent that specific policies are carried out with a certain frequency, they significantly reduce the perception of gender barriers.

## Relevance to the Congress Theme

This contribution is novel in analyzing the effects of Equity Policies in decreasing the barriers to women's perceptions.

## Relevant UN SDGs

This paper contributes mainly to the SDG 5: Gender Equality, and secondly, to the SDG 3 Good Health and Well Being.

*Keywords: Barriers to women's promotion, gender equity policies*

## Oral presentation OP806

### Do HR Practices for Aging Workforce Improve Work Motivation among Older Workers Experiencing Career Plateaus?

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science

As populations age in many societies today, there is a trend for individuals to extend their professional lives. As a result, there is a growing interest among practitioners and researchers in motivating middle-aged and older workers to continue working. Existing research suggests that organisational HR practices specifically designed for ageing workforce may act as an important antecedent of older workers' motivation to continue working after retirement age. However, there are two major challenges in the literature. First, little evidence has been provided that takes into account factors related to the career context specific to older workers. In particular, there are greater differences in the extent to which older workers experience 'career plateaus' in their organisations. Accordingly, the effectiveness of the support from the organisation in motivating workers to continue working may well differ between older workers who experience career plateaus and those who do not. Second, the existing empirical reports are dominated by ones based on cross-sectional analyses, and thus fail to clarify the relationship between HR practices for ageing workforce and the motivation to continue working, operationalised as variables with time-series changes.

To address these issues, we develop an analytical model using job-demands resources model applied to ageing workforce career context, and examine (1) longitudinal effects of changes in HR practices for ageing workforce on changes in motivation to continue working and job apathy, and (2) moderating effects of changes in career plateaus on the relationship between changes in HR practices for ageing workforce and changes in motivation to continue working and job apathy.

Large-scale, time-series surveys were conducted over full-time employees in private companies with more than 100 employees in Japan. Japan is known as super-ageing society and has achieved the world highest ageing rate of 30%. Our analysis included data from 1,835 full-time workers aged 45 to 64 who participated in all four waves of the surveys, i.e., from Time 1 (T1) to Time 4 (T4), and who worked for the same company during the entire survey period (one year).

To test our hypotheses, we used a latent growth curve modelling, in which the intercepts and slopes of the repeatedly measured variables at four time points are estimated and a multiple regression model between the slopes of each variable can be estimated. Results revealed that changes in HR practices for ageing workforce (as operationalized by work assignment practices and performance review practices) were significantly and positively related to motivation to continue working after retirement age and negatively related to job apathy. In addition, we found that changes in career plateaus had significant moderating effects on the relationship between changes in the HR practices and changes in motivation to continue working as well as job apathy. Interestingly, the pattern of the moderating effects suggested that the HR practices designed for ageing workforce enhance motivation to continue working (and reduce job apathy) when the growth rate of workers' career plateaus are high while the same HR practices reduce motivation (and enhance job apathy) when the growth rate of career plateaus are low.

The contributions of this study are twofold. First, the study adds value to existing research on the HR practices-motivation relationship, which is mainly based on cross-sectional analysis, by identifying linkages between HR practices for ageing workforce and motivation to continue working (and job apathy) over time. Second, it was confirmed that changes in career plateaus moderated the

relationship between HR practices and increased motivation to continue working (and decreased job apathy), and that the relationship between HR practices (i.e., job resources) and outcomes (i.e., motivational outcomes) varies with the degree of career plateau experience (i.e., job demands). Specifically, for individuals with a decreasing trend in career plateau (i.e. declining job demands), HR practices can be effective in ameliorating motivation to continue working and job apathy, whereas for those with an increasing trend in career plateau (i.e. growing job demands), the HR practices may have worsening effects on motivation to continue working and job apathy.

In line with the EAWOP Congress theme 'The future is now: the changing world of work', this study focused on older workers' motivation issues from the sustainable career perspective. Furthermore, Goal 8 of the UN SDGs, 'Decent Work and Economic Growth', aims to achieve high levels of economic productivity through diversification. In particular, if the experienced and highly-skilled elderly population can continue to work after retirement through their intrinsic motivation, the possibility of achieving that sustainable goal will increase.

*Keywords: HR practices for aging workforce, career plateau, sustainable careers*

## Oral presentation OP416

### Do university students and employees face comparable demands and resources? Comparing data using the ReA employees and student edition

Britta Wittner, TU Braunschweig Industrial/ Organizational and Social Psychology; Eva-Maria Schulte & Simone Kauffeld | Industrial/ Organizational and Social Psychology

science

The number of students reporting to feel stressed is rising— even more since the beginning of the pandemic (Besa et al, 2021, Aristovnik et al, 2020). While studies underline this, society is often unimpressed: what kinds of struggles do students really have to face? Are demands and resources of students and employees truly comparable?

According to the Job-Demands-Resources Model (J-D-R; Bakker & Demerouti, 2017) stress is predicted by the demands individuals face at work and in their private life. In contrast, resources support work-engagement and can buffer the relationship between demands and stress. After applying the JDR to multiple contexts, it was adjusted to fit the needs of students at university (Study-Demands-Resources Framework, S-D-R, Lesener et al., 2020). Studies based on both models often use a limited amount of resources and demands as dedicated psychometrical scales were scarce. The ReA (Ressourcen und Anforderungen bei der Arbeit; Schulte et al., 2021) as well as the ReA\_Stud (a version adapted to the higher education context; Wittner et al., in prep) fill this gap by offering questionnaires measuring 20 to 23 resources and 17 to 22 demands for employees respectively students. Since 27 scales overlap (13 demands and 14 resources), meaning that they are identical except the context (e.g., using the word “university” instead of “work”) they enable us to compare scores of students and employees.

Comparing the demands we assume that time pressure and private demands are more prevalent in employees. Deadlines are rapidly paced in organizations, while students often have all their exams and papers at the end of the semester. Since their parents are often younger, and they are less likely to already have children of their own they are less likely to have to offer care work. We expect pressure to perform, strain, and technical difficulties to not significantly differ, while students are more likely to feel overly challenged since they must learn something new every day. While some resources might be similar, we assume students to have more private support, recovery, and autonomy. Younger people often have more friends and closer ties to their parents, they can structure days as they feel fit and thus could have more time to rest and feel more autonomy. In addition to these expected differences, we examine all scales exploratively to identify potential other differences and, thus, to answer the question, how equally challenged students and employees are.

In this study, we compare data of  $N = 459$  employees and  $N = 716$  students. The employees were 38.5 years old ( $SD = 12.53$ ) and on average entered the working world approximately 15 years ago ( $SD = 12.04$ ). 40% respectively reported to be male or female, 20% made no allegations. Students were notably younger ( $Mean = 24.5$  years,  $SD = 5.57$ ) and in their 4th semester ( $SD = 2.82$ ). 65% were female, 27% were male and 11% diverse.

In contrast to our hypotheses initial results show that students perceived significantly higher time pressure and private demands, while employees reported significantly higher strain. Students were significantly more challenged and thus felt more overwhelmed. Contradicting to our hypotheses, students perceived significantly less private support and scored lower on recovery and autonomy. Our results show, that over all dimensions, students reported significantly less resources and more demands than employees.

Our study offered surprising insights, that lead to a better understanding and a call to take university students complaints seriously. Discussed in the light of previous results on stress and university students, it is important to support students early on. Stressed students are less successful in their studies and more likely to drop out of their major or university all together. Most alarming: first studies point towards an overspill effect – stressed students become stressed adults later on. Thus, universities, teaching staff and private support systems have to support students a) directly, b) by offering a learning environment they can strive in and c) guiding them to use and strengthen their resources.

With our study we support the UN sustainable development goals: supporting students early on does not only lead to quality education for all students, but it might also lead to employees in psychologically healthy careers. Since stress in the workplace influences all other aspects of an individual's life, it supports their long-term well-being and enables them to lead a healthy life.

*Keywords: Job-Demands-Resources Model, Study-Demands-Resources Framework, stress*

## Oral presentation OP465

### Do you see me as I see myself? Implications of internal leader identity asymmetry

Samet Arslan, Cristian Vasquez, Anna Topakas & Kristin Hildenbrand | The University of Sheffield science

Although researchers have contributed to the growing interpersonal congruence-related literature, the intrapersonal aspect of congruence has been neglected (Meister et al., 2014). Our study, first, answers the call for the need for studies to understand how leaders define themselves (Epitropaki et al., 2017) by examining the internal leader identity congruence of managers. Second, our research answers the call for exploring the causal relationship between the internal identity (in)congruence and outcomes (Meister et al., 2017) using a time-lagged survey design.

Due to the fundamental desire for self-verification of individuals (Swann, 1983), they seek to be affirmed and verified of their work-related (i.e., leader) identities (Meister et al., 2014). Developing a leader identity is complex because of the various processes such as being granted and validated by others through social interactions (DeRue & Ashford, 2010; Epitropaki et al., 2017). Individuals engage in both internal and external identity negotiation during the leadership development process (Collinson, 2003; Sinclair, 2011) and they might experience internal identity asymmetry (incongruence) when they feel misidentified (Meister et al., 2014) or symmetry (congruence) when they feel identified correctly. While internal identity incongruence might affect individuals negatively (Meister et al., 2017), increased congruence between self-views and the views of others might help individuals to predict and control their environment (Swann, 1983) and have a positive impact on their effectiveness and performance (Carter & Mossholder, 2015; Carter et al., 2018). We conceptualise internal leader identity incongruence as the incongruence in leader identity assessments between manager–subordinate reflected appraisal, that is, the distance in a manager's leader identity and their perception of their subordinate's assessment of their leader identity. Thus, in the current study, we propose that the incongruence between manager–subordinate reflected appraisal of managers' leader identity is associated with (1a) lower leader effectiveness and (1b) lower affective motivation to lead than is the congruence. Drawing on recent evidence that endorsing one's own leader identity as well as ensuring one's leader image is acceptable to others (Cunningham et al., 2022) we further propose that a high-high congruence is associated with (2a) higher leader effectiveness and (2b) higher affective motivation to lead than a low-low congruence.

In this study, participants having managerial responsibilities (N = 202) were recruited from Prolific. We used a two-wave time-lagged survey design, with a two-week interval. In Time1, managers were asked to rate the extent to which they see themselves as a leader and their subordinates see them as a leader (reflected appraisal) as well as the outcome variables. In Time 2, they were only asked to rate the outcome variables. We used polynomial regression with response surface methodology to test our hypotheses (Edwards & Parry, 1993).

Our findings did not support hypothesis 1a and 1b but supported 2a and 2b. The analyses demonstrated non-flat increasing (slope = .43,  $p < .001$ ) and linear (curvature = .07, n.s.) leader effectiveness, as well as non-flat increasing (slope = .65,  $p < .001$ ) and linear (curvature = .00, n.s.) affective motivation to lead along the leader-subordinate leader identity congruent axis.

Our study has several limitations. First, even though our study employed time-lagged data, we used a single source (i.e., managers) to capture both the predictors and outcomes. Future research might extend our study by collecting outcome data from the managers' followers, especially in the case of

leader effectiveness. Second, as we did not use an experimental design, our study has limitations in terms of inferring causality.

This study extends our understanding of intrapersonal dynamics of leader identity by evaluating the congruence between how managers see themselves and managers' reflected appraisal of their subordinates. Our findings might inform the organizations about the importance of using more comprehensive 360-degree feedback tools that include questions seeking the intrapersonal aspect of leadership ("how I believe others see me") as well as the external and actual aspects ("how others actually see me" and "how I see myself").

The future will be more inclusive and equal if we can act now to increase diversity in the leadership echelons. By exploring the implications of internal leader identity processes, we build knowledge and understanding of why some people may see themselves and be seen as having leadership potential, while others may struggle to endorse a leader self-view, which may prevent them from seeking leadership and evaluating their own leadership positively. We address "the future is now?" by pre-empting the future we want through understanding and removing the barriers to diversifying the leadership pool of the future.

*Keywords: identity, Identity asymmetry, leadership*

## Oral presentation OP576

### **Does Career Change Make Life Better? Development in Health, Well-Being, and Job Satisfaction after an Occupational Change**

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science

Research goals: Occupational changes are important and relatively common career transitions (Bachmann et al., 2020), that have important implications for employees because they influence individuals' work roles, behavior, and work-related outcomes (Dierdorff, 2019). Occupations also significantly shape the work environment, job conditions, and nature of job tasks (Dierdorff & Morgeson, 2013). Thus, changing an occupation may be difficult and can have significant consequences for employees and organizations (Dierdorff, 2019). According to the Institute of Labor Economics, 3% of European workers change their occupations yearly (Bachmann et al., 2020) and about 47% are unhappy wishing to change careers. The goal of the study was to address previous inconsistent results regarding the consequences of occupational change and expand the scope of investigated outcomes, by health and well-being. Furthermore, we also explore and explain why employees show different developments in tested outcomes after an occupational change .

Theoretical background: Switching occupations can lead to a devaluation of occupation-specific human and social capital, and a depletion of resources due to the necessary investment of resources for developing new skills and knowledge (Kambourov & Manovskii, 2009; Parrado et al., 2007). However, occupational change can also lead to gains and benefits for employees, such as an improved match between skills and job-specific requirements or improved working conditions (Edwards et al., 2006; Parker, 2015). Existing research on occupational change has led to ambiguous findings. Because of possible losses and gains, not all employees may show the same effects on outcomes or the same development of outcomes after the occupational change. Previous research commonly explored job and career-related effects as outcomes of occupational change (Carless & Arnup, 2011; Longhi & Brynin, 2010). However, because occupational change is a considerable transition with potentially broad professional and personal implications, it could also influence employees' health and well-being. Previous research has not yet clarified which factors contribute to favorable or unfavorable development over time.

Design/Methodology: We analyzed the career data of young employees in Switzerland, only including participants who changed their occupations within the first four years after entering the labor market (N = 352). To estimate intra-individual change across time in outcomes, we used latent growth models (LGMs).

Results: On average, our results suggest that those who change their occupations report positive developments in health, well-being, job satisfaction, and the quality of job conditions. Our expectations that job and personal resources in the new occupation should be positively related, and job demands negatively related to an improvement in health, well-being, and job satisfaction after an occupational change were supported. Our findings also imply that improvement in resources and demands in a new occupation is associated with more favorable developments in health, well-being, and satisfaction after an occupational change.

Limitations: Our sample only contains employees in their early career stage, not middle- or late-career employees. Different trajectories might be found for more diverse samples or samples with

employees in later career stages. Future studies should include more diverse samples regarding education, age, and career stage or might explore which factors or combinations of factors might moderate the different consequences of occupational change.

**Conclusion:** In the early career, occupational change has positive consequences for most individuals in our sample. We find an overall favorable development in health, well-being, and job satisfaction, as well as in job demands, job resources, and self-efficacy up to two years after an occupational change. An increase in job resources and self-efficacy and a decrease in job demands after an occupational change explain favorable development in tested outcomes. Furthermore, especially improvement (decline) in job resources seems relevant for improvement (decline) in “positive” outcomes (job satisfaction and positive affectivity). Improvement (decline) in job demands seems relevant for improvement (decline) in “negative” outcomes, such as physical ailments and negative affectivity.

*Keywords: Occupational change, health, well-being*

## Oral presentation OP240

### Does economic skills obsolescence increase older workers' absenteeism?

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science&practice

#### Research goals

With accelerated technological developments, older workers can experience 'economic skills obsolescence' in which their current skills no longer correspond to the newly required skills for their job and lose their value. Previous studies showed that skills obsolescence is related with job dissatisfaction and job-related stress (e.g., McGuinness et al., 2021; Tsai et al., 2007). Our study is the first to examine the relationship between economic skills obsolescence and absenteeism among older workers. Studying this relationship is important for finding ways to extend working lives and sustain older workers' employability. In today's tight labor market, where organizations face difficulties in recruiting adequately skilled workers, employing experienced workers with up-to-date skills is essential to ensure a successful organization.

#### Theoretical background

Using the JD-R framework (e.g., Bakker et al., 2003), we argue that economic skills obsolescence is a job demand, as it is a stressor related to the changes in the skills demanded in the job. Workers experience the fear of skills obsolescence and its consequences for their employability, as well as the constant pressure to keep their skills up-to-date. Building on the JD-R model, we hypothesize that economic skills obsolescence increases workers' absence rates (duration and frequency) by two processes: a health impairment process mediated by burnout and a motivational process mediated by work engagement.

#### Methodology

We used data from 'STREAM' - Study on Transitions in Employment, Ability, and Motivation for our study. STREAM is a longitudinal stratified cohort study among older employees, self-employed, and non-working persons in the Netherlands (aged 45-64 years). We analyzed the long-term effects of economic skills obsolescence on absenteeism in a job with data from employees who participated in the 2015 wave and the follow-up measurements of 2016 and 2017. We tested our hypotheses with SEM models, including cross-pathways, using R's statistical software.

#### Results

Our results show that economic skills obsolescence is a job demand that affects absenteeism both through a health impairment and a motivational process. More specifically, we find that burnout and work engagement mediate the relationships between economic skills obsolescence and absence duration and absence frequency.

#### Limitations

There are a few limitations to our study. First, variables were derived from self-report measures, raising concerns of common method bias. Our absence data also has a non-normal distribution, which is very common in studies using absence data. A final limitation is the low percentage of variance explained by the research models. However, the pseudo R<sup>2</sup> in our study corresponds with prior research, since absence behavior is influenced by a wide range of factors (e.g., Bakker et al., 2003).

### Research implications

Our study is the first to examine the relationship between economic skills obsolescence and absenteeism, making several contributions to the literature. First, our study extends the JD-R literature by including economic skills obsolescence as a job demand that could lead to absenteeism. Second, it contributes to the current literature on absenteeism, which has so far not identified economic skills obsolescence as a possible cause. Finally, our study contributes to the empirical research on economic skills obsolescence as an early warning indicator of older workers' absenteeism.

### Practical implications

Our study emphasizes the importance of monitoring economic skills obsolescence as an early warning indicator for absenteeism. Also, to promote lifelong learning and related pro-active HR practices, we suggest strengthening dialogue on the fit between workers' skill sets and current & future skills demand.

### Relevance to the Congress Theme

Economic skills obsolescence is a stressor resulting from a process of continuous changing skill requirements in a job. Experiencing obsolescence usually stimulates workers to engage in developmental activities, such as training, but they could also increase workers' absence rates. We aim to analyze this latter relationship, discuss the results, and find ways to prevent or overcome economic skills obsolescence so that workers remain healthy and motivated at work.

*Keywords: economic skills obsolescence, absenteeism, older workers*

## Oral presentation OP350

### **Does mindful organizing shape employees' attitudes and behavior? Testing a multilevel moderated model**

Daniel Gajda & Przemysław Zbierowski | University of Economics in Katowice

science

#### Research goals

Ensuring the reliable functioning of an organization is one of the priorities for managerial staff, because in the age of modern technology, the consequences of failures and accidents at work may be global in scale. The particular importance of reliable functioning is assigned by so-called high reliability organizations (HROs), such as nuclear power plants, drilling platforms and airlines, that are positively deviant in their nearly error-free performance, despite operating in dynamic and time-pressured conditions. The scientific literature (e.g. Weick et al., 1999) argues that the exceptional reliability of these organizations arises from mindful organizing (MO).

The current theory on MO is mostly informed by studies conducted in HROs, which has provided some details about the nature of mindfulness in organization and the conditions under which it thrives. Although the concept of MO is intriguing, there is a shortage of empirical evidence to support the usefulness of mindful thinking and action in ordinary business settings. Moreover, a growing body of evidence shows the positive impact MO has on reliability and safety related outcomes. However, very little is known about employees' subjective experience of working in contexts engaging in MO, especially about the attitudinal and behavioral responses of employees at work.

Therefore, the purpose of our study was to examine the employees' reactions to MO in ordinary business settings. Ultimately, we ask the question about how MO affects positive attitudes and behavior toward work and organization, such as work motivation, organizational commitment and organizational citizenship behavior (OCB), that is attitudes and behaviors associated with organizational performance in previous research.

#### Theoretical background

We apply social exchange theory (Blau, 1994) to explain how the employees' reactions to MO are formed. We also try to contextualize the employee-related effects of MO and study the moderating effect of the organization's environment on the examined relationships as several researchers (e.g. Vogus & Sutcliffe, 2012) argue that the effectiveness of MO may be higher under uncertain environments with constant changes.

#### Method

We surveyed 307 employees to test our model. Data collection was carried out with the use of convenience sampling to recruit employees who work for companies from many industries and occupy various positions. A series of hierarchical regression analyses and structural equation models were performed to test our hypotheses.

#### Results

The results reveal that MO has a positive and significant impact on employees' affective and normative commitment, motivation to work and OCB. Contrary to expectations, our study did not confirm that organizations' environment affect the attitudinal and behavioral results of MO.

Furthermore, we found that OC to some extent explains the relationship between MO and motivation as well as between MO and OCB.

#### Limitations

Like other studies, also ours has some limitations. First, all the data for this study were gathered from a single source at a single point in time, raising concerns about common method bias. Although we adopted the procedural remedies recommended by Podsakoff et al. (2003), we cannot exclude the possibility that CMV exists. However, the post-hoc test indicated that CMV is not a threat to our results. Second, because the data were self-reported, social desirability response bias cannot be fully ruled out.

#### Conclusions – research and practical implications/Originality/Value

To the best of our knowledge, our study is one of the first attempts to explore the effects of MO in the traditional business context. Our findings demonstrate that organizations situated in a less demanding environment than HRO's could also benefit from MO. Moreover, the study offers some insight into how MO affects employees' attitudes and behaviors. Results of our research show organizational leaders that it is in their best interest to foster MO, as it contributes to a more positive working experience and, consequently, strengthens employees' bond with the organization, boosts their work motivation and elicits discretionary behavior.

#### Relevance to the Congress Theme

The study is particularly relevant in the light of changing world of work because in contemporary economic realities, characterized by increased risk and uncertainty in managing the organization, raising awareness of and finding ways of responding to unanticipated occurrences daily in order to avoid more consequential crises is critically important.

#### Relevance to the UN SDGs

Our study shows that MO contributes to a more positive working experience and elicit discretionary behavior, which leads to strengthening interpersonal relations and building social capital. This may result in achieving the UN Sustainable Development Goals, such as creating wealth and well-being for customers, shareholders and the whole society.

*Keywords: mindful organizing, employee attitudes, organizational citizenship*

## Oral presentation OP210

### Does performance management underpin employee's motivation and behavior

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practice

Subtitle: The Effect of Performance Management System on Change-Oriented Behaviors and the mediating role of intrinsic motivation in banking sector in Cambodia

Purpose: Performance Management System is one of the most important management tools that enhances performance and productivity of the organization by developing and improving performance of individuals and teams. It consists of a range of activities such as goal setting, on-going coaching and monitoring, providing feedback, and developing knowledge, skills and abilities of people to improve performance. Performance management system is considered as effective when it enables employees to positively change their behaviors and subsequently improve their performances. For this purpose, it has leaned toward motivational, developmental and nonjudgmental orientation that encourages discretionary behaviors among employees and increases their motivation for extraordinary efforts. Those discretionary behaviors include promotive and constructive behaviors which intend to stimulate and inspire something to happen. In organizational psychology, motivation refers to energy and willpower within individual to initiate work-related tasks and behaviors. It has been recognized that employees who are intrinsically motivated are more likely to be flexible, curious to learn and try new things, and open to new approaches to solve problems. According to cognitive evaluation theory, goal-oriented challenges, communication, evaluation, support, and freedom from being judged or criticized by others can reinforce individual's intrinsic motivation which drives desirable change-oriented behaviors such as taking charge, personal initiative, and speak up or challenge the status quos. These productive behaviors are critically important for successes of organizations. Nevertheless, there is little finding on how performance management system motivates employees to embrace change-oriented behaviors. Therefore, this research study aims to investigate the effect of performance management system on change-oriented behaviors and examine the mediating role of intrinsic motivation in banking sector in Cambodia.

Methodology: A sample of 469 employees in banking sector in Cambodia were surveyed. Four hypotheses were tested using multiple linear regressions and mediation analyses.

Findings: The result showed that 1) performance management system had strong effect on employee's intrinsic motivation and change-oriented behaviors. 2) among the four instruments, performance review had the strongest influence on intrinsic motivation and change-oriented behaviors followed by goal setting, performance coaching and performance feedback. 3) the predictor power of performance feedback on intrinsic motivation and change-oriented behaviors disappeared when adding performance review into the model although there was no sign of multicollinearity. 4) intrinsic motivation partially mediated the positive relationship between performance management system and change-oriented behaviors.

Research limitations & Implications: It is worth noting that four limitations were recognized in this study. 1) language barrier of the survey questionnaire which was written in the second language of the respondents, 2) the dominant responses from two organizations who participated would potentially influence the overall research finding. 3) demographic information of respondents such age, gender, education level, service tenure, and leadership responsibility of the respondents was not comprehensively analyzed and discussed for the maximum benefits of this study. 4) 15 outliers

were found but kept in dataset due to insufficient reasons to exclude them from the analysis, however, severe skewness and high kurtosis were in acceptable range.

**Originality & Value:** The relevant findings were that goal setting and performance review had the greatest impact on change-oriented behaviors so more attention and effort should be rigorously paid on these two main instruments. It was suggested to further investigate at workplaces why performance coaching had lesser impact on employee's intrinsic motivation and change-oriented behaviors than that of goal setting and performance review. Finally, intrinsic motivation partially mediated the positive relationship between performance management system and change-oriented behaviors. In this context, extra emphasis should be put on empowerment by management on changes or corrections of work process and procedure, and speak up culture that encourages new creative ideas. For future studies, it is suggested 1) to add extrinsic motivation as a mediator because external social-contextual events can reinforce intrinsic motivation. 2) to add demographic information of respondents as control variables given that the primary study showed some of these variables had influences on change-oriented behaviors. 3) to closely examine the relationship between performance review and performance feedback.

*Keywords: Performance Management, Change-Oriented Behaviors, Intrinsic Motivation*

## Oral presentation OP805

### Does procrastination can fluctuate day to day? A dynamic lens

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science

Procrastination is a behavior that implies delays in starting or finishing tasks or making decisions, makes it difficult to achieve goals and is associated with feelings of guilt, shame and is experienced as stressful (Visser, Korthagen & Schoonenboom, 2018). Although great advances have been made to unravel the antecedents and consequences of procrastination, limitations can be identified, such as the lack of daily studies. New findings have already pointed to the daily fluctuation of procrastination that can decrease or increase as the days go by (Van Eerde & Venus, 2018). Studies have indicated task aversion as a reason to procrastinate, which may increase in the face of more difficult and boring tasks (Michałowski et al., 2020). To expand the nomological network of procrastination, the research aimed to analyze its daily fluctuation, considering the influence of the degree of importance and pleasure attributed to the task and the positive affects that occurred on the day. The study was relevant for confirming the fluctuation of procrastination over the days at work and in different groups.

#### Theoretical basis

The theoretical support of the research is Bandura's Social Cognitive Theory, for which, in addition to personal factors, it shows that behavior can be altered by contextual factors, confirming the situational perspective of procrastination and its dynamic structure.

#### Method

This daily study was carried out on six consecutive days with Brazilian workers. The first day of the survey was structured with sociodemographic questions and a questionnaire in which the participant programmed up to three work activities to be carried out the following day. The five subsequent days of the research consisted of questionnaires in which, in addition to containing the report of the activities planned to be carried out on the following day, the participant was asked to classify the percentage of completion of each task, the degrees of importance and pleasure that they experienced. felt when carrying out these activities, and the positive affects that occurred on the day. Such percentages of completion of these daily tasks were grouped in each of the five days, making a total of 420 responses, generated by the 84 participants. Most workers who participated in the survey were female (63.1%). The mean age was 35.65 (SD=8.983), with 44% having children and, of these, 37% having children living in the same household, 39% being married. The average working time in the profession is 12.3 years (SD=9.101). Almost half (n=51%) of the respondents were in face-to-face work format at the time of participating in the survey and 54% do not hold a management position. A multiple linear regression analysis was carried out, with the aim of investigating to what extent the variables importance and pleasure of the task and positive affects influenced task procrastination. The repeated measures ANOVA was used to evaluate the difference in procrastination fluctuation in groups such as men and women, workers in face-to-face and home office formats, leaders and non-leaders, groups according to marital status, groups that have children living at home and living abroad at the time of application of the survey.

#### Results

The research results support the fact that there was a variation in the impacts on procrastination over the six days verified, and the degrees of pleasure and importance attributed to the task were the variables that most impacted on procrastination, however positive affects did not had a significant impact in the research period. The fluctuation of procrastination occurred more intensely in the group of men and workers in the home office format than in the other groups. Workers who do not hold a leadership position procrastinated more and maintained this behavior over the days with low fluctuations. Married professionals groups procrastinated more than divorced and single professionals. Professionals who have their children living in the same house showed a greater fluctuation in procrastination throughout the research.

#### Limitations

Data were self-reported and new advances would be made in establishing external criteria to assess procrastination in workers. In addition, the assessment of procrastinating behavior lasted only six consecutive days, it is suggested that future studies verify this behavior over longer periods.

#### Research/practical implications

The study fills a gap in the literature on the fluctuation of procrastination and the factors that impact this behavior and justifies the development of training focused on productivity in the work environment.

#### Originality/Value

The research stands out for analyzing the fluctuation of procrastination through the daily study method, in addition to the influence of context variables on the procrastinating behavior of workers. The study makes theoretical and practical contributions by describing other mechanisms that affect procrastination at work.

*Keywords: Procrastination, Degree of pleasure of the task, Degree of importance of the Task.*

## Oral presentation OP179

### **Does the leader's life story matter? Exploring generativity in leaders', employees', and teachers' life stories**

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science&practice

Generativity is a crucial leadership characteristic in today's VUCA environment. For highly generative individuals taking care of others is as important as the maintenance and the extension of the self. Their main aim is to create something that will outlive the self, that will be a gift for the future generation. This object, event, or behaviour will be their own legacy, the representation of their symbolic immortality. Generativity can contribute not only to the organization's profitability, but also to a better atmosphere, where everyone is committed to continuous development and organizational citizenship behaviour. That's how it can also contribute to the organization's sustainability. With a highly generative leader firms can become learning organizations and easily adopt to today's rapidly changing environment. The only way someone could authentically achieve generativity is the narrative revision of one's life story. The objective of the present study was to examine different forms of generativity in life stories of Hungarian leaders, employees, and teachers. It is widely proven that teachers represent the communal mode of generativity, but it has only been theorized that leaders represent the agentic mode. With the present study we would like to demonstrate that different types of generativity could be manifested differently in the life stories according to various work positions. In the present study, N = 85 participants (n CEO = 46 n employee = 20, n teacher = 21; n man = 68, n woman = 19) were interviewed using a shortened version of the life-story interview developed by McAdams (1985). Themes of agency and communion were used in coding. The result show that CEOs and teachers are the most generative group, but among different components. The characteristics of CEOs' generativity is agency, while teachers' life stories are marked by communality. Despite this difference both groups could integrate the two themes in their life stories equally, which is also a key feature of an authentic generative person. One of the biggest limitations of our study is the overrepresentation of males, which is a general pattern among Hungarian leaders. At the same time our study calls attention to the importance of leaders' life stories. With this powerful tool, we could develop and help leaders – with techniques such as narrative coaching - to find their true authentic self, become more effective leaders and be able to establish balance in their organizations in today's unpredictable environment. Leaders finding their inner generativity can result in a company culture that supports decent work and economic growth, innovation, and inequality within their organization, by which they can also have a positive effect on their employees' and local environment's well-being.

*Keywords: leadership, generativity, life story*

## Oral presentation OP335

### Don't leave accountable leaders alone: How and when felt accountability affects loneliness at work for leaders

Hodar Lam, University of Amsterdam; Zhuojun Wang, Institute of Psychology, Chinese Academy of Sciences; Shuai Yuan, University of Amsterdam

science

High quality connection is vital to employee motivation and satisfaction (Stephens et al., 2012). However, employees are finding it harder to feel connected at work, as indicated by a recent large-scale surveys in U.S.: half of the employees reported feeling lonely at work, an experience that impairs employee performance and well-being (Anand & Mishra, 2019; Ozelik & Barsade, 2018).

Scholars and practitioners are now paying attention to loneliness among employees. However, leader loneliness has received substantially less attention. Emotion and well-being issues in leadership are often stigmatised, partly due to the romanticised view that leaders are mentally strong, powerful, and resourceful (Barling & Cloutier, 2017). Therefore, the literature contains little evidence for the leadership-specific trigger and protective factors of leader loneliness.

We argue that felt accountability, defined as the expectation that one's decisions or actions will be evaluated by a salient stakeholder (Wang et al., 2019), would be a key protective factor that prevents leaders experiencing an excessive degree of loneliness. Accountable individuals are more cautious in decision-making and hence, process information in more detail and produce better decisions (Aleksavska et al., 2019). In the decision-making process, leaders often need to discuss and disclose their information as well as stress and anxiety (Wright & Barling, 1998); this self-disclosure behaviours enjoy two important benefits: emotionally, it helps build mutual trust with peers, and cognitively, it facilitates information and feedback sharing.

Here we argue that leaders with high accountability, bearing the goals of support-seeking and information-sharing, are more likely to engage in self-disclosure with their peers (but not leaders or followers), and hence, feel less lonely at work. Moreover, we expect self-disclosure to peers is more likely when leaders feel more powerful, as power has a disinhibiting property that motivates individuals to satisfy their social goals more immediately (Guinote, 2017).

#### Method

We conducted a three-wave weekly survey study with 277 mid-level managers, recruited via Prolific Academic. The average self-rated hierarchy level, on a ten-point scale, is 6.55 (SD = 1.25), and the average number of followers is 8.04 (SD = 10.20). Each weekly survey measured participants' felt accountability (Giessner et al., 2013), self-disclosure to superiors, peers, and followers (Lam & Shemla, 2019), and workplace loneliness (Wright et al., 2006).

#### Results

We tested our hypotheses with the Structural Equation Modelling framework with the R package lavaan. In line with our hypothesis, felt accountability measured at Time 1 positively predicted self-disclosure behaviours towards the peers, measured at Time 2 ( $b = .18, p < .01$ ), which in turn negatively related to leaders' self-reported loneliness at Time 3 ( $b = -.32, p < .01$ ). Importantly, our suggested indirect effect is also significant ( $b = -.06, p < .05$ ); in other words, felt accountability negatively affected the sense of loneliness through self-disclosure to peers. Last, subjective power

indeed positively moderated the relationship between felt accountability and self-disclosure to peers ( $b = .17, p < .01$ ).

#### Discussion

#### Limitations

First, we proposed support-seeking and information-sharing as motives of accountable leaders to self-disclose to peers, but this explanation remains empirically untested. Second, our focal variables were measured by self-reports and are subject to response biases. Therefore, other-ratings of accountability and self-disclosure may provide stronger tests for our proposed hypotheses.

#### Implications

First, drawing on the accountability literature, we distinguish the concept of leader loneliness from employee loneliness by introducing felt accountability as a leadership-specific antecedent. Second, we identify a mechanism of self-disclosure that explains how accountable leaders cope with potential loneliness threats. Third, we show that subjective power is a key condition for leadership emotional experience, thus addressing the puzzle of when power could mitigate loneliness (Lee & Tiedens, 2001).

#### Research Relevance

Our study introduces loneliness as a likely emotional reality in the future of work. With increasing work digitalization and remote work arrangements, leadership will be even more challenging, as social cues are lost in online communications and workplace interactions become more instrumental (Chernyak-Hai & Rabenu, 2018). Therefore, we believe our study would inspire EAWOP participants on evidence-based interventions for leader well-being.

This study primarily addresses the UN SDG8: Decent work and economic growth and curb the spillover of leader loneliness to their teams (SDG3: Good health and well-being). Further, we raise public awareness on loneliness that is often-stigmatised at work (SDG10: Reduced inequalities).

*Keywords: Loneliness, accountability, leader well-being*

## Oral presentation OP333

### **Don't you tell me what to do, you are just an artificial intelligence! – Perception, evaluation and motivational function of AI-assisted feedback**

Klara C. Grünwald, Matthias F. C. Hudecek | Department of Experimental Psychology, University of Regensburg, Germany; Silke F. Heiss, FOM University of Applied Sciences

science&practice

Research goals and why the work was worth doing:

While Artificial Intelligence (AI) is becoming more prominent and is already used by 50% of workers in organizational context, most employees are optimistic and grateful to work with robot co-workers. 64% even have more trust in robots than their managers (Oracle, 2019). This gives the impression that the further implementation of AI is a relevant change for the future organizational context and future leadership.

Therefore, we intended to examine the underlying psychological aspects of AI in a leadership context. Our study aimed to investigate the acceptance, perceived quality and motivational function of AI in a managerial position in organizational context. We compared the perception of AI-assisted feedback to feedback from a human manager to investigate whether people really prefer an AI to a human manager when it comes to feedback.

Theoretical Background:

AI seems to generate an objectively higher quality of feedback than human managers under certain conditions (Tong et al., 2021), which correlates with better employee performance and learning. However, when employees know that the feedback was generated by an AI, they are less likely to accept the feedback and rate its quality lower than feedback from human managers, which negatively affects performance and learning.

Further, positive feedback from human managers correlates with higher evaluated accuracy and positive attitudes towards the organization, as well as higher work engagement, resulting in lower turnover compared to negative feedback (Anseel & Lievens, 2009; Lee et al., 2019).

Design/Methodology/Approach/Intervention

We set up a 2x2 online scenario-based study. Participants (n=357) were instructed to imagine a hypothetical scenario, in which they were working for several months in a lead position on an important project for their company. Before the last part of the project, the participants now receive feedback from their manager. This feedback was randomly varied in source of feedback (AI vs. human manager) and type of feedback (positive vs. negative).

We then assessed acceptance of feedback, evaluated quality of feedback, and individual work engagement as dependent variables, as well as the rated competence of feedback provider, i.e., the AI/human manager.

Results

Positive feedback was significantly more accepted ( $\eta^2=0.41$ ), evaluated more positively regarding feedback quality ( $\eta^2=0.38$ ) and feedback provider ( $\eta^2=0.14$ ) and led to a higher work motivation ( $\eta^2=0.34$ ) than negative feedback.

Further, we found that feedback from human managers was more accepted ( $\eta^2=0.09$ ), evaluated as more qualitative ( $\eta^2=0.13$ ) and led to a higher work engagement ( $\eta^2=0.02$ ) than the same feedback from an AI. Last, human managers as a feedback provider were significantly rated as being more competent than AI ( $\eta^2=0.35$ ).

#### Limitations

The present study was a scenario-based study and should be replicated in a real-life organizational context.

#### Conclusions – research and or practical implications/Originality/Value

This is the first study to compare AI in a managerial position to a human manager, and the first study using the exact same feedback to compare the perception of AI to human managers. Therefore, differences cannot be attributed to actual quality differences but to the source of feedback, i.e., AI vs. human manager.

Furthermore, previous tendencies regarding the acceptance and quality of AI-assisted feedback were confirmed and extended by the perceived competence of the feedback provider and individual work engagement as a relevant outcome for the organizational context.

Finally, the current study demonstrated for the first time that the findings on acceptance and quality of feedback and its effect on motivation from research on human managers can be applied to AI-based feedback.

#### Relevance to the Congress Theme

The present study is a critical response to the findings of the study conducted by Oracle (2019) and demonstrates that AI is not necessarily and unreservedly better accepted than human managers. Employees might seem optimistic and grateful towards AI co-workers and wish for a robot instead of their human manager, but when it comes to feedback, the results of the current study can not support these statements. Our study therefore contributes to a critical discussion on the use of AI as a manager in the organizational context.

*Keywords: Leadership, feedback, artificial intelligence*

## Oral presentation OP359

### Dutch workers' concerns towards having a coworker with mental illness: a latent class analysis

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science

Research goals and why the work was worth doing

The aims of this study are to examine: (1) workers' concerns about towards having a coworker with mental illness, (2) to identify distinct subgroups of workers based on their concerns about towards having a coworker with mental illness, and (3) to characterize these subgroups in terms of knowledge, experience, attitudes, and background characteristics.

Theoretical background

Mental illness is highly common, and as people with common and severe mental disorders are three to seven times more likely to be unemployed than people with no disorder [1], this problem is costly for society [2]. Whereas unfavorable work environments can lead to mental illnesses such as burnout and stress, research has shown that overall, and especially under favorable conditions, employment is beneficial for wellbeing and mental health. For instance, employment can provide major benefits for health and wellbeing, (e.g. financial independence, social contacts) and it is increasingly shown to be beneficial for mental health [3-5]. Under the influence of the prevailing biomedical model, for decades it was assumed that the lower work participation rates were caused by the mental illness itself [6]. However, it is increasingly being acknowledged that these can also be attributed to other, psychosocial factors, such as stigma and discrimination [7]. Evaluating how processes of stigma are perpetuated in the workplace is essential for guiding the development of anti-stigma interventions [8]. A recent systematic review highlighted that publications on workplace stigma is rapidly increasing, although the roles of co-workers warrant more attention [9]. To design destigmatizing interventions to create more inclusive workplaces and to improve sustained employment of people with mental illness, more knowledge on worker's concerns towards having a coworker with mental illness is needed.

Design/Methodology/Approach/Intervention

In February 2018, a cross-sectional survey was conducted among a nationally representative internet panel of Dutch employees. The questionnaire was sent to 1,671 Dutch adults who participated in the panel, had paid jobs, and were not working in management positions. A new questionnaire was developed to address the aims of this study. To address the first research aim, descriptive statistics were used (means, standard deviations, and frequency table). For the second and third research aim a three-step approach Latent Class Analysis (LCA) was used.

Results obtained or expected (if not available, it must be made clear when they will be)

First, the most common concerns reported were the concern that a direct colleague with mental illness would not be able to handle the work (45.0%) and the concern that they were not sure how to help this colleague (38.0%). Second, five distinct subgroups of workers based on their concerns about having a coworker with mental illness were identified: two subgroups with less concerns (SG1 and SG2; 27.0% and 24.8% of the workers), one subgroup with average concerns (SG3; 22.7% of the workers), and two subgroups with more concerns (SG4 and SG5; 17.1% and 8.5% of the workers). Third, the majority of the biggest subgroup (SG1; the personal concerns subgroup) stated that they would want to learn more about how they can best deal with coworkers with mental illness. Also the

subgroups with more concerns (SG3, SG4 and SG5) want to learn more about mental illness in general. Differences between the subgroups were found on knowledge and attitudes, no significant differences were found between the subgroups on background characteristics.

#### Limitations

This study used self-reported data based on attitudes, this study did not focus on actual outcomes. That does not mean that attitudes do not say anything about actual behaviour. The results showed that having more concerns lead to not willing to work with or for a coworker of a higher ranking manager with mental illness. Also, this study did focus on concerns and did not include positive attitudes, this might result in a more negative picture.

#### Conclusions – research and or practical implications/Originality/Value

A broad approach of anti-stigma interventions is needed. The results indicate that these interventions should focus on teaching how to best deal with coworkers with mental illness and on mental illness in general.

#### Relevance to the Congress Theme

The inclusion of people with mental illness in the workforce is urgently needed, there is a shortage of workers. A lot of work potential is wasted when we exclude people with mental illness. With our research we can help to develop effective anti-stigma interventions which contribute to inclusion of people with mental illness at work.

#### Relevant UN SDGs

‘Good health and wellbeing’ and ‘decent work and economic growth’

*Keywords: Mental illness, workers, stigma*

## Oral presentation OP621

### **Dynamic aspects of workplace resilience: Investigating the role of proactive coping in building resilience**

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science

#### Introduction

Work-related stress is inevitable (Siegrist et al.,2016). To promote optimal stress levels, stress management approaches must incorporate a general approach where employees engage in proactive strategies; rather than utilising traditional reactive strategies only. Thus, we must expand our knowledge of proactive and adaptive processes that facilitate workplace stress and well-being.

The purpose of this research is to investigate the interplay between proactive coping and resilience, and subsequently, how this relationship influences stress and well-being. Resilience is a process by which individuals successfully use assets and resources to protect themselves against the negative consequences of stress; while promoting the ability to overcome, steer through and bounce back from adversity (Richardson,2002). Facilitative processes of resilience are both proactive and reactive, however, only reactive processes have been fully explored. Proactive coping too is a positive function in the promotion of well-being (Greenglass & Fiksenbaum,2009). Consequently, both constructs are salutogenic to occupational well-being; surprisingly, neither have been explored concurrently.

This research will refer to the Transactional Theory of Stress (Lazarus & Folkman,1984), Proactive Coping Theory (Schwarzer & Taubert,2002), the Integrative Model of Resilience for Employees (Britt et al.,2016).

#### Methods

Three distinct studies were assessed where different temporal and magnitude characteristics were predicted to be of interest.

Study 1 included employees experiencing job displacement within an Irish organisation. 146 completed T1 and 118 T2.

Study 2 included third-level students during a semester at an Irish University. 160 completed T1, 154 completed T2, 154 completed T3, and 150 Time 4.

Study 3 sample included a general Irish working sample. 345 completed T1, 222 completed T2 and 204 completed T3.

Proactive coping was assessed using a sub-scale from the Proactive Coping Inventory (Greenglass et al.,1999). Resilience was assessed using the Connor-Davidson Resilience Scale (Connor, Davidson,2003). Perceived stress was assessed using the Perceived Stress Scale (Cohen et al.,1983). Psychological well-being was assessed using the job-related Affective Well-being scale (Warr et al.,2014). Demographic questions.

Apparatus used included Qualtrics TM, IBM® Statistical Package for the Social Sciences v.24, Mplus v.8.2.

Longitudinal quantitative research design using self-report questionnaires. SEM Was used to analyse the longitudinal data. Cross-lagged modeling was adopted.

## Results

Study 1 found proactive coping was a significant predictor of resilience over a four-month period ( $\beta = .30$ ,  $SE = .137$ ,  $p = .028$ ). However, resilience was not a significant predictor of proactive coping ( $\beta = .067$ ,  $SE = .052$ ,  $p > .05$ ).

Study 2 found Proactive coping T1 predicted resilience T2 ( $\beta = .42$ ,  $SE = .12$ ,  $p = .000$ ), proactive coping T2 predicted resilience T3 ( $\beta = .29$ ,  $SE = .10$ ,  $p = .005$ ), Proactive coping T3 predicted resilience T4 ( $\beta = .49$ ,  $SE = .15$ ,  $p = .001$ ). Resilience T1 predicted proactive coping T2 ( $\beta = .19$ ,  $SE = .05$ ,  $p = .000$ ), resilience T2 predicted proactive coping T3 ( $\beta = .09$ ,  $SE = .04$ ,  $p = .027$ ) and resilience T3 predicted proactive coping T4 ( $\beta = .14$ ,  $SE = .06$ ,  $p = .019$ ), over a four week period.

Study 3 results are predicted to replicate Study 1 and 2 findings, which demonstrate a reciprocal relationship between proactive coping and resilience. It also aims to show the role of perceived stress and well-being in this relationship.

## Conclusions

Study 1 found no reciprocal relationship between proactive coping and resilience; however, it found that proactive coping was a significant predictor of resilience. Interestingly, resilience did not significantly reduce within the aversive context of pending job displacement. Suggesting that proactive coping may play an influential role in the maintenance of resilience.

Study 2 found a reciprocal relationship between proactive coping and resilience over a one-month period. Findings suggest that as resilience decreases, proactive coping maintains, as resilience increases, proactive coping decreases. Resulting in a complimentary relationship between the two.

The research so far has important theoretical and practical implications. It's the first set of studies to investigate the relationship between resilience and proactive coping. We advocate that resilience development should be seen as thinking, feeling and behaving in a way that not only facilitates recovery and growth after stressful events but is also a proactive self-regulated approach.

Limitations include inconsistent data waves, sample size, self-reported data, and limited direct measurement of stress.

This research has relevance to the congress theme 'Well-being' especially sub-topics coping and resilience and adaptability.

This research relates to the UN SDG's 'Good health and Wellbeing' in ensuring sustainable health in the working lives of employees and promoting well-being in the workplace.

*Keywords: Resilience, Proactive coping, well-being*

## Oral presentation OP590

### Early Career Gender Differences in Job Burnout Trajectories: Roles of Work, Family, and Financial Resources

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science

Theoretical background: The gender-segregated job market reproduces gender stereotypes surrounding different workplaces (European Commission, 2015; Wood & Eagly, 2002). Those gender stereotypes then contribute to different social expectations in light of gender roles. It is well known that workplace can lead to job burnout (Maslach, 1982). According to the job demands-resources (JD-R) model (Demerouti et al., 2001), there are job resources and job demands that either prevent or worsen job burnout. Traditional gender ideology supports the specialization of tasks and roles by gender, suggesting different job demands and resources for women and men: women are expected to take up the caregiving responsibilities in the domestic sphere; men are expected to take the economic responsibilities in the public sphere (Davis & Greenstein, 2009; Bergh, 2006). Consequently, women and men share the same job duties at work but differ in their family duties and economic duties. To understand whether job burnout development is gendered and how job burnout may be prevented by resources for women and men, we examined the relationship between gender and job burnout trajectory, and the relationship between job burnout and job resources from three perspectives: (1) family resource (i.e., partner support, parenthood status), (2) work resource (i.e., belongingness to workplace), and (3) financial resource (i.e., monthly salary).

Methodology: We included data from the Finnish Educational Transitions project. Participants were followed between 2003 and 2020. Participants completed a survey that included questionnaires on gender, job burnout, partner support, belongingness to workplace, parenthood status, and income. The present study included young adults ( $N = 732$ ) who were surveyed in 2013 (6<sup>th</sup> wave: age 26-27), 2016, and 2020.

The research questions were analyzed using a latent growth model (LGM) with gender as time-invariant predictor and a multigroup LGM with gender as a group classifier. The analyses were performed by using the Mplus statistical package (Version 8.6, Muthén & Muthén, 1998-2017) with the missing data method.

Results: The results of the first LGM ( $\chi^2(24) = 34.78, p = .07; CFI = .96, TLI = .93; RMSEA = .03; SRMR = .03$ ) showed good fit of the model. In general, burnout decreased over years in early adulthood (Estimate slope =  $-.46$ ). Moreover, gender had a main effect on the intercept of job burnout development (Estimate =  $-.22, SE = .06, p < .001$ ), indicating that women scored higher in job burnout scores comparing to men. The results also showed that intercept was negatively related to the slope (Estimate =  $-.59, SE = .12, p < .001$ ), indicating that participants with lower initial job burnout scores experienced less decrease in job burnout in the following years.

The results of the Multigroup LGM showed that the model has a good fit ( $\chi^2(2) = .35, p = .84; CFI = 1.00, TLI = 1.00; RMSEA = .00; SRMR = .003$ ). The results showed that for women: belongingness to workplace prevented job burnout in year 2016 and 2020; having children prevented job burnout in 2013 and 2016. For man: partner support prevented job burnout in 2013; belongingness to workplace prevented job burnout in 2016; higher income prevented job burnout in 2020.

Limitations: This is a longitudinal study started in 2003. We have only been able to collect binary gender.

Implications: Coherent with men's economic duties, financial resource prevented job burnout for men but not for women, and the relationship was only prominent during the pandemic. This finding suggests that stereotypical gender roles might have been enhanced during the pandemic—the social role of a paid worker was more salient for men when the boundary between work and home was blurred.

Having a child or children has been studied as a job demand even though many studies found negative relationship between burnout and having children (Maslach & Jackson, 1985). The current study included “having a child or children” and partner support to unfold job burnout at the intersection of work and home. Consistent with women's caregiving duties, having a child or children prevented job burnout for women but not for men. This effect disappeared during the pandemic. Stereotypical gender role was also more prominent during the pandemic for women, the demand of having a child or children might have exceeded the resource provided by social support of the child or children when the boundary between work and home was blurred.

Originality/Value: This study adds a developmental perspective to current job burnout research, where longitudinal study is scant. This study also adds a social role perspective into the J-DR model.

Relevance to the congress theme: Most workplace are still gender segregated. Experience of job burnout differs between women and men due to gendered nature of workplace. This study provides insights into the future of workplace burnout prevention intervention, as well as gender equality.

*Keywords: gender, job burnout, job demands-resources*

## Oral presentation OP195

### Early-stage power dynamic shifts in workplace bullying

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Research goals and why the work was worth doing:

Workplace bullying research has become more contextually and methodologically diverse, providing new opportunities to uncover less understood but challenging to investigate psychological processes which underpin the phenomenon. As such, calls for critical approaches and interdisciplinary efforts have intensified (Fevre, 2018). To this end, an integrative theoretical framework focused on early-stage power dynamics is proposed as part of a three-piece project which will subsequently aim to verify the emerging relations empirically with a mixed methods design.

Theoretical background:

The framework is rooted in the critical realist philosophy and is distilled following the meta-triangulation guidelines set out by Lewis & Grimes (1999), building on theoretical assumptions of existing frameworks employed in bullying and related constructs research.

Design/Methodology/Approach/Intervention:

A systematic search of research articles which problematise notions of causality and power as central components of negative workplace behaviour that precedes and overlays bullying was conducted on several databases, resulting in a sample of 40 articles falling under four paradigms frequently employed in organisation studies: functionalism, interpretivism, radical structuralism, and radical humanism. Contrasting the respective insights from a meta-perspective allowed for the uncovering of boundary conditions and causal mechanisms at the onset of the bullying experience.

Results:

Boundary conditions were grouped under the theme of mismatched expectations, understood as conflict-generating interpretations of events and others' behaviour which contradict anticipated social interactions as informed by individual and/or group normative schemas and deeply rooted norms shaped over time through subjective experience, group(s) membership, institutional and more diffuse cultural characteristics. Mismatched expectations are necessary but not sufficient for bullying to occur; they are progressively amplified and driven by reinforcing mechanisms which run concurrently, allowing for the escalating and prolonged manifestations typically characterising bullying (e.g., isolation of targets, increase in power differentials, stress-related outcomes for targets and bystanders, deterioration of workplace climate, etc.). These, in turn, are described as inclusion/exclusion, reward/punishment, and resource boost/resource depletion mechanisms.

Power was found to be embedded in all normative frames theorised in the sample, which were best explained as frames of reference that help individuals navigate social contexts and exercise agency, however expectations being overwhelmingly future-oriented and therefore uncertain,, the conflict that mismatches generate is bound to become a power struggle. Equally, power is embedded in the mechanisms driving the bullying process, as the work environment represents a medium in which, when bullying occurs, the organisational structures, practices and discourses which otherwise support power inequalities generally recognised as legitimate, effectively equip all stakeholders with additional means to exercise self-centred agency, delaying resolution.

#### Limitations:

An anticipated limitation of the propositions within this framework concerns their empirical validation. The difficulty of empirically tracing back perceptual processes and their effect on actual behaviour of stakeholders after the fact, or accurately capturing these in real time without influencing the outcomes of subjects' lived experience, might prove a frustrating task. However, in line with the promising prospects which a fresh and closer examination of paradigmatic assumptions often taken for granted might give as new insights, some solutions to overcome these challenges will be proposed in parts II and III of this study.

#### Conclusions – research and or practical implications/Originality/Value

Overall, the results contribute to theory by addressing methodological challenges inherent to the complexity of bullying dynamics, which stalls research into its causes and early-stage processes, but at the same time could impact the way prevention is conceived and implemented in practice.

*Keywords: workplace bullying, bullying prevention, relational dynamics*

## Oral presentation OP337

### **Economy for the Common Good (ECG): How democratic practices in ECG-enterprises foster employees' moral behavior and their political & civic engagement**

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science&practice

Economy for the Common Good (ECG) is a global social movement, promoting an alternative economic model intended to benefit people, planet and future generations (Felber et al. 2019). Enterprises adopting the ECG balancing and reporting system enshrine social and ecological value creation as their most important business purpose. This places ethical behaviour at the heart of corporate governance, prioritizing social and environmental concerns over profitability and economic value. Among others, transparency, participation in decision making, and an appreciative work climate are core values in ECG-enterprises. The current research aims at investigating if these values are also embodied by the employees in such enterprises. Further, we examine if ECG-enterprises have the potential to sustainably promote social well-being and to counteract anti-democratic tendencies by fostering employees' moral and political/civic behaviour through the implemented democratic practices.

The current research focuses on two types of democratic practices in ECG enterprises: 1) individually perceived employee participation, and 2) sociomoral organizational climate. Individually perceived participation reflects actual and direct participation in strategic or tactical decision making as reported by employees (Weber et al., 2020). Sociomoral climate represents a sub-domain of organizational climate, referring to employees' shared perceptions of organizational practices and procedures. Associated practices and procedures are characterized as supportive, appreciating, and participative, and are assumed (and have partly been shown) to shape moral and prosocial development of the members of an organisation (Weber et al, 2008; Pircher Verdorfer et al, 2013). This corresponds with the long-standing "Spillover Hypothesis" by Pateman (1970), which postulates the educative potential of organisations. Specifically, it states that democratic practices in organisations strengthen employees' political efficacy which, in turn, enhances (further) development of prosocial and civic attitudes or behaviours.

In a self-report questionnaire study N = 182 employees from six ECG-enterprises participated. Four enterprises were located in Austria and two in Germany. Questionnaire scales measured employees' individually perceived participation in organizational decision making, perceived sociomoral climate, political and moral self-efficacy, and employees' moral behaviour and political/civic engagement. Confirmatory factor analysis and structural equation modelling were employed for hypothesis testing. Bootstrapping techniques were used for assessing the significance of indirect effects. Models were corroborated by a battery of statistical fit indices.

In line with the Spillover-Hypothesis, the specified structural equation model confirmed that employees' individually perceived participation was positively related with their political self-efficacy which, in turn, correlated positively with their political and civic engagement. Hence, a significant indirect effect of individual participation via political self-efficacy to political and civic engagement was attested. Perceived sociomoral climate was not significantly related with political self-efficacy or political and civic engagement, but was positively related with employees' moral self-efficacy, which, in turn, correlated positively with self-reported moral behaviour. The indirect effect of sociomoral climate via moral self-efficacy on employees' moral behaviour was significant. A similar significant

indirect effect was also found for individually perceived participation, but was weaker than the indirect effect of sociomoral climate on moral behaviour.

The cross-sectional design limits inferences regarding the causality of the mediation model. Further, self-reported moral behaviour might have been biased by social desirability. Moreover, the number of analysed ECG-enterprises was insufficient to assess multilevel effects.

The present study has shown that ECG-enterprises can foster a healthy and democratic society by nurturing moral, prosocial and democratic competencies and behaviours of their employees. These competences may spill over from the work context into the civil domain. Adopting the ECG-model and conducting an ECG balance sheet may help practitioners to introduce democratic practices in their enterprise and thus contribute to a more socially sustainable society.

Power concentration in transnational corporations, problems resulting from financial speculation and corruption in the economy, and eroding systems of employee codetermination in Europe are among the societal problems that are already serious today, and will likely get worse in the future. The present study examines organisational and individual resources that may counteract societal disintegration and foster corporate social responsibility within democratic and social market economies.

*Keywords: Economy for the Common Good, democratic organizational practices, political and civic engagement*

## Oral presentation OP816

### Effectively managing sickness presenteeism - understanding the decision-making process

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science

Research goals and why the work was worth doing

Defined as working when unwell (Ruhle et al., 2020), presenteeism is commonly considered a negative workplace phenomenon. However, several researchers have highlighted the therapeutic effect of presenteeism with appropriate adjustments and managerial interventions (Karanika-Murray and Biron, 2020). Understanding how and when individuals decide to enact sickness presenteeism is an essential starting point in supporting employees.

Theoretical background

The current study is grounded in the presenteeism decision-making model developed by Whysall et al. (2023), which integrates insights from both decision-making theory and presenteeism research. It captures both absenteeism and presenteeism decisions, since they are potential outcomes of the same decision (Halbesleben et al., 2014; Patton & Johns, 2012), and outlines four stages in the decision-making process, that are (1) trigger, (2) options, (3) evaluation, and (4) feedback.

Design/Methodology/Approach/Intervention

An experience sampling method was adopted through a daily diary approach to examine how individuals decide to work or rest when they are unwell. To aid participants in elucidating their thought processes, both open and closed-ended questions (e.g., multiple choice, rating scales) were included. The open-ended questions were structured according to the decision-making model of presenteeism (Whysall et al., 2023), to explore participants' thought processes at each stage.

Results obtained or expected (if not available, it must be made clear when they will be)

Diary participants were recruited through an initial cross-sectional survey, which resulted in a total of 1387 daily observations nested in 155 participants. Through thematic analysis and quantitative analyses including multiple linear regression, the data largely support the process model and reveal important insights into presenteeism decision-making. Specifically, the thematic analysis showed that the decision-making process is triggered by a health event and begins with an assessment of symptom severity and how much this affects employees' work capability (Stage 1), identification of options (Stage 2), and evaluation of options (Stage 3). Stages 2 and 3 appear to take place in a non-linear, cyclical way until the decision-maker finds a preferred option, and Stage 3 will be driven mainly by work-related factors. Moreover, work-related factors appear to restrict employees' perceived available options (Stage 2). Finally, the results also demonstrated that employees' reflection on whether they made the right decision was driven largely by their work-related concerns than health-related concerns.

Limitations

A limitation of the experience sampling method is its dependence on self-report (Csikszentmihalyi and Larson, 2014). However, the daily diary study approach offers strong context validity with rich data on real-life attendance decision-making, and aims to reduce recall bias through the daily frequency. Another consideration is the number of health incidences. Overall, there were 474 health

incidences (34.2%) out of 1387 diary observations, and experience sampling techniques are reliant upon capturing a sufficiently large number of relevant incidences of the phenomenon under study. This sample size might not be sufficient for certain quantitative analysis.

Conclusions – research and or practical implications/Originality/Value

The current study extends presenteeism theory and builds on emerging work identifying presenteeism as an adaptive behaviour. Greater understanding of how individuals decide to enact presenteeism can help to create effective interventions to manage this behaviour, and even promote functional presenteeism as a purposeful and adaptive behaviour by which individuals aim to balance their health needs and work performance demands (Karanika-Murray & Biron, 2020; Whysall et al., 2018). Future research should focus on the prolonged effects on health, and on developing managerial interventions to mitigate detrimental outcomes.

Relevance to the Congress Theme

Due to the Covid-19 pandemic, most companies have shifted to remote or hybrid working. This has increased the prevalence of sickness presenteeism among employees, because of the blurred boundaries between home and work (Kinman and Grant, 2021). Employees can hide their ill-health symptoms behind the screen and without the need to be physically in the office, they feel more obligated to continue working even when they are unwell. To create a more positive work environment and enhance employees' health and well-being (UN SDGs Goals 3 and 8), it is essential to develop effective managerial interventions for sickness presenteeism, particularly when facing a potential global recession.

*Keywords: Sickness presenteeism, attendance behaviour, organisation well-being, experience sampling*

## Oral presentation OP483

### Effectiveness of a stigma awareness intervention about disclosure of mental health issues or illness in the workplace for unemployed people

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science

Research goals/why the work was worth doing: People with mental health issues or illness are three to seven times more often unemployed than people without mental health issues or illness. One of the barriers to paid employment is the stigma attached to mental health issues or illness. The current study focuses on the health, well-being and job seeking activities of unemployed people with mental health issues or illness who receive social benefits from Dutch municipalities. In a clustered randomized controlled trial the effectiveness of a stigma awareness intervention, consisting of (1) the Dutch version of the decision aid 'Conceal or Reveal' (CORAL) about disclosure of mental health issues or illness and (2) a stigma awareness training for employment specialists, is evaluated on finding and retaining paid employment. The research goal of this study is to examine the effectiveness of a stigma awareness intervention for employment specialists and a decision aid and two infographics about disclosure of mental health issues or illness on finding and retaining employment for unemployed people with mental health issues or illness, compared to usual guidance.

Theoretical background: Both disclosure as non-disclosure of mental health issues or illness in the employment setting could have advantages and disadvantages. Therefore, the disclosure decision-making process can be seen as a risk-benefit analysis. Advantages could be support from colleagues or being able to get work adjustments. Disadvantages could be stigma and discrimination. For that reason, support in decision-making about (non-)disclosing mental health issues or illness may help in creating a positive outcome. The CORAL decision aid was developed by the Institute of Psychiatry at King's College London and is designed to support decision-making about disclosure in the work context. The principle of this decision aid is that people know their own situation best and therefore can make the best choices themselves, but still benefit from help with making a choice. In several follow-up studies, using the decision aid was found to be promising: people who used CORAL had less decision-making stress and were significantly more often working full time after 3 months than people who did not use the decision aid.

Methodology: Participants (N=153) were recruited by eight organizations, i.e. Dutch municipalities and organizations who work on behalf of the municipalities. Cluster randomization took place at organization level. Participants of four organizations received care as usual (control group) and participants of the other four organizations received care as usual combined with the CORAL decision aid, and besides that, their employment specialists received a stigma awareness training (experimental group). Inclusion criteria for participants were (1) suffering from mental health issues or illness and (2) being unemployed. Participants filled out a questionnaire in one-by-one appointments with the researcher about health, well-being, job seeking activities and disclosure of mental health issues or illness at baseline and 3, 6 and 12 months. Multilevel analyses, containing random intercepts of participants nested in organizations, were conducted to analyze the effects of the intervention on finding and retaining employment, as well as for the secondary outcomes.

Results: A total of 153 participants with mental health issues or illness were randomized to experimental (n = 76, age: M(SD) = 37.4 (11.86), women: N (%) = 44 (57.9%)) and control group (n =

77, age: M(SD) = 40.0 (12.5), women: N (%) = 37 (48.1%). Intention-to-treat analyses showed that randomization to the experimental group was associated with finding (OR (95%CI) = 7.78 (1.33 - 45.53),  $p = 0.02$ ) and retaining (OR (95%CI) = 12.15 (2.81 - 52.63),  $p < 0.01$ ) at twelve months. Analyses showed that participants of the experimental and control group did not differ in decisional stress.

Limitations: Limitations of the study are that participants were recruited via employment specialists, which may cause selection bias from the individual employment specialists. In addition, in this study only self-report data is used. Finally, participation in the study is entirely voluntary, therefore the study has a dropout of 20%.

Conclusions: Nowadays, there is more evidence that psychosocial factors such as stigma and discrimination are of major influence in relation to employment for people with mental health issues or illness. This cluster RCT showed that implementing a stigma awareness intervention was highly effective in improving employment outcomes for unemployed people with mental health issues or illness. Participants of the intervention group found and retained paid employment almost twice as often, compared to a control group. If replicated, this may substantially contribute to increased employment opportunities of people with mental health issues or illness.

*Keywords: disclosure, stigma, discrimination*

## Oral presentation OP691

### Effects of Daily Strain on Boundary Management Preference and Enactment: Findings from a Daily Diary Study

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science

**Research goals:** The modern world of work faces employees with blurred boundaries between work and nonwork life. As a result, employees experience increasing spillover between work and nonwork life, underlining the significance of purposefully managing the boundaries around life domains. Boundary management refers to how individuals manage work and nonwork life by segmenting or integrating these life domains. The boundary management concept has become an established framework in the work–nonwork literature. Yet, most studies investigate boundary management on a trait level and explore the consequences of inter-individual differences in boundary management. In contrast, there is little research on intra-individual fluctuations in boundary management and their antecedents. To close these gaps in the current boundary management literature, the research goals of the present study are (1) to address intra-individual fluctuations in boundary management, and (2) to investigate daily strain as an antecedent of these fluctuations.

**Theoretical background:** We examine the influence of daily strain in work and nonwork life on four boundary management constructs: (1) work-to-nonwork boundary management preference, (2) nonwork-to-work boundary management preference, (3) work-to-nonwork boundary management enactment, (2) nonwork-to-work boundary management enactment. Drawing on cross-role spillover and conservation of resources theory, we hypothesize that daily shifts in boundary management preferences reflect a strategy to regulate strain-related negative spillover between work and nonwork life. In general, we assume that daily strain is associated with preferring more segmentation. However, daily strain may force individuals to enact more integration. For example, experiencing daily strain in work life shall increase individuals' work-to-nonwork segmentation preference to protect resources in nonwork life. However, individuals may not be able to enact their segmentation preference but need to integrate their work demands into nonwork life. Moreover, we consider work and nonwork role involvement as moderators of these relationships.

**Methods:** The present study deploys a diary research design with daily measurement waves over two workweeks. Full-time working participants from an online panel rated daily strain in work and nonwork life and the boundary management constructs every evening for ten workdays. In sum, we analyze data from 425 participants and 3,238 daily observations.

**Results:** Multilevel modelling results reveal considerable intra-individual variations in work-to-nonwork and nonwork-to-work boundary management preferences and enactments. These fluctuations are a function of daily strain in work and nonwork life. On days when employees experience more daily strain in work life, they prefer more work-to-nonwork segmentation but enact more work-to-nonwork integration. On days when employees experience more daily strain in nonwork life, they prefer more nonwork-to-work segmentation but enact more nonwork-to-work integration. Work and nonwork role involvement do not moderate these strain effects but directly influence work-to-nonwork and nonwork-to-work boundary management preferences and enactments.

**Limitations:** Limitations result from the use of self-report measures and the missing time lag between assessing predictor and outcome variables. Consequently, the study does not allow for

drawing causal conclusions. Furthermore, using an online panel to recruit participants could be considered a limitation.

Implications, originality, and value: The present study has several theoretical implications, opening new topics for future research. In general, it contributes to the boundary management literature by providing novel insights into intra-individual fluctuations in boundary management. Further, this is the first study addressing antecedents of these intra-individual fluctuations in terms of daily strain. Thus, it answers calls to identify factors that motivate individuals to prefer and enact segmentation or integration. Regarding practical implications, organizations should be aware of their influence on their employees' boundary management preferences and enactments via work demands that may affect daily strain in work life (e.g., workload). Considering the importance of fit between employees' preferences, their enactments, and external supplies, organizations should update their supplies to accommodate intra-individual fluctuations. Finally, coaching might empower employees in the daily management of their work–nonwork boundaries. Taken together, the present study adds a novel perspective on boundary management and provides several starting points for future research and practical action.

Relevance to the congress theme: Employees face several challenges managing the blurring work–nonwork boundaries in the "changing world of work" which highlights the importance of research on boundary management and its antecedents.

*Keywords: boundary management, daily strain, diary study*

## Oral presentation OP119

### Effects of Gender in Leadership in Higher Education Institutions.

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science&practice

**Research goals.** Despite notorious advancement in the actions for the advancement of women at work in European policies and legislation, putting these actions into practice often remains a challenge. The specific issue of advancing women in leadership and top managerial positions in Higher Education institutions is particularly relevant, given women's limited progress in these contexts. In this study, we aim to identify elements that influence women's advancement to leadership positions in these fields, with a focus on employees' perceptions and resistances about implementing gender action that supports women in leadership.

**Theoretical background.** In general, female leaders encounter many disadvantages that flow from distrust about their abilities as leaders. The incongruity between the characteristics usually ascribed to women and the characteristics typically ascribed to leaders is behind this situation and represents one of the strongest obstacles for women in leadership. The fact that domestic functions are commonly taken by women is also harmful for women's leadership career by limiting their access to decision-making positions or generating the expectation that they are less committed to such leadership roles (Mandel & Semyonov, 2005; Gupta et al., 2006). These findings are often referred to as a "motherhood penalty/fatherhood bonus" (Hodges & Budig, 2010). Despite this reality, it is not clear to what extent employees in real-life institutions and in particular research institutions are aware of women's situation of discrimination, as well as male and female employees' resistances to gender equality actions aimed at promoting women's advancement.

**Methodology.** A questionnaire was designed and implemented to evaluate perceptions about women in management and gender action to promote women in management (quotas) from all the staff of the participating institutions. The data was anonymized, collated and analysed using SPSS Statistics. The first set of questions included general values and traits of male and female employees and leaders, in order to capture individual dispositions. Attitudes and values are asked. The following section included questions intended to understand the perceptions of employees about their supervisors from a gender perspective, examining whether and how employees report different leadership behaviors from their leaders on several dimensions as well as resistances towards affirmative action (implementing gender quotas for women). The final set of questions asked about female and male employees' and leaders' perceptions of work-life balance (WLB), and the extent to which domestic issues influenced their leadership orientations and promotion.

**Results.** In terms of values and general dispositions, women and men identified with similar dispositions in terms of agentic traits (being competitive or courageous) and task-oriented leadership, but compared to men, women rated themselves higher in relation to communal traits and received higher people-oriented scores. In all the dimensions of work-life balance studied, women expressed higher concerns about the biases and obstacles that they encounter in the organisation regarding work-family issues. In contrast, perceptions of a work-family conflict in one's personal life were similar for all groups, except for people with managerial responsibilities: top managers experience the highest levels of work-family conflict (but also higher levels of satisfaction with work). Resistances against affirmative action of women in leadership were generally high but stronger for male than female respondents.

Limitations. Some factors may limit the generalization of these findings to other contexts. First, all the participating institutions (and, thus, individuals) are located in Europe, which is unique from a gender and affirmative action perspective. Furthermore, the study only gathered data once, which precludes the possibility of inferring causal relations.

Implications. Together, these results point to strong effects of gender in variables that are critical for leadership and decision-making in Higher Education Institutions, suggesting that gender equality actions should take into account how managerial activities are gendered and influence organisational dynamics at different levels. Implications are also discussed in relation to work-life balance and men's perception of affirmative action.

Originality. Our analysis points to remaining challenges in higher education institutions regarding gender equality and the incorporation of stereotypically feminine values and needs in decision-making.

Relevance to the Congress Theme. Advancing towards gender equality is one of the objectives that work environments must integrate into their reality, as a demand of the society as a whole (as an element of social justice) and because of the implications it has both on their workers and on their organizational reality.

*Keywords: leadership, gender, higher education*

## Oral presentation OP319

### Effects of Quasi-Nonverbal Leader Communication on Impression Formation

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science

**Research goals.** Digitalization poses increasingly wide-ranging affordances to individuals and organizations alike, particularly in regard to workplace communication. The most prevalent digital mediums (i.e., e-mail and messenger services), however, are less broad in information and omit nonverbal behaviours, such as gestures and facial expressions. This constitutes a substantial challenge for leaders, as the transferal of emotions, mostly being driven by a message's nonverbal delivery, constitutes one of the key pathways for leaders' effectiveness. Yet, digital written communication also entails an opportunity to re-enrich messages with quasi-nonverbal signals – Emoticons and Emoji. As these, however, may be perceived as inappropriate in the usually more formal and sober setting of workplace communication, this study aims to explore the immediate emotional and cognitive reactions to affective quasi-nonverbal leader signals.

**Theoretical background.** Building up on the foundations of the signalling theory and the Brunswik Lens Model, this study further distinguishes between the emotional contagion and the cognitive inference pathway of processing emotional displays, as proposed by the emotion as social information (EASI) model.

**Methodology.** For this study, an experimental design will be employed, with participants being randomly assigned to a specific text sample including verbal and quasi-nonverbal emotional expressions from an imaginary leader. These will depict the same text, either being enhanced by Emoji depicting emotions of positive or negative valence, or no Emoji. Participants will rate the message's emotional intensity and valence as a measure for their processing of its content and the emotional contagion pathway will be assessed using the affect grid before and after the stimulus presentation. Cognitive responses, i.e., appraisals of the sender resulting from these pathways, will be assessed by employing measures of ascribed charisma, perceived leader prototypicality, leader approval, and first impressions in regard to the leader's authenticity, competence, dominance, likeability, and warmth. Based on power analyses, we aim for a sample of 34 participants per experimental cell, resulting in a total sample of 102 participants.

**Expected results.** This study will be conducted throughout November and December of 2022. Results should therefore be available in January 2023. We expect ratings of emotional intensity to increase, and participants' affect and valence ratings to mirror the affect displayed in the respective enriched communication condition. Furthermore, we anticipate charisma, leader approval, authenticity, likeability, and warmth to be rated higher in the positive Emoji condition, and ratings of prototypicality, competence, and dominance to decrease as compared to the neutral condition. Negative Emoji, on the other hand, should lead to increases in dominance as well as decreases in prototypicality, leader approval, competence, likeability, and warmth ratings.

**Limitations.** This study focuses on providing internally valid causal insights into impressions based on quasi-nonverbal leader communication and thus must compromise on its external validity. The stimulus material will be specifically designed for this study to allow for a full standardization and therefore not depict fully authentic workplace communication.

Conclusions and or practical implications. This study will investigate reactions to quasi-nonverbal signalling in the digital workplace environment and thus provide valuable insights into whether leaders are well- or ill-advised to employ these emotional communication techniques. Its findings will allow for inferences on how followers will likely react to such displays and thereby aid leaders with recommendations on how to adapt their affective signalling to ensure it will elicit the intended outcomes.

Relevance to the Congress Theme. Digital communication is one of the cornerstones of the modern workplace. Yet, most of our communication in this context, especially via e-mail, follows potentially outdated norms. Quasi-nonverbal behaviors could be a means to lend leaders a voice in contexts where they cannot use their actual voice. Knowing how leaders could communicate through digital media in a way that increases their approval and ascriptions of charisma and desirable leader attributes is of great benefit for all leaders and indispensable for developing them to be fit for the future.

*Keywords: Emotional Signals, Digital Communication, Leader Attributions*

## Oral presentation OP41

### Effects of vigor at work between job stress and mental health: Is physical activity always beneficial?

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science

**Research goals:** This study aims to enhance insight into the relationship between job stress and workers' mental health, testing the fit to the data of a moderated mediation model, where vigor at work mediates the relationship between job stress and workers' mental health, whereas weekly physical activity (PA) moderates the relationship between stress and vigor at work

**Theoretical background:** Job stress relates to a higher risk of poor mental health, as higher levels of anxiety and depression. However, potential mediators in this relationship may be explaining the effect of stress on health. In fact, personal resources are the psychological aspects, associated with resilient processes, and refer to the ability to control and act on the environment in an adaptive way. Therefore, personal resources may have an important role in the stress-tension framework, mediating the relationship between stress and health. Thus, we posit that an affective personal resource, such as vigor at work, could mediate the relationship between workers' stress and mental health, analyzing whether PA may also moderate stress and vigor at work relation.

**Design/Methodology:** Five hundred and twenty-seven employees (53.3% were female), with a mean age of 38.2 years (SD = 11.5; range 19 to 63 years) and an average tenure in the organization of 9.9 years (SD = 10; range 0.5 to 41 years), composed the final sample.

**Results:** The results showed that vigor at work was related to better mental health, whereas stress was related to high psychological problems and low vigor at work. The interaction between stress and weekly PA on vigor was significant, indicating a counterproductive effect of weekly PA. Specifically, the negative relationship between stress and vigor at work was greater when doing weekly PA. In this vein, high levels of weekly PA would not have a favorable impact when workers experience high levels of stress, consuming part of vigor at work and reducing the positive effect of vigor at work on mental health by coping with stress.

**Limitations:** The use of a cross-sectional design and a convenience sample prevents the generalization of the results. Therefore, longitudinal studies are needed to further analyze the mechanisms between stress and its relationship with mental health. Additionally, work-related and leisure-time PA in this study were analysed jointly and in future studies should be considered separately, due to its possible paradoxical effect on health.

**Conclusions – research and or practical implications/Originality/Value:** Vigor at work and weekly PA constitute relevant personal resources in the interpretation of the connections between stress and mental health, where changes in stress levels, with the imbalance of psychological demands and control at work, over time, can predict subsequent changes in levels of vigor at work, with weekly PA having an important role. In consequence, vigor at work would decrease the probability of developing mental problems in workers, where weekly PA could have a counterproductive role in employees, consuming part of vigor at work affecting mental health. In addition, the design of preventive and intervention strategies should focus on increasing vigor and control at work, as autonomy and skill development, to reduce stress levels in workers and, this way, improve mental

health. Furthermore, it would be necessary to program the type, duration, and frequency of weekly PA to not exceed the threshold, where vigor levels are affected.

Relevance to the Congress Theme: The relevance of this study derives from the fact that the working environment is changing continuously due to psychosocial and technological changes at the workplace, which may be increasing the demands of workers and worsening their mental health. For that reason, this study focused on analysing variables that could reduce this relationship.

Relevant UN SDGs: This study contributes to the third goal (good health and well-being) of the Sustainable Development Goals.

*Keywords: mental health, physical activity, vigor at work*

## Oral presentation OP55

### Egoism at Work Attitude Questionnaire: Its development and psychometric properties

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science&practice

Egoism is a significant motivational strength in the workplace. Employees can be encouraged or discouraged to egoistic behaviors at work and, depending on the leader ethics and organizational climate, awarded or punished for egoism attitude. Finally, besides these organizational and interpersonal factors, egoistic or altruistic activities will also be taken due to their individual level of egoism. The study aimed to operationalize egoism at work as a weakness of character and present measure to verify it. So far, in the literature egoism of employees, was not explored and only one measure had been used to verify this phenomenon as a personality trait, but it was not designed for the business and had some methodological limitation. Exploratory factor analysis (EFA) conducted on 460 employees from Poland revealed a one-factor structure of the Egoism at Work Attitude Questionnaire (EWAQ), which explained a 58.85% variance of the egoism attitude in the workplace. CFA in a sample of 754 employees confirmed the good construct validity of EWAQ and internal consistency, which measured by alpha Cronbach coefficient was 0.89. Values achieved to follow the Bagozzi & Heatherton (1994) criteria regarding the magnitude of factor loadings, average variance extracted, and the composite reliability showed good convergent validity of this tool. Criterion validity of EWAQ was confirmed through the correlations with religious practices and positive and negative indicators of occupational well-being as well as employee's attitude toward the organization. EWAQ is a well psychometrically sound measure to examine egoism attitude at work and is recommended to use in Polish employees. Further implications in reference to EWAQ were discussed.

*Keywords: egoism; employees; measure*

## Oral presentation OP194

### Emerging vocational aspirations among young men and women – to limit or to expand the scope of options?

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science

The aim of this research was to study differences and similarities between young men's and women's perceptions of their future, in terms of work and career. Working life is gender segregated in many respects, to the disadvantage for both individuals, organizations, and society (Statistics Sweden, 2018).

Girls and boys learn very early in life what is expected of them, in terms of roles, interests and values. Girls are expected to be warm and friendly, and to be interested in caring for others. Boys, on the other hand, are expected to be competitive and assertive, and to have technical or practical interests (Diekman, et al., 2010; Tellhed, et al., 2018). Such expectations stem from the norms they face in their daily life, which also tend to be internalized as beliefs about their own abilities (Jämställdhetsmyndigheten, 2022).

The present study is based on a questionnaire study among 350 high school and first year university students in Sweden and Norway, carried out in 2022. The questionnaire contained questions about goals in life (communion and agency), ability beliefs, interest in various lines of work, educational aspirations, autonomy, as well as demographic factors.

Based on the answers to the question "given your interests and what you think you are good at, which of the following occupational areas do you think you will fit?" (with 21 choices from Swedish Public Employment Service) three categories of occupations (each containing four occupations) were formed: those to a higher extent chosen by the young men, those to a higher extent chosen by the young women, and those occupations chosen by men and women to the same extent. The relations to goals, ability beliefs, and background factors were analyzed by multiple regression.

The results revealed that different factors were at work for men and women choosing male coded occupations, and also gender neutral occupations, while men and women displayed similar patterns when choosing female coded occupations. Furthermore, what they thought they were not good at had greater impact on choices than interests and what they actually believed to be their assets.

The sample used in this study was a convenience sample from a few regions in Sweden and Norway, and from a narrow array of study programs, mainly such that attract both men and women. This of course limits the generalizability of the results. The results still have some important implications:

In the pursuit of enhancing gender equality among young people, the focus very often is to expand their horizon of interests. Less work has been dedicated to boys' and girls' ability beliefs. This research shows that what young men and women think they are not good at tend to narrow their scope of options, which then counteract equality strivings. As ability beliefs are influenced not only by actual experiences, but to a large extent also by what is expected of a boy or girl, i.e., the norms they encounter, much more work need to be directed at trying to enhance young people's beliefs about themselves.

In Europe we face a backlash regarding gender equality, which not only limit the opportunities for women, but is also detrimental for the supply of people to the work force. Knowledge that deals with gender issues thus is in line with the congress theme.

*Keywords: gender, vocational choice, ability beliefs*

## Oral presentation OP290

### Emotional agency at work in strategy implementation

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science

#### Objective

The aim of the research is to understand how emotional agency at work relates to strategy implementation. Agency, that is, individuals' active participation and the power of making a difference in everyday activities and interactions, shapes social action in organizational life, whether looking at professional learning (Goller & Paloniemi, 2017) or at strategizing (Jarzabkowski, 2008). Previous literature has shown the relevance of both emotions and agency in strategy implementation but there is no research on the meaning of emotionally imbued agency in strategy implementation.

#### Background and research question

Emotional agency at work acknowledges the emotional component to grasp the agentic actions related to emotions (Hökkä, Vähäsantanen & Ikävalko, 2022). Emotional agency involves competence to perceive, understand and take into account both one's own and other people's emotions, and actions to influence emotions in organizational practices and interactions. Thus, it comprises two dimensions: i) emotional competence at work, and ii) influencing emotions at work (Hökkä, Räikkönen, Ikävalko, Paloniemi & Vähäsantanen, 2022).

Strategy implementation refers to the interactive processes of conceptualization, enactment, and coordination through which organizational stakeholders realize an organization's strategy (Weiser, Jarzabkowski & Laamanen, 2020). In this study, we investigate the enactment of strategy, the actions and interactions of organizational members "in making sense of and adjusting a given strategy to their own contexts" (Weiser et al., 2020, 974). We also consider the role of emotional climate at work, that is, organizational members' shared perceptions of the extent to which they perceive their organizational environment to be conducive to emotions and emotion-related activities, in this relationship.

Our research question asks how individuals' self-reports of emotional agency at work and emotion climate at work associate with their evaluations of strategy implementation. Based on the previous studies on the role of agency (Jarzabkowski, 2004; 2008) and emotions (Maitlis et al., 2013; Vuori & Huy, 2016) in strategy, we anticipate a positive relationship between emotional agency at work and strategy implementation. In the analysis we control for background variables such as gender, age, work experience, and position at work, as they may confound the relationships of our interest.

#### Methodology

A survey (N=837) was conducted in three organizations in Finland in a situation where each organization had an updated strategy to be implemented. In measuring emotional agency at work, we utilized a validated instrument consisting of ten items, which divide into dimensions of emotional competence and influencing emotions at work (Hökkä et al., 2022). Emotional climate at work was measured with five items based on organizational climate theorizing (Parke & Seo, 2017). Enactment of strategy was measured with eight items, related to clarity of actors' role in strategy (cf. Kauppila,

2014), integration of strategy into everyday actions (cf. Kohles et al. 2012) as well as to strategically aligned behavior (Riel et al., 2009).

The analysis of associations between emotional agency at work, emotion climate at work, and strategy implementation, as well as the confounding role of background variables, was conducted using a structural equation model.

### Results

Of the two dimensions of emotional agency at work, influencing emotions at work was significantly and positively associated with enactment of strategy. Emotional competence did not show significant direct associations with enactment of strategy, but it was strongly correlated with influencing emotions at work. Emotional climate at work was positively correlated with emotional agency at work, but it also was significantly and positively associated with enactment of strategy.

Of the background variables considered, only female gender and managerial position at work associated significantly with emotional agency at work and enactment of strategy, these associations being positive. No confounding role was detected among these variables as the associations between emotional agency at work and enactment of strategy appeared similar regardless of whether they were controlled or not.

### Limitations

This was a cross-sectional study and was conducted in three organizations.

### Conclusions

The study highlights the role of emotional agency in the interaction processes of strategy implementation. The study has implications by offering new avenues to tackle the challenging task of strategy implementation and more broadly, understanding and utilizing the power of emotions in the everyday practice of organizations.

### Relevance to the Congress Theme

Discussing emotions and the ways employees can develop emotional competence and exert influence on emotions at their work is highly relevant for the changing world of work.

*Keywords: Emotions, agency, strategy*

## Oral presentation OP532

### **Emotional exhaustion in the face of personal and technological requirements among a sample of Spanish secondary teachers**

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science

The expansion of the use of technology has had a great impact on different aspects of life, including the professional. This expansion has led to the appearance of new forms of work where computer systems provide services. ICTs in the field of teaching have in fact become a basic pillar among all levels of educational instruction and learning. However, this technological expansion into the educational system has led to new demands on teachers, which are at times have been unable to cope either due to their misuse of technology or lack of training in it resulting in the advent of new psycho-social risks such as techno-stress or burnout (Alvarado, Aragón & Bretones, 2020; Lawrence & Tar, 2018). The current study analyses the presence of the psycho-social risks subsequent to the digitalisation process of teaching among a sample of Spanish secondary school teachers. It delves into the resources, both individual and organisational, that are available to deal with the aforementioned demands, which escalated and became more evident during the COVID-19 pandemic (Manuti, Giancaspro, Gemmano & Morrelli, 2022). The consequences on balancing work and family (Currie & Eveline, 2011; Harris, Harris, Carlson, & Carlson, 2015), the threat to job security and the fear of technological uncertainty (Tarafdar, Tu, Ragu-Nathan, Ragu-Nathan, 2007), the expansion of the work culture beyond the classroom (Ragu-Nathan, Tarafdar, Ragu-Nathan, Tu, 2008), and the stress generated by the use of technology (Al-fudail & Mellar, 2008; Joo, Lim, Kim, 2016) are some of the pernicious effects on teachers resulting from the introduction of ICTs into the classroom. These technological changes have heightened their professional and personal demands leading them to acquire attitudes of resistance and defense (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, Sendurur, 2012; Kotrlik & Redmann, 2005; Yu, Lin, Liao, 2017). The current study therefore when taking into account the Job Demands-Resources Theory (Bakker & Demerouti, 2000), will attempt to model the influence of certain of these factors in predicting burnouts. The study, currently underway, focuses on a sample of Spanish secondary school teachers. They completed a questionnaire related to technostress (Ragu-Nathan, Tarafdar, Ragu-Nathan, Tu, 2008), adaptation to the Work-to-Family Conflict (Netemeyer et al., 1996), the Distributed Leadership Inventory (Hulpia, Devos, Rosseel, 2007), the Work and Meaning Inventory (Steger, Dik & Duffy, 2012) and the Maslach Burnout Inventory (Schaufeli, Leiter, Maslach, Jackson, 1996). Data collection is currently underway and completion is expected in December 2022. Relevance of the theme to the congress: This investigation explores the relationship between the use of new technologies and their influence on the changing world of work.

*Keywords: Exhaustion, Job Demands-Resources, Teachers*

## Oral presentation OP58

### **Emotional Intelligence, Teleworking, Interpersonal Conflicts and Well-being at Work: A Path Analysis Model**

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science

**Research aims and objectives :** This study aimed to identify the role specific emotional intelligence dimensions (i.e., self-emotion appraisal, others' emotion appraisal, use of emotion, regulation of emotion), and work characteristics (i.e., teleworking, workload, job insecurity, skill utilization, decision authority, social support) could play in interpersonal conflict at work and employees' well-being.

**Theoretical background :** According to the Job Demands-Resources model, work resources (e.g., low workload, social support) expand an individual's mental capacities. Inversely, a lack of resources could impair these capacities (e.g., capacity to avoid or to manage interpersonal conflicts at work). This lack of resources could in turn, impair one's mental health (e.g., lower levels of well-being). Beyond work-related resources, an individual's personal resources (e.g., emotional intelligence) could also play an important role in their mental capacities.

**Design/Methodology/Approach/Intervention :** Path analyses were conducted with MPlus software on a sample 264 Canadians workers from 19 small and medium organizations.

**Results :** Our results indicated that interpersonal conflicts played a mediating role between emotional intelligence, work characteristics and well-being. Regulation of emotion and teleworking were associated with a higher level of well-being via their effect on interpersonal conflicts (lower interpersonal conflicts). Use of emotions and workload were associated with higher level of interpersonal conflicts, while emotional regulation, teleworking, decision authority and social support were associated with a lower level of interpersonal conflicts.

**Limitations :** In terms of limitations, this study was cross-sectional and relied on self-reported questionnaires.

**Practical Implications :** Practitioners should pay particular attention to the differentiated effects of emotional intelligence dimensions in their training programs, as well as on the management of telework.

**Originality/Value :** Overall, the results of this study could provide valuable insight to employers. More specifically, this study could highlight different ways of improving interpersonal relationships at work to favor workers' well-being.

*Keywords: Interpersonal Conflicts; Well-being; Emotional Intelligence.*

## Oral presentation OP12

### Emotions as Social Information in Unambiguous Situations: Role of Emotions on Justice Perception

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science&practice

Objectives, Importance

EASI theory proposed that in an ambiguous situation, individuals rely on others' emotions to make sense of the level of fairness. However, the theory provides no information when the situation is unambiguous. This study fills this gap and assesses if the information provided by emotions about the fairness of a situation can explain individual differences in perception of variance in unambiguous situations when people are treated fairly and unfairly. The study goes further to assess the possible moderation that emotions may play between the fairness of the procedure and the observer's justice perception of that procedure.

Theoretical background

According to the EASI, emotional expression provides information about the affective state of the transmitter, which may influence observers through inferential processes and/or affective reactions. To make judgements on procedural justice, individuals seek relevant information about a specific event. However, individuals often find themselves in ambiguous situations where no helpful information is available. The degree of uncertainty increases people's need for justice information, motivating them to attend to the emotions expressed by others. The observer may use the information inferred from others when forming their own judgments as well as others' evaluations of an event.

The notion that in an ambiguous situation, people rely on others' emotions to make sense of the level of fairness encountered, as stated by the EASI theory, implies that in unambiguous situations, where sufficient information about the fairness of the procedures is available, people rely less on other emotions to understand the situation. This situation suggests that emotions may not have any incremental variance in the fairness of an event, in addition to what an unambiguous (un)fair situation can offer. To the best of our knowledge, this notion has not yet been tested. Accordingly, we test the following hypothesis:

H 1 : Emotions will not add significant incremental variance in addition to what an unambiguous (un)fair procedure could offer.

Therefore, we further assessed the possible moderation role that emotions may play between the fairness of the procedure and the observer's justice perception. Observer's procedure justice is formulated after he or she assesses others' procedural justice. In fair situation, happiness signals that the outcome is favorable and justified; whereas in unfair situation, anger indicates unfavorable outcome and that the goal is unfairly obstructed. When an individual treated fairly, an observer is more prone to believe the expressed happiness emotion; and when that individual treated unfairly, the observer is more prone to believe the expressed anger emotion, as there is no reason to fake.

Individuals may show emotions that they do not actually feel or may exaggerate to influence others. Therefore, observer estimates the appropriateness of emotional expressions to ensure that they are consistent with the norms of the surrounding situation. Inappropriate emotion decreases the inferential process and negatively activates the affective reaction, because they are seen as less

legitimate, or less deserved. There are situations where the observer has no access to the expresser's emotions. This may be because they have no direct interaction with the expressor who deliberately or inadvertently altering the emotions or masks them from reaching others. Accordingly, we proposed the following hypotheses:

There is a significant interaction between emotion and procedure for the other's procedural justice (H 2a ), as well as the observer's own procedural justice (H 2b ). Such that, in fair situation, happiness would significantly increase the justice perception of other's (H 2c ) and the observer own procedural justice (H 2d ) compared with anger. In unfair situation, anger would significantly decrease the perception of other's procedural justice, (H 2e ), and observer own procedural justice (H 2f ) compared with happiness.

### Methodology

We collected data using Qualtrics online survey software from 1012 employees across different industry services in the United States. The participants were assigned randomly to one of the 12 experimental conditions (fair, unfair, and unknown x happiness, anger, guilt, and neutral). Measures were Colquitt's (2001) organizational justice and PANAS.

### Results

for predicted other's procedural justice, inserting emotion added 5.2%, and for observer's procedural justice add 0.8% in addition to what procedure had contributed. Regardless of whether the procedure was fair or unfair, emotions were still able to contribute significant incremental variance in predicting procedural justice. Also, the results showed a significant interaction between procedure and emotion for other's procedural justice and observer's procedural justice. These results supported both H 2a and H 2b .

The study revealed significant interactions between the procedure and emotion. In fair situation, happiness significantly increases the perception of other's and observer own procedural justices compared with anger. Thus, H 2c and H 2d were supported. In unfair situation, though anger got lower mean compared with happiness, the difference wasn't large enough to be significant. Thus, H 2e and H 2f were not supported.

### Limitations

At the time of data collection, COVID-19 continued to spread in the US. It is reasonable to think that such a health crisis may affect participants' perceptions when filling out the questionnaires. The study used self-report measures that could have caused many known biases.

### Conclusions & implications

The findings highlight the importance of others' emotions as social information, the subjective nature of justice judgment, and that justice perceptions are not merely a result of deliberate cognitive processes. Emotions play a significant role in justice judgments, under (un)certain conditions, with (un)fair procedures, even when the observers were themselves not mistreated. The study also emphasized the role of emotion as a potential moderator between (un)fair procedures and the justice perception of that procedure. The results drew our attention to the importance of fair procedures and policies toward external parties, such as applicants and customs, as this may affect the perception of fairness of their internal parties. An employee who witnesses others being treated unfairly may experience injustice even when they are personally treated fairly. Accordingly, decision-makers should review their organizational policies toward external parties to eliminate any biases.

Congress Theme: Diversity and Inclusion: Organizational Justice

Relevant UN SDGs: Peace, justice, and strong institutions

*Keywords: justice, emotion, observer, uncertainty*

## Oral presentation OP110

### **Employability as an antecedent of eudaimonic well-being at work: the mediating role of job meaningfulness**

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science&practice

Research goals: Despite the growing interest in eudaimonic well-being, there is still a lack of research focusing on the origins of eudaimonic well-being at work (Dagenais-Desmarais et al., 2017). Recently, the role of personal resources (i.e., employability) as antecedents of well-being at work has been highlighted (Akkermans et al., 2020). The current study explored the relationships of Fugate et al.'s (2004) employability dimensions (i.e., career identity, personal adaptability, and social and human capital) with eudaimonic well-being at work (i.e., personal growth at work and purpose in professional career) as well as the mediating role of job meaningfulness in these relationships.

Theoretical background: We hypothesized positive direct and indirect effects (via job meaningfulness) of Fugate et al.'s (2004) employability dimensions on the eudaimonic well-being at work dimensions (personal growth at work and purpose in professional career). With respect to the direct effects, we drew on Fugate et al.'s (2004) model of employability and argued that employability is a personal resource that fosters eudaimonic well-being at work. Strong career identity, adaptability, social and human capital can not only facilitate the identification of career opportunities, but also provide motivation and agency to realize growth opportunities at work and to pursue overarching purposeful career goals. With respect to the indirect effects, we took on the worker-centric approach of job meaningfulness which states that employees are active creators of meaning (Rosso et al., 2010) and meaningfulness depends on what they bring into work (Chalofsky, 2003). We pose that employability is an antecedent of job meaningfulness since research has suggested that work activities that are congruent with one's identity, in this case, one's career identity, are crucial for experiencing meaningful work (Lysova et al., 2018). In addition, a numerous social network, as well as competencies and adaptability contribute to employees' experience of their job as meaningful (Robertson et al., 2020). Job meaningfulness, in turn, has an eudaimonic direction (Steger et al., 2012) and as such may trigger eudaimonic well-being at work outcomes (Chalofsky & Cavallero, 2019). Thus, we hypothesize positive direct and indirect effects (via job meaningfulness) of the four employability dimensions on the two eudaimonic well-being at work dimensions.

Methodology: We implemented a time-lagged design with data collection at three-time points, each separated by 3 months starting in April 2020. The sample was composed of 263 Spanish employees (48 % women; mean age = 37 years, SD = 10). Career identity (T1) and Social Capital (T1) were measured with 4-item scales (González-Roma et al., 2018). Personal adaptability (T1) was measured with a 3-item scale (Ployhart & Bliese, 2006). Human Capital (T1) was measured by 6 items focused on several generic competences (Hernández-March et al., 2009). Job meaningfulness (T2) was measured by a 5-item scale (May et al., 2004). Finally, the two dimensions of eudaimonic well-being at work (T3) were measured by Van Dierendonck's scales (2004): 7 items for personal growth at work and 6 for purpose in professional career. All measures showed adequate psychometric properties. Structural Equation Modelling (SEM) was conducted in Mplus 8, and indirect effects were tested with bootstrap analyses.

Results: Our research model showed good fit to data (RMSEA = 0.02; CFI = 0.99; TLI = 0.99; SRMR = 0.04). The indirect effects of employability dimensions on the two dimensions of eudaimonic well-being were positive and statistically significant for career identity, human and social capital, since the 95% bootstrapped confidence interval did not include zero. However, contrary to our expectations, personal adaptability did not show significant indirect effects on any of the dimensions of eudaimonic well-being at work. Regarding the hypothesized direct effects after controlling for job meaningfulness, results showed significant direct effects of career identity on personal growth at work and on purpose of professional career, as well as of social capital on purpose of professional career.

Limitations: Our study limitations are the use of self-report measures and the limited generalizability due to the sample being composed of Spanish employees only.

Research/practical implications: Our study highlights the importance of fostering employability as a personal resource that facilitates employees' experience of job meaningfulness and ultimately their eudaimonic well-being at work.

Originality/Value: By integrating the literature on employability and the worker-centric approach to job meaningfulness, our study offers new insights into the underlying mechanism relating employability with eudaimonic well-being at work.

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*Keywords: employability, job meaningfulness, eudaimonic well-being*

## **Oral presentation OP316**

### **Employee non-work activities: a cross-disciplinary systematic review**

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science

#### Research goal:

This study aims to integrate cross-disciplinary research on non-work activities and their impact on employee performance and well-being. After developing a novel typology of non-work activities from the perspective of content, we explicate how different non-work activities relate to employee outcomes. We further suggest that time, location, and whom the activities take place with act as important boundary conditions of these relationships.

#### Theoretical background:

While increasing research has explored the impact of various types of non-work activities on employee outcomes, our understanding has been thwarted by a lack of consensus regarding the scope of non-work activities and systematic integration of research across different disciplines. Our understanding of non-work activities has been primarily constrained to those that people engage in either out of working hours or workplace. However, working conditions have largely changed, with a general tendency to move away from fixed working hours and traditional offices and increasing implementation of flexible working arrangements. The traditional definition of non-work activities may prevent researchers from capturing these activities holistically and may also camouflage nuances of their impact. In this study, we expand existing research by differentiating non-work activities from the perspective of the content itself and focus on activities where content is not related to work. Furthermore, research located within different disciplines tends to take different conceptual and methodological perspectives on studying a specific non-work activity, and there is little consolidation across these disciplines. Existing research has also rarely considered the impact of non-work activities on performance-related outcomes and well-being at the same time. Our review aims to synthesize existing research on a broad range of non-work activities across different disciplines to provide a comprehensive overview of how different non-work activities contribute to diverse behaviors and well-being and propose a future research agenda.

#### Methodology:

We conducted a systematic search in the Web of Science Core Collection to identify potentially relevant outputs in March 2022. After reviewing 25,181 titles and abstracts, a total of 549 outputs from 34 disciplines met the inclusion criteria and form the basis of this review.

#### Results obtained:

Nine categories of non-work activities emerged considering the content, with sports and physical activities and the use of information and communication technology (ICT) receiving the most attention, followed by social, relaxation, and entertainment activities and traveling. Physical activities have been well-documented to be related to well-being indicators such as cognitive and affective state, life satisfaction, and sleep quality. Research on work-related benefits of physical activities has mainly addressed work ability, absenteeism, and presenteeism. Evidence that examined the impact of the use of ICT and social activities is mixed. While some studies found that participating in these activities contributed to increased positive emotions and recovery experience, leading to greater work engagement and work efficiency, in other studies, these activities were unrelated to changes in

well-being indicators or even activated fatigue, which could translate to deleterious work behaviors. Longer commuting time and distances as well as passive commuting mode exerts a negative impact on sleep time, subjective well-being, and psychological distress. Given the lack of studies and the broad range of activities included, it is difficult to draw general conclusions regarding the impact of volunteer activities, household and care activities, educational and learning activities, and religious and spiritual activities, respectively.

Limitations:

Although we conducted a systematic literature review across multiple disciplines that studied the effects of non-work activities on a number of employee outcomes, a meta-analysis could provide a cumulative effect size of such effects. Also, we limited our review to outputs published in English as this was the only common language spoken by all three authors.

Conclusions:

We observed that no theoretical framework has been consistently applied to explain the relationships between different non-work activities and outcomes. Also, not all non-work activities are uniformly related to all work-related behaviors and well-being dimensions. Given the mixed effects in existing research, future research could investigate the boundary conditions surrounding these relationships, especially in terms of time, location, and interpersonal relationships involved when engaging in different activities. Such effort could ultimately provide a framework that integrates the multifaceted effects of different types of non-work activities in relation to work-related behaviors and well-being indicators.

*Keywords: non-work activities, systematic review, cross-disciplinary*

## Oral presentation OP598

### Empowering self-direction in return to work of employees with lower and higher levels of education: two qualitative comparative studies

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#### Research goals and why the work was worth doing

Return to work (RTW) after sickness absence is not self-evident, particularly among employees with lower levels of education. One third of the Dutch low-educated individuals (aged 25-65 years) is inactive in the labour market, partially because of failing RTW processes. Dutch legislation prescribes employees and employers to cooperate in the RTW process and encourages self-direction of employees. Yet, we lack insight into how employees exercise influence over (i.e. self-direct) their own RTW. In this presentation, we will present the results of two studies, focusing on employees with lower and higher levels of education. The first study aimed to enhance our understanding of (A) the role that employers play in the self-direction of employees with lower levels of education (EL) over their RTW, (B) how employers perceive these employees' efforts (or lack thereof) to self-direct their own RTW, and how employers understand and interpret the behaviours of these employees. The second study aimed to analyse (A) how representatives of a university (employing employees with high levels of education (EH)), manage RTW, (B) the similarities and differences between the RTW management of employers (or representatives thereof) of employees with low (EL) and high levels of education (EH), and (C) the degree to which the employers' roles resemble empowering leadership.

#### Theoretical framework

Social cognitive theory was used as a framework for the first study. The second study builds on the theory of empowering leadership, which may support employees' self-direction in RTW (e.g. by allowing and enabling their involvement in decision-making).

#### Design/Methodology/Approach

Study 1 [1]: A qualitative study was conducted with 13 employer representatives (EL) using semi-structured interviews. Data were analysed in NVivo12 using a template approach. Study 2 [2]: 10 additional semi-structured in-depth interviews with employers (EH) were held and these were compared with the interviews from study 1. For study 2, a thematic analysis of interview transcripts (research goal A) was followed by a comparison of themes (research goal B) and pattern matching (research goal C).

#### Results obtained

Study 1: Employers (EL) tend to play a guiding, directive role in employees' RTW, leaving employees with limited decision latitude. Employers can and do decide about the timing and mode of employees' RTW for instance. Employees generally comply with the employers' decisions and suggestions, whether or not after trying to realise their own preferences regarding timing and mode of RTW. Such employee behaviour can be understood by person-related factors (perceptions of sickness and RTW, work preferences, being unable to resume certain work), and environmental factors (financial pressures to resume work, fear of job loss, pressure of the private life domain to not return to work, feeling to be pushed away/pulled towards the workplace). Study 2: (A) EH tend to engage in dialogue and accommodate their employees as much as possible. (B) EL and EH showed

several similarities, such as aiming to meet legal requirements on RTW management. Compared to EL, EH tend to focus more on facilitating employees. (C) Empowering leadership seems to be more common among EH.

#### Limitations

Both studies focused on the employer perspectives. We recommend future studies to include the employee perspective as well.

#### Conclusions – research and or practical implications/Originality/Value

Compared to employees with low levels of education, those with high levels of education may be granted more opportunity to self-direct their RTW. The results demonstrate the vulnerable positions of employees with low levels of education during sickness absence and RTW. These employees hardly seem to (be able to) self-direct their own RTW. Employers should give voice to employees and enable them to have more control over their RTW. The study results provide starting points for employers for employees with both low and high levels of education who aim to enable employees' self-direction in RTW, and help them to develop empowering leadership styles.

#### Relevance to the Congress Theme

These findings stress the importance for professionals in the field to give voice to employees during RTW, particularly to employees with lower levels of education. This research is highly relevant to the congress theme as it addresses a group of workers that is particularly impacted by recent global developments in social security systems and at the labour market.

*Keywords: Return-to-Work, self-direction, qualitative study*

## Oral presentation OP262

### Empowerment and Organisational Support Predict Work Attitudes in Forced Remote Working

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science

Goals and why the work was worth doing:

We sought to contribute to a theoretical understanding of the antecedent conditions predicting employee attitudes in the context of forced remote working. This study was important in developing models for progressing healthy and adaptive perceptions and attitudes during forced remote working conditions, such as those brought about by the pandemic.

Theoretical background:

The pandemic created an unprecedented set of forced remote working conditions about which little research currently exists. In the empowerment literature (e.g., Spreitzer, 1995), employees are thought to perceive varying degrees of meaning, competence, self-determination, and impact as a function of antecedent influences in their work environment. In forced remote working, employees do not have the usual stimuli in place that might otherwise influence empowerment perceptions. This includes antecedent predictors such as organisational, managerial, and collegial support (Anseel et al., 2015; Matusik et al., 2021). Other antecedent factors might play a role in predicting attitudes in forced remote work, including emotional stability, readiness for use of technology, and general readiness of one's home environment (Hutchinson & Williams, 2007; Parasuraman & Colby, 2015). There is evidence that empowerment relates to outcome attitudes such as intent to leave, well-being, satisfaction, and organisational commitment (Carless, 2004; Emery et al., 2019; Fisher, 2014; Van De Voorde et al., 2016). How these variables are expressed in the context of forced remote working is largely unknown. The pandemic has highlighted that furthering knowledge about attitudes in a forced remote working context is critical to (a) developing a theoretical understanding of processes relevant to forced remote work and (b) preparing organisations for how to foster psychologically healthy conditions for people who are forced to work remotely.

Design/Methodology/Approach/Intervention:

We fitted a Bayesian, Hamiltonian Monte Carlo multilevel model with a recalled pre- and during-pandemic within-participants factor and an occupational type between-participants factor to partial job complexity (N = 337). Predictors in the model included organizational, managerial, and collegial support, neuroticism, and technological and home readiness. Empowerment was specified as a mediator, with the outcomes intent to leave, well-being, job satisfaction, and organizational commitment.

Results:

All measures returned admissible reliability estimates (coefficients alpha > .70) with acceptable model fit and convergence (as indicated by  $R_{hat}$  [ $< 1.05$ ] and posterior predictive p-value statistics [= .50], along with  $R^2$  values per outcome ranging from .20 to .52). We found that the onset of the pandemic negatively impacted job satisfaction ( $\beta = -.32$ ) and to some extent empowerment ( $\beta = -.16$ ), well-being ( $\beta = -.13$ ), and commitment ( $\beta = -.11$ ). Our results consistently suggested that perceived organizational support (POS) was a critical factor in predicting all outcomes in our model, including intent to leave ( $\beta = -.34$ ), organizational commitment ( $\beta = .36$ ), and well-being ( $\beta = .21$ ). We

found small, significant indirect effects for POS via empowerment relating to the same outcome attitudes. Moreover, empowerment predicted intent to leave ( $\beta = -.30$ ) and job satisfaction ( $\beta = .47$ ).

Limitations:

This study was conducted during forced lockdown conditions. However, we were reliant on recalled pre-lockdown perceptions for our within-participant contrast. Most participants in our sample were White and working in British organisations. It would be interesting to know about attitudes relevant to other ethnic backgrounds and in other countries.

Conclusions:

Our findings suggest that in forced remote working, POS and empowerment are critical to the prediction of outcomes that are relevant to the psychological health and well-being of employees. We contribute to theory relating to a novel, yet clearly impactful set of work circumstances. We moreover offer practical considerations for organisations about fostering POS and empowerment in the context of forced remote work.

Relevance to the Congress Theme:

A sustained normative shift towards increased levels of remote working is identifiable across countries (Šmite et al., 2023). Organisational policy directed at meeting the challenges of this shift, within a context of mounting economic challenges, could invite an increase in forced remote working in the future (Musleh, 2022). Within this uncertain context, we have much to learn from the circumstances brought about by the pandemic and the ability of organisations to remain sustainable and employees to remain psychologically healthy in conditions of forced remote working.

Relevant UN SDGs:

Good health and well-being; decent work and economic growth

*Keywords: Remote working, Empowerment, Organisational Support*

## Oral presentation OP218

### ENERGIZING LEADERS TO BE TRANSFORMATIONAL : WORK-BREAKS

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science&practice

Personal resources play a crucial role in important behaviors at work, but little research has explored the dynamic nature of leaders' personal resources and leadership behaviors. In this study, we examine one possible way to help leaders gain more resources and energize themselves so that they can be transformational on a daily basis, and further investigate the extent to which the importance of this resource-based mechanism is contingent on the level of leaders' daily work demands. Also, given that transformational leadership goes beyond leaders' self-interest and their own tasks to focus on followers (Dvir et al., 2002), we incorporate the relational nature of transformational leadership into our model. Thus, we examine how this resource-based process unfolds in the leader-member dyadic context. We use Conservation of Resources (COR) theory (Hobfoll et al., 2018) as an overarching framework and draw from the recovery literature (Troughakos & Hideg, 2009).

By testing our hypothesized model, we aim to make several key contributions. First, our study offers a new antecedent of daily transformational leadership, thereby contributing to the scholarly knowledge of how to facilitate leaders' daily transformational leadership behavior. Second, COR theory is a dynamic theory, acknowledging that human resources ebb and flow over time (see Halbesleben et al., 2014; Hobfoll et al., 2018, for reviews). In our model, we integrate this theory with the recovery and leadership literature to examine intermediary processes that support leaders as they exhibit transformational leadership on a daily basis. Identifying moderating conditions helps to refine theories, as moderators can specify conditions under which certain relationships/processes are either strengthened or weakened (Sutton & Staw, 1995; Weick, 1995). In our research, we test whether the proposed indirect effect of microbreaks on transformational leadership via affective resource states has moderating conditions that are embedded in leaders' work environment. Additionally, we test whether the extent to which leaders use their improved affective resources for transformational leadership depends on the quality of leader-member exchange (LMX) relationship with followers (Graen & Uhl-Bien, 1995).

COR theory (Hobfoll, 1989, 2001) has been perhaps one of the most cited theories in the organizational psychology and behavior literature (Halbesleben et al., 2014). Its central premise revolves around the assumption that human resources are finite, such that people seek to protect and obtain resources for meeting demands in their life. Although COR theory was heavily used in research to test its notion that resource loss leads to stress and ill-being, many gaps need to be filled to refine the theory (Halbesleben et al., 2014; Hobfoll et al., 2018). In the work context, the theory suggests that because work requires employees' continuous expenditure of resources (e.g., energy), it is critical for them to protect and gain important resources for their best work outcomes. However, COR theory did not specifically theorize how individuals might conserve and gain resources in various contexts at work. That said, the recovery literature has fleshed out the theory by identifying recovery processes—that is, means by which individuals replenish their resources to have better well-being and work outcomes (see Sonnentag et al., 2017, for a review). As a form of at-work recovery, within-day work breaks have been tested as an effective way to conserve and restore resources at work (see Troughakos & Hideg, 2009, for a review). Thus, we focus on microbreaks—short, informal respites that individuals voluntarily take between task episodes for momentary recovery (Kim et al., 2017; cf.

Fritz et al., 2011)—as a way to energize leaders so that they can improve their affective states that are critical for transformational leadership.

Data were collected through three daily surveys from 118 leader–member dyads for five workdays (n = 512 observations). Multilevel path analysis showed that on days when leaders reported taking more frequent microbreaks, they were more likely to show transformational leadership behaviors (as rated by followers) through increased positive affect and decreased negative affect. Interestingly, the mediated relationship between microbreaks and transformational leadership via the affective paths was stronger for days when leaders had higher work demands than for days with little demands. Further, the mediated relationship via positive affect was significant for leader–member dyads in a higher-quality leader–member exchange relationship, but not for those in a lower-quality relationship (as rated by followers). Overall, these findings extend the conservation of resources theory and the leadership literature by delineating resource processes of daily transformational leadership and identifying important moderating conditions for the resource pathways.

*Keywords: microbreaks, resources, transformational leadership*

## Oral presentation OP142

### **Engage and Retain the Aging Workforce: Identifying the Workplace Antecedents and Mechanism Underlying Age-based Stereotype Threat**

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science&practice

Theoretical background: Older employees are stereotyped as less capable, less flexible, and less willing to learn new skills (Posthuma & Campion, 2009). Encountering stereotypes can make older employees susceptible to age-based stereotype threat, or the concern about confirming or being reduced to a negative stereotype (Steele, 1997). Older employees' experiences of stereotype threat are associated with more negative workplace outcomes, such as poorer job attitudes and greater intentions to quit (Kulik et al., 2016; von Hippel et al., 2013).

Research goals: Although age-based stereotype threat is associated with disengagement, we know little about the factors that can trigger it. Drawing on stereotype threat, socioemotional selectivity, and social comparison theories, we tested a range of potential workplace antecedents of stereotype threat among older employees. It is also unclear why experiencing different antecedents might lead to stereotype threat. We proposed age salience (i.e., the extent to which age is at the forefront of someone's mind when interpreting an event; Taylor & Fiske, 1978) as a potential mediating mechanism. Given that organizations are multi-level systems (Costa et al., 2013), we approach the problem of stereotype threat via multi-source data by investigating how individual- and organizational-level factors impact employees' experiences. From a managerial perspective, identifying specific workplace antecedents can inform interventions designed to predict and prevent stereotype threat, thereby improving the engagement and retention of the aging workforce.

Method and Results: Three studies were conducted among members of an aging advocacy group and 26 municipal councils (N = 1283 older employees). At the individual-level, the first two studies identified 10 key antecedents associated with higher stereotype threat (e.g., being overlooked for training opportunities, feeling excluded from the informal social aspects of the workplace). Mediation results revealed that experiencing any of the 10 antecedents related to increased age salience, which in turn, related to greater feelings of stereotype threat. Consistent with previous work, stereotype threat was associated with poorer workplace outcomes. At the organizational level, we collected responses from older employees' younger co-workers (40 years old and under; N = 214) and HR representatives to understand if organizational culture impacts older workers' feelings of stereotype threat. Our findings indicate that stereotype threat may be less impacted by organizational factors, like younger co-workers' attitudes or the age-friendly HR programs available, than by factors that are local to each employee. Study 3 (N = 197) used a 10-day diary study in which employees responded to a short survey at the end of each workday to determine how daily antecedents relate to daily feelings of stereotype threat, and consequently age salience, stress, strain, and belonging.

Limitations: Our research is correlational and cannot establish a causal link between the antecedents and stereotype threat. Additionally, given the size of councils, workgroup or departmental-level data would provide a better test of how younger co-workers' attitudes relate to older employees' stereotype threat.

Conclusions: Our studies identified 10 key antecedents to age-based stereotype threat for older employees and the frequency at which they occur daily in the workplace. We found support for age salience as a partial explanation underlying why experiencing an antecedent leads to stereotype

threat. Adopting a multi-level approach, we addressed concerns of common method variance and gained insight into how organisational-level factors relate to older employees' stereotype threat.

Relevance to Congress Theme: The global aging population has led to predictions of an upcoming labor shortage (UNDESA, 2019), indicating that it is increasingly important to better engage and retain older employees. Thus, gaining a better handle on the triggers of stereotype threat can help inform psychoeducation interventions designed to predict and prevent the antecedents from occurring, thereby minimizing feelings of stereotype threat, and consequently better engaging and retaining the aging workforce.

Relevant UN SDGs: Although younger employees also experience stereotype threat at work, they are not as susceptible to poorer workplace outcomes as older employees (von Hippel et al., 2013; 2019). Our research contributes to reducing inequalities in the workforce by focussing on the triggers to stereotype threat for older employees and minimising their stereotype threat experiences. Consequently, an engaged and retained aging workforce can ameliorate the upcoming labor shortage, promoting economic growth, and improve wellbeing and health outcomes for older adults worldwide.

*Keywords: Aging workforce, Stereotype threat, Job attitudes*

## Oral presentation OP575

### Enhancing employees' competence development and career management – an RCT study

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science&practice

Research goals and why the work was worth doing:

Changing working life creates pressure to renew work-related competences and to navigate one's own career. Continuous learning and career management skills are increasingly important to all individuals to successfully grow and to update one's skills in today's labor market and to cope with changing working life (Hirschi & Koen, 2021; Nagy et al., 2018). Employees experiencing a career deadlock (i.e., employees who are dissatisfied with their current career situation but feel unable to make career-related changes) may be in a particularly high need of support in advancing their careers. Interventions targeted to reduce subjective career deadlock and to improve one's career situation are suggested (e.g. Stengård et al, 2016; Zacher et al., 2015), yet the research on this area is lacking. The aim of our study was to develop a resource-building intervention aiming to increase employees' self-directness in learning, preparedness for competence development and career management, and to assess whether employees in a career deadlock benefit the most from this intervention.

Theoretical background

The group-coaching intervention is based on theories on social learning (Bandura, 1986), planned behavior (Ajzen, 1991), and cognitive stress inoculation (Meichenbaum, 2007) that emphasize specific self-efficacies and preparation against setbacks as personal resources. We refer to these dimensions together as preparedness. The intervention program was also built utilizing prior preventive group methods that aim at increasing preparedness in educational and employment transitions (Vinokur et al., 1995; Vuori et al., 2002). The components of the group coaching included active learning techniques, supportive learning environment, and skilled trainers.

The topics and exercises of the intervention were designed to promote continuous learning and increase employees' career (self-)management skills (e.g. Bridgstock, 2019; Heslin et al, 2020; Hirschi & Koen, 2021). Examples of specific topics include self-appraisal, career planning, and goal selection, skill development, decision-making in career, and utilizing social networks to promote career advancement and to seek support.

Design/Methodology/Approach/Intervention

The study is conducted as a randomized controlled trial (RCT) in different work organizations from public and private sectors between 2022 and 2023. Participants are employees from different occupational fields who take part in the study voluntarily. As career refinement and questions about working identity are evident especially in mid- and late-career, the study is primarily targeted for employees over 35 years.

Two to four trainers from each organization are trained (4x3h) to conduct the group-coaching intervention in their workplaces. Participants are randomly assigned to the intervention (group-training, 4x3 h) and control groups (written material). All participants are asked to fill out online questionnaires before the treatment (T1) and immediately after (T2).

Results obtained or expected

We are currently collecting T1 data. Immediate follow-up data will be collected and analyzed in Spring of 2023. The results of these immediate effects will be presented in the conference. We expect the intervention to enhance individuals' preparedness for competence development and career management and self-directedness in learning. We hypothesize that employees experiencing career deadlock at baseline will benefit most from the intervention.

#### Limitations

The trial results are currently limited only to immediate effects and thus, it would be beneficial to understand the long-term career and well-being effects of the intervention.

#### Conclusions – research and or practical implications/Originality/Value

Our study results will increase understanding of the effectiveness of group coaching in supporting employees' motivation and skills for continuous learning and career management. It will also help to understand whether employees in high need of support experiencing career deadlock can be supported in their careers through group-coaching methods. We provide evidence-based knowledge of best practices for supporting employees that can be easily adapted by organizations and practitioners.

#### Relevance to the Congress Theme

Individuals are expected to plan and proactively proceed in their working careers. Being able to learn continuously and develop occupational skills is not only useful for the future but essential in the current rapidly changing working life. Our work provides tools for employees to adapt and cope in the changing world of work.

*Keywords: career management, competence development, subjective career deadlock*

## Oral presentation OP260

### Entering and exiting self employment – how do they relate to health and well-being?

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science

Research goals and motivation: Self-employed workers contribute significantly to our society in terms of economic productivity, job opportunity and innovation. Thus, it is in the interest of our society to support and encourage self employment. It is well documented that self-employed workers – on average – experience higher levels of wellbeing, and less mental health problems than employed workers do. However, self-employed workers are a highly heterogeneous group when it comes to who they are, how they work, and their health status. Thus, averages are not sufficient to inform researchers, policymakers and companies on how to understand the mental health and wellbeing of this group of workers.

Workers enter and exit self employment all the time as business opportunities occur, need of an income arises, innovations are created, and businesses fail. However, little is known about the mechanisms behind these career transitions beyond economic factors. Is the decision to start a business related to wellbeing, and how? How many self-employed workers are thriving over time, both when it comes to wellbeing and their business? Who is struggling and experiencing mental health problems, and is this related to exiting self employment? Questions like these currently go unanswered.

Theoretical background: This study is mainly exploratory, but mental health problems, wellbeing and how it develops and how it relates to entering and exiting self employment can be related work environment. The effort-reward imbalance model (ERI) has proven to be a good framework to understand health developments, and is adapted and used in this study as theoretical framework.

Method: Latent transition analysis (LTA) is used to consider both the longitudinal aspect and the heterogeneity of the group of self-employed workers, in a unique and novel way. We investigate what profiles of mental health and wellbeing exist among self-employed workers, how common they are, and how the workers transition between these profiles over time. Further, we study how the profiles and transitions between them relate to entrepreneurial entrance and exit, work environment factors (ERI) and background variables (i.e., age and gender).

We use data from the Swedish Longitudinal Occupational Survey of Health (SLOSH) The current study is based on participants who responded to the 5<sup>th</sup> -7<sup>th</sup> wave of SLOSH conducted in 2014 (response rate 53%), 2016 (response rate 51%) and 2018 (response rate 48%). In this study, we use respondents who were self-employed at any of the three time points (N=2327).

Results: Results of all statistical analyses will be available when the conference takes place. Preliminary findings of factor analysis show that all scales have adequate fit and factor loadings. Based on previous research we expect to find at least one profile of relatively good mental health and wellbeing, as well as profiles with less advantageous mental health. We also expect that work environment factors are linked to health profiles such that better health is found in workers with less ERI. ERI, a well-documented theoretic model, is used to validate the health and wellbeing profiles. Probably, exist out of or entrance into self employment is related to changes in health and work

environment. Mechanisms, the number of transitions, and the temporal order will be explored in our study.

Limitations: The limitations of this study lie in the exploratory nature of the analysis, and more studies will be needed to further validate any found profiles.

Relevance to congress theme : This study is relevant to the first theme of the congress: Careers and the labour market. Specifically, career transitions and employee mobility. With regard to the UN SDG, our study addresses good health and wellbeing and decent work and economic growth.

Conclusions: Exact conclusions will depend on the findings, but the study is one of the first to focus on health profiles of self-employed workers, and ways in which these workers' mental health and wellbeing changes in relation to ERI and decisions to change employment. The results will yield a better understanding of how self-employed workers thrive or struggle, and how to identify the ones that struggle. This will also help to discuss potential possibilities to create better circumstances or preventive tools to shape decent work and sustainability of careers that involve self employment.

*Keywords: self employment, wellbeing, mental health*

## Oral presentation OP516

### **Entrepreneurs' creativity in crises: Psychological wellbeing as a protective factor in difficult times**

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science

#### Research goal

The crisis such as the Covid-19 pandemic threatens the survival of entrepreneurs' businesses, but some of them also seem to 'thrive'. Why are some entrepreneurs better able to deal with the crisis? This paper explores entrepreneurs' psychological wellbeing (PWB) as an important psychological capability to preserve creativity during the crisis, allowing them to adapt and explore new opportunities.

#### Theoretical background

There is growing research interest in entrepreneurs' well-being, yet so far, the focus has been on hedonic wellbeing (Stephan, 2018; Wiklund et al., 2019). This is surprising as eudaimonic wellbeing, especially PWB, should be critically important for entrepreneurs by way of facilitating 'entrepreneurial behaviors' such as proactivity and creativity (Hahn et al., 2012; Ryff, 2019).

PWB emphasizes "multiple facets of well-being such as purposeful engagement, realization of personal potential, autonomy, mastery, quality ties to others, and self-acceptance" (Ryff, 2019:647). Evidence indicates that PWB is stable, has trait-like features (Anglim et al., 2020) and enables individuals to cope with adversity (Ryff et al., 2015). It may be a critical psychological capability for entrepreneurs to thrive in crisis by helping them to accept the crisis and potentially reframe it as an opportunity for personal growth and reaffirm the purpose of their work. High PWB is therefore likely to support entrepreneurs' creativity through the sense of agency that autonomy and master entail, while high quality ties with others allow them to mobilize social support to access new ideas and maintain energy and a positive outlook.

We further explore whether PWB may be a critically protective factor for those entrepreneurs who are most negatively affected by adversity. High PWB may enable them to reframe adversity as an opportunity for learning and growth (Franco et al., 2016) and to mobilize support from positive social connections (Ryff, 2017).

#### Method

We collected data before (January-March) and during the Covid-19 crisis (May-July) in two countries (Poland and Spain) that were differently affected by Covid. In both rounds, the same 158 entrepreneurs completed a questionnaire followed by a 10-day diary study using daily telephone interviews.

We measured PWB using Ryff and Keyes' scale (1995), creativity using an adaptation of Janssen's (2000) scale (as in Weinberger et al., 2018). To assess the severity of the negative impact on the entrepreneur's business we used the index of stringency of government response produced by Covid-19 Government Response Tracker. We employ stepwise regressions and standardized variables to test and plot interactions to test interactive effects of PWB with the negative economic impact of COVID-19 on the entrepreneurs' business. We control for the effect of our dependent variables at "time 0" (pre-Covid) and entrepreneur age, gender, education, firm size, industry sector, pre-

pandemic profit, years of business' ownership, and personal financial situation of the entrepreneur. We then replicate our findings using daily diary study data on a sample of 145 entrepreneurs in 1431 observations using multi-level modeling.

### Results

Entrepreneurs creativity decreased during the Covid-19 pandemic compared to pre-Covid levels. Additionally, the more severely the entrepreneurs were affected, the bigger drop in creativity. Controlling for pre-Covid levels of our measures, we find that those entrepreneurs who showed higher levels of PWB before the crisis had higher creativity during the crisis. We also find significant interaction between PWB and severity of the impact: the more severely the entrepreneurs are affected, the bigger role is played by PWB in protecting their creativity.

### Implications

Our study newly introduces PWB as an important psychological capability for entrepreneurs to deal with and thrive in crisis. This extends the scarce research on entrepreneurs' PWB and their eudaimonic well-being. We provide novel longitudinal evidence that PWB shapes creativity and helps entrepreneurs to deal with crisis. This consolidates theoretical expectations that PWB is particularly important for entrepreneurs (Ryff, 2019; Stephan, 2018, Wiklund et al., 2019) not just because it leads to higher hedonic wellbeing (Nikolaev et al, 2020; Shir et al., 2019) but also because it supports entrepreneurial creativity. We also complement crisis research in entrepreneurship which typically explores pre-crisis firm capabilities (Dorn et al., 2019) as opposed to personal resources and capabilities. Finally, our findings offer a more nuanced perspective on 'entrepreneurs as masters of adversity' who adapt with creativity to crises. We show both in a between-person and day-to-day diary study using objective measures of adversity that it diminishes entrepreneurs' creativity.

### Relevance to the Congress

We explore of the changing world of work of entrepreneurs by highlighting how important their happiness is for their work.

*Keywords: entrepreneurial creativity, psychological well-being*

## Oral presentation OP371

### **Entrepreneurship and innovation Competencies as predictors of high potential: an exploratory study with middle managers in Spain**

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science&practice

In this work, a proposal of talent as a pool of predictors of high potential (HP), is revised. Talent management in organizations is a complex constellation of skills, motivational aspects, and interests, that interact to achieve excellence. It seems to involve the joint action of variables including intelligence, creativity, personality traits or dimensions of emotional intelligence, such as passion and perseverance. Drawing on Bartram (2008) and Dries & Pepermans (2012) talent model, we carried out this research.

In a sample of 806 middle managers of a multinational service company, it is verified if the competencies used as predictors: (i) can be grouped into the cognitive and socio-emotional categories, (ii) if the first category has a better predictive capacity for high potential of talent (HP), and (iii) if there are differences between men and women. Based on the data collected on the competencies and the final decision on the HP in the annual performance evaluation, factor analyzes were first carried out and then logistic hierarchical regression analyses.

The results showed that the competencies were grouped into the previously two categories proposed, in the way that: cognitive -initiative, appetite for learning and thinking beyond boundaries- ; and sociemotional -commitment, cooperation, maturity and understanding of others- and that the first category was the most important to predict HP with an overall accuracy of classification of 75.3%. In addition, differences were found when segregating the results by sex for the self-cognitive skills: initiative, appetite for learning, and thinking beyond boundaries. Finally, the implications of these results are discussed when designing talent management actions and in organizations.

*Keywords: Competencies, talent, managers*

## Oral presentation OP543

### **E-recruitment: the effects of the emotions on organizational attractiveness change and intention to apply**

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science&practice

#### Research Goals:

Nowadays, corporate websites are one of the most used and sustainable sources of recruitment, and there is growing interest in the characteristics of the website that can change organizational attractiveness. Since the early 2000s, some evidence has encouraged the investigation of the relationship between website content and design and organizational attractiveness (Brady & Phillips, 2003).

The study intends to clarify the role of the emotions felt by applicants during a corporate website exploration with respect to organizational attractiveness and their intention to apply. Finally, we want to study whether the model is stable or not concerning different corporate reputation levels.

#### Background:

We study the emotions of job seekers after having visited a corporate website. We based our hypotheses on stimulus-organism-response Model (Mehrabian & Russell, 1974) that suggests that environmental stimuli lead to an emotional reaction that evokes behavioral responses; the model has been adopted in many fields and, in the last years, to explain the consumer decision-making process in online shopping (e.g. Kim & Lennon, 2013) but it is new in recruitment field.

The mediation variable, between emotions and intention to apply, is the organizational attractiveness that has been adopted in many models about online recruitment (i.e. Gregory, Meade and Thompson, 2013). Although this, few empirical studies have analyzed the malleability and the change of employer perceptions during recruiting processes (Kantar, Collins & Bell, 2010; Kantar, Collins & Bell, 2015). So we therefore want to contribute to the literature on recruitment by studying how company websites can change organizational attractiveness for a job seeker.

Finally given that a firm's reputation has been demonstrated to affect job pursuit intention (i.e. Behrend, Baker & Thompson, 2009; Kantar et al., 2015), we will analyze all that at high and low levels of perceived reputation.

#### Methodology:

Participants (N = 422; F=59%; average age = 23.3) were postgraduate students who attended a university in Northern Italy. The procedure comprised three steps. First, the participants completed a questionnaire on a company's organizational reputation and organizational attractiveness. Second, they were invited to visit the website of the organization, thinking and behaving as if they were job seekers. Third, at the end of the exploration, they completed a second questionnaire on the positive emotions ( joy, contentment, and happiness ), organizational attractiveness, and Intention to apply on the sole basis of what they had seen on the company's website. The index of organizational attractiveness change was defined as the difference between the two measures of the same construct. The psychometric qualities of the measures were good. The recommended procedure for

moderated mediation model, as tested by IBM SPSS package PROCESS macro, was adopted for the data analysis.

#### Results:

The results indicated that emotions were positively related to the intention to apply via the change of organizational attractiveness, the change that occurred after the website exploration. The moderator effect of reputation was confirmed too: when the reputation was low, the indirect effect was higher, so, in these cases, the role of emotions was more relevant.

#### Limitations:

The main limitation concerns the generalizability of the results. Indeed, all the companies taken into consideration had at least fairly structured websites and the sample was of only young job seekers. Moreover, the emotions were measured not during the website exploration but immediately afterward and this could have impacted on the validity of the measure.

#### Conclusion:

The study presents significant implications for the strategy of recruitment communication in corporate websites, suggesting the importance of giving positive emotions, especially for a company with a low level of reputation. The contribution of this study is triple. First, the research offers new insights into the analysis of changing organizational attractiveness. Second, it suggests the role of emotions in the intention to apply and third underline the relevance of considering the different level employer reputation for understanding job seekers strategies.

#### Relevant UN SDGs:

Decent work and economic growth; Reduced inequalities

*Keywords: E-recruitment, emotions, organizational reputation*

## Oral presentation OP782

### **Ethical challenges for employees in a time of pandemics and advances in artificial intelligence; or “is our psychology relevant any more”?**

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science&practice

Research goals and why the work was worth doing

Our work is at an unusual intersection of professional psychology and professional business ethics. We partnered in an international survey examining ethical and unethical behaviour in industry. We make longitudinal comparisons of ethical behaviour with a focus on the ethical implications of Covid-19 and the growing role of Artificial Intelligence in the work environment and in social lives.

There has been much consideration of the impact of the pandemic by the social sciences, this has focused on changing patterns of work, health and particularly mental health. In particular we consider the ‘moral hazard’ raised in decision-making during the pandemic. Separately we examine ‘rights’ impacted by the increasing use of artificial intelligence. Industrial responses are examined, the experience of “workers” foregrounded, and the real-world challenges to academic and practitioner colleagues that arise as a consequence discussed.

This work uniquely represents the “user voice”. It means that we, who seek to understand the world of work, can openly and honestly consider our response to these contentious ethical domains.

Theoretical background

Psychology as a profession has been argued to be fundamentally ethical and values-based (Kwiatkowski & Duncan, 2006; Lefkowitz, 2014). However, psychologists wear “multiple hats” (Sternberg, 2008) and so ethical questions inevitably arise. If we are not simply to be “Servants of Power” (Baritz, 1960), automatically dancing to our paymasters’ tune we must fully understand the ethical landscape that impacts our science and practice.

There are many ethical pressures and dilemmas faced by working people who do not have the privilege associated with psychologist or academic status, and who have to daily engage with issues of ethics, misconduct, compromise, compliance, whistleblowing, dishonesty, and drags on development.

Two important and contentious sets of experiences, concerning the pandemic and the rise of artificial intelligence need to be kept in sight and examined. The ethical aspects of the changes brought about by these recent phenomena and the impact on work psychology, including changes to come, are particularly significant.

Design/Methodology/Approach/Intervention

The field work was carried out by professional market research organisation calling on a stratified sample of 9834 working adults (18+) from 13 countries. The survey has 125 questions including questions on age, gender, sector employed, company size, and managerial responsibilities. Main areas of investigation are 1) “the acceptability of” a range of unethical behaviours; 2) how prevalent “honesty” is in the organisation’s daily operations; 3) a range of misconducts the participant is aware of; 4) reasons why employees will not speak up; and 5) managerial attitudes toward ethical behaviour in the workplace.

### Results obtained or expected

We will present a variety of temporal (2015, 2018, and 2021) and geographical (13 countries in 2021) comparisons; for instance concerning the prevalence of ethical and unethical behaviours, focusing on change over time, and considering attitudes to the impact of the pandemic and the adoption of artificial intelligence in the workplace. However, our main focus (as well as utilising the data itself) will be to draw out the importance of these considerations for the field of psychology.

### Limitations

The usual considerations of snapshot survey / testing design apply; however, the survey is well-designed and robust, and this dataset has a longitudinal component; further our purpose is actually to challenge psychological thinking using this analysis as a key stimulus.

### Research/Practical Implications

Our paper will bring both academic and practitioner psychologists face-to-face with real ethical dilemmas experienced by working people. It will therefore challenge both theory and practice and will question some core principles of work and organisational psychology; if we are not involved in a fundamentally ethical endeavour then our work is a chimera.

### Originality/Value

EAWOP was a signatory (2016) and key member of the “alliance for organisational psychology memorandum of understanding and fostering ethical relevant and rigorous research” which we support. We suggest that ethically relevant and rigorous practice are both critically important. Given the critique of “novelty” in that memorandum we hesitate to use that term; however, we are not aware that exactly this sort of material has previously been presented.

### Intended audience

Both academics and practitioners. Specifically, the interactions between the adoption of artificial intelligence in the workplace as well as the status of being a “key worker” or not during the pandemic with the instances of unethical behaviour observed or showed in the workplace will doubtless attract commentary on the reasons behind our results.

*Keywords: Ethics, Employees, Psychology*

## Oral presentation OP616

### **Ethical dilemmas and well-being in teachers' work: A three-way, two-year longitudinal study**

Taru Feldt, University of Jyväskylä; Saija Mauno, University of Jyväskylä & University of Tampere; Mari Herttalaampi & Mikko Heikkilä | University of Jyväskylä

science

**Research background:** The aim of the present three-way two-year longitudinal study was two-fold: First, to explore what kinds of latent longitudinal ethical dilemma subgroups can be identified among Finnish teachers, and second, to examine how these subgroups differ from each other with respect to occupational well-being (burnout, work engagement) and recovery from job strain (psychological detachment).

**Theoretical background:** We investigated two kinds of ethical dilemmas: acute and rationalization dilemmas. Acute dilemmas refer to situation in which a person does not know which would be the right or wrong action to take. Hence, in facing acute dilemma, teachers perceive the situation to be without any obvious solution to the challenging dilemma. Rationalization dilemmas are situations in which an individual knows the right action to take but cannot or does not act upon this. Rationalization dilemmas are those in which teachers need to recognize that fundamental values are violated to make the dilemma visible to themselves. To investigate the associations between teachers' ethical dilemma subgroups and occupational well-being (burnout, work engagement) and recovery (psychological detachment) we used the stressor-detachment model, which comprises 1) job stressors, 2) strain reactions and well-being, and 3) psychological detachment from work (Sonnentag & Fritz, 2015). According to this model, we assumed that ethical dilemmas are job stressors that cause job stress. We assume that these reactions constitute a risk for teachers' burnout and work disengagement. A third component of the stressor-detachment model is psychological detachment, which is an important part of recovery from job strain. We assume that prolonged ethical dilemmas may impair teachers' psychological detachment from work-related issues in non-work time.

**Design:** Altogether 310 Finnish teachers participated to the three-way two-year longitudinal study. An electronic survey included scales of acute and rationalization dilemmas, burnout, work engagement, and psychological detachment at each measurement time.

**Results:** Using Latent Profile Analysis, three longitudinal ethical dilemma subgroups of teachers were identified: frequent dilemmas (22%), occasional dilemmas (51%), and rare dilemmas (27%). Teachers in the frequent dilemma subgroup experienced acute dilemmas almost daily and rationalization dilemmas weekly. This subgroup was overrepresented by special education teachers and teachers working in kindergartens and comprehensive schools. Teachers in the frequent dilemma subgroup had the highest levels of burnout, although it decreased slightly over time. Teachers in the occasional dilemma subgroup experienced acute and rationalization dilemmas on average monthly. Upper secondary school teachers were overrepresented in this group. Teachers facing dilemmas occasionally reported moderate levels of burnout and psychological detachment. In the rare dilemma subgroup teachers experienced acute and rationalization dilemmas approximately yearly. Senior teachers, subject teachers, and student counselors were overrepresented in this subgroup. Teachers' who reported dilemmas rarely, scored lowest in burnout, highest in work engagement, and moderately in psychological detachment.

**Limitations:** Our longitudinal study was conducted using self-report questionnaires, which may have affected the validity of the study because of common method variance. Furthermore, we cannot

verify causality between the ethical dilemmas and occupational well-being, which is a shortcoming in our study.

**Conclusions:** To summarize, ethical dilemmas showed significant associations with teachers' occupational well-being and recovery. Allowing time and possibilities for reflections and dialogue would help teachers to recognize and deal with ethical dilemmas better in their daily work. This would lessen teachers' long-term ethical dilemma frequency and overall strain reactions related to ethical dilemmas.

**Relevance to the Congress Theme:** Teachers face many kinds of ethical dilemmas in their daily work at school. Major changes in the environment, such as a pandemic and the increasing number of refugee children, cause ethically challenging situations that teachers must deal with. This study shows that ethical dilemmas are linked to teachers' well-being and that teachers need support in dealing with these dilemmas.

**Relevant UN SDGs:** The goal of the study is to promote teachers' good health and well-being.

*Keywords: ethical dilemma, teacher well-being, recovery*

## Oral presentation OP496

### Ethical infrastructure, leaders' attitudes, and discrimination of ageing workers – a time series study

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science&practice

Research goals and why the work was worth doing

This study presents relationships between an organisations' ethical infrastructure, leaders' attitudes, and indicators of ageism and discrimination against ageing workers. Age discrimination prevails (Wilsona, Errasti-Ibarrondod, Low, 2019; Voss, Bodner, Rothermund, 2018) in concert with leaders' mixed attitudes towards older workers (Andersen, 2021; Blomé, Borell, Håkansson, Nilsson, 2020; Leisink & Knies, 2011; Nilsson, 2016). Few studies have addressed these relationships, although „age-friendly” ethical infrastructures might be expected to hinder age discrimination in organisations.

Theoretical background

Ethical infrastructure in organisations are decisions and behaviour contributing to ethical effectiveness (Tenbrunsel, Smith-Crowe, & Umphress, 2003). Ethical effectiveness is principles and practices that do not hurt others, are legal, are seen as legitimate, and are supported as morally acceptable (Jones, 1991), here, absence of age discrimination. Ethical infrastructure may exist both as formal, written regulations and informal systems (e.g., climate, social norms), and the latter influences organisation members' behaviour in absence of the former (Tenbrunsel et al., 2003). Within this ethical infrastructures, a leader will still have some decision latitudes where the leader's attitudes may influence decisions and behaviour related to ageing workers (Furunes, Mykletun, & Solem, 2011; Wilckens, Wöhrmann, Deller, & Wang 2020).

Method

Data were collected by five time series questionnaire studies. IPSOS Norway sampled 750 leaders in public and private sector organisations in each of the years 2004, 2009, 2012, 2016, and 2019. Six questions probed for age discrimination. Two of these related to recruitment: leader willingness to employ older workers, and practice of inviting older workers to interview for vacant jobs. Two questions focused older workers' competence development: inclusion of older workers when new technologies and methods were introduced, and considering older workers for internal recruitments. Two questions focused on protecting older workers when down-sizing, and in particular protecting older workers who were not eligible for age pension. Formal ethical infrastructures were assessed by asking for documents urging older workers career extension by HR-strategies, economic incentives, adapting work to older workers' capacities if needed, and competence development programmes for older workers. Informal ethical infrastructures were assessed by asking for the perceived contribution of older workers to the organisation, and whether workforce aged 50 years and above had the same access to learning new skills and get access to new tasks. Attitudes towards ageing were assessed by asking for at which age they conceived a co-worker to be an older worker, whether workforce aged 50 years or above performed as well as their younger colleagues, whether workforce aged 60 years performed as well as those aged 55 - 60 years, and whether it was appropriate for the organisation to disregard a job applicant because of a mismatch between his/her age and the profile of the organisation. Data were analysed by frequencies, correlations, and multiple regression in SPSS 28.0.

Results

Indications of age discriminations were rather stable from 2004 to 2019. Age discrimination in recruitment was related foremost to informal ethical infrastructure and secondly, to the leader's own attitudes and private as opposed to public sector organisation. The formal ethical infrastructure was related to age discrimination in recruitment in the 2009 and 2012 data. Age discrimination in competence development was related foremost to informal ethical infrastructures and employment in private sector and secondly, to the leader's attitude and to formal ethical infrastructures. Age discrimination if downsizing was foremost related to informal ethical structures, secondly to the leader's attitudes, formal ethical infrastructures in 2009 and 2012, and private sector in 2004 and 2012.

#### Limitations

The results lean on self-reports and are thus subject to social desirability biases.

#### Conclusions

Established formal ethical infrastructures against age discrimination were negatively related to occurrence of age discrimination. The informal ethical infrastructures were more closely related to such discrimination. This indicates that interventions aimed at establishing „age-friendly“ informal ethical infrastructures might be attempted to reduce or hinder age discrimination in organisations. Likewise, establishing "age-friendly" formal ethical infrastructure and modifying attitudes of the leaders' may contribute towards this goal.

#### Relevance to the Congress Theme

The paper reveals unfair and discriminating attitudes and behaviour in organisations (contribution) and indicates how they might be incompatible with „age-friendly“ ethical infrastructures and leader attitudes (urgency and delivery).

*Keywords: Age discrimination, Leadership, Ethical infrastructure.*

## Oral presentation OP323

### **Evaluating how employees and employers succeed in a facilitated job crafting intervention for Return To Work (RTW) after burn-out**

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science&practice

#### Research goals and why the work was worth doing

Research on RTW after burn-out is highly relevant as burn-out and its adverse effects on the health and wellbeing of the workforce, are associated with high rates of sick leave and replacement costs (Pijpker, Vaandrager, Veen, Koelen, 2019). In contrast with the abundance of research on the causes and consequences of burn-out, there is a lack of research on RTW after burn-out and little is known on the barriers and facilitators of a successful RTW (Karkkainen, Saaranen, Hiltunen, Ryyananen, Rasanen, 2017). Furthermore, relapse after RTW affects circa 25% of cases (Geluk, Lenstra, Stuer, 2000; Koopmans et al., 2011; Norder et al., 2015). This raises questions on how RTW interventions are taking place and what determines their effectiveness (Rooman et al., 2021). Our research reports the findings of an intervention study designed to facilitate RTW after burn-out. The intervention consists of a neutral facilitator facilitating a dialogue between employee and supervisor during RTW. The facilitation is supported by a toolbox consisting of job crafting cards and a digital scan as well as a designed step-by-step process from the beginning of sick leave until 9 months after RTW. The research goal is to evaluate how both employees and employers succeed in a sustainable RTW, thereby contributing to the current gap in knowledge on the effectiveness of RTW interventions.

#### Theoretical background

A theory-of-change based upon several theoretical constructs is proposed. Increasing job resources as main enabler (van den Heuvel, Demerouti, Peeters, 2015) with Job Demands Resources (Demerouti, Bakker, Nachreiner, Schaufeli, 2001) and Job Crafting (Tims, Bakker, Derks, 2013) as underlying theoretical constructs. Second, feeling safe in the RTW as enabler for engaging in dialogue (Edmondson, 1999), whilst a good working relationship with the manager is conducive to job crafting and increases psychological safety (leader-member-exchange (LMX) theory). (Graen; Uhl-Bien, 1995)

#### Design/Methodology/Approach/Intervention

A within-case study method is chosen for the impact evaluation of the intervention, with the aim of gaining better understanding of the causal claims based on a mechanistic view of causality. (Wauters & Beach, 2018) We chose process tracing as it allows for evaluating how, in this case a theory-of-change based, intervention actually works. The theorized process is seen as an unbroken chain of action and reaction (activities) enacted by entities (actors). It combines a potential cause with its hypothesized outcome (Beach & Pedersen, 2019). The evaluation will test how certain theoretical assumptions are linked in RTW and will contribute to better understanding of what sustainable RTW could be taking a stakeholder perspective.

Results obtained or expected (if not available, it must be made clear when they will be)

#### Limitations

Given the complexity of RTW after burn-out, heterogeneity issues might complicate the interpretation of results. Whilst conducting a within-case study gives in depth knowledge on the

conditional context it will not allow for generalization other than conceptual and possible theoretical generalization which might provide greater insight in how concepts are linked.

Conclusions – research and or practical implications/Originality/Value

The research seeks to understand the role that job crafting plays in sustainable RTW after burn-out. It thereby contributes to JDR and job crafting literature by providing insights on a new application of job crafting namely supervisor and employee co-crafting the best job fit for a sustainable RTW. It further builds upon the RTW literature, contributing to defining dimensions and their operationalization of sustainable RTW examining how job crafting can lead to sustainable RTW without relapse. Thirdly it seeks to contribute on an interventionist level in RTW contributing to understanding how stakeholder oriented influence sustainable RTW. This is particularly relevant for practice as managing long term sick leave and relapse within teams has implications for team functioning and supervisor performance. Implications of the outcomes of this research are directed towards enabling organizations and supervisors to gain insights on interventions that can contribute to effective RTW after burn-out.

Relevance to the Congress Theme

This submission fits in the subpart The future is now! Urgency . Stress related sick leave is on the rise in Europe with crises like Covid 19 leading to a further increase. Interventions including the context of work in RTW are rare but highly needed which is why the evaluation of an intervention that includes the work context is particularly valuable.

*Keywords: Burnout, re-integration, jobcraftingintervention*

## Oral presentation OP587

### Evaluation of the effects of an intervention directed to improve employee well-being in an organizational change context in Uruguay

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science&practice

Research goals and why the work was worth doing

The intervention was implemented in a change process in a Uruguayan organization. In this context, the objective of this intervention was to improve the work climate and employee well-being by developing interpersonal relationships between employees and job characteristics.

Theoretical background

Literature in organizational change shows that such processes may generate different levels of uncertainty that negatively impact employee well-being (Bordia et al., 2004). Stress models suggest that employee well-being is determined by the balance between job demands and resources (Demerouti et al., 2001). Organizational change processes can be understood as a source of demands for employees. With the objective of decreasing workers' job demands and/or increasing their job resources, and to promote their sense of well-being, organizations can implement several interventions (Silvaggi & Miraglia, 2017). These interventions may take the form of group workshops, individual coaching sessions, or training activities. In this study we implemented a series of group activities directed to improve employee interpersonal relationships and job characteristics.

Design/Methodology/Approach/Intervention

The intervention was implemented in a small, 78 employees, organization in Uruguay. A quasi-experimental pre-posttest design was carried out. Employees voluntarily participate in the workshops (i.e., participants in intervention (n=36) and not participants (n= 42)). Data was collected during a year, including a baseline measure (T0), immediately after workshops (eight and ten months), and one follow-up (three after implementation). Measures included job demands (e.g., emotional demands, job insecurity), job resources (e.g., autonomy, peer support), and general health perception with scales of CoPsoQ Spanish version (Moncada et al., 2005), procedural organizational justice (Niehoff & Moorman, 1993), and counterproductive work behaviors (Fox et al., 2001). To explore pre-post differences, ANOVA tests were used, and to explore the role of contextual factors, moderation analyses were implemented.

Results obtained or expected (if not available, it must be made clear when they will be)

Results show that employees reported higher levels of global health,  $t(32) = -2.143$ ,  $p = 0.40$ , and lower levels of job insecurity,  $t(22) = 2.142$ ,  $p = 0.43$ , after the intervention. In terms of the intervention context, results show higher levels of job demands for employees who participated in the workshops versus those who did not participate,  $F(2,713) = 2.577$ ,  $p = 0.012$ . This finding shows that those employees who participated in the intervention were those who needed the most. Furthermore, the negative relationship between job demands (pre-intervention) and global employee health (post-intervention) was stronger for employees who perceive low levels of social support from managers and colleagues ( $B = 4.113$ ;  $SE = 0.108$ ;  $p < .001$ ). Similarly, the negative relationship between counterproductive work behaviors and global employee health (post-intervention) was stronger for employees who reported higher procedural organizational justice ( $B = 3.982$ ;  $SE = 0.129$ ;  $p < .001$ ).

Taken together, these findings suggest that social support and organizational justice can be important contextual factors to consider when evaluating the effects of a well-being intervention.

#### Limitations

This study is not exempt from limitations, such as being implemented in one Latin American SME, having a low sample size and using self-report measures of employee demands, resources and outcomes. In addition, there could have been changes in the organization and its context that could have affected the intervention process.

#### Conclusions – research and or practical implications/Originality/Value

Overall, the findings suggest that the intervention successfully improved global employee health and diminished job insecurity associated with the organizational change process. Moderation analysis results show that social support and organizational justice can be important context variables in terms of resources that also contribute to understanding global employee health improvements.

#### Relevance to the Congress Theme

Organizational changes are increasingly present in the current changing world of work. Therefore, it is essential to understand how well-being interventions can be helpful in protecting employee well-being during these processes.

#### Relevant UN SDGs

This work is relevant for at least two objectives: Good health and wellbeing and Decent work and economic growth.

*Keywords: organizational interventions, wellbeing*

## Oral presentation OP678

### Event-level Profiles of Morning Affect and Resources and Their Impact on Flow and Task Performance: The Roles of Task Relevance and Trait Autonomy

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science

Research goals and why the work was worth doing: We aim to explore latent profiles of self-control resources and positive and negative affect (PA, NA) at the morning to understand how these profiles shape flow experiences at work and predict task performance. We also examine moderating effects of task relevance and trait autonomy (the extent to which individuals strive for congruency of their personal values, interests, and goals) on the positive within-person relationship between flow and task performance. Our study seeks to provide in-depth insights into how and when patterns of morning levels of PA, NA, and self-control resources cause employees to engage in engrossing and enjoyable states of mind, thereby facilitating task performance. In doing so, we analyze boundary conditions that stabilize task performance, even when flow experiences are low after experiencing non-optimal morning events.

Theoretical background: We delineate a moderated mediation model that predicts indirect effects of morning patterns of PA, NA, and self-control resources on task performance via flow experiences. Our model is based on the proposition that resource levels and affect jointly influence work-related experiences and hence goal-focused behavioral regulation during task completion. This proposition derives from the broaden-and-build theory (Fredrickson, 1998) and resources-based theories (Kotabe & Hofmann, 2015). We also predict moderating effects of task relevance and trait autonomy on the within-person relationship between flow and task performance. In doing so, we extend both views and integrate insights from self-determination theory (Ryan & Deci, 2000) which proposes that autonomy and meaningfulness jointly provide a strong motivational base for goal-directed self-regulation.

Design: To test our predictions, we conducted a daily diary study and recruited participants from a wide range of occupational settings. In sum, 157 participants (Mean Age = 33.28; Percentage of Women: 61.8) provided data on 1027 days. PA, NA (Watson et al., 1988), and self-control resources (Johnson et al., 2014) were assessed at the morning, whereas daily flow experiences (Rivkin et al., 2018) and task performance (Yang et al., 2016) were measured at the afternoon and evening, respectively. Task relevance (Poethke et al., 2018) and trait autonomy (Weinstein et al., 2012) were included in the pre-survey.

Results: We conducted multilevel latent profile analyses (Mplus 8, Muthén & Muthén, 2017) and identified five profiles that predominantly differ in the negative affect levels and self-control resources. These profiles (dummy coding procedure) were specified to predict daily flow experiences in a multilevel moderated mediation model that was analyzed on the basis of Bayes estimation. The results show that profiles with lower PA, higher NA, and lower resources (as compared with an optimal morning profile) were negatively and indirectly related to daily task performance via flow experiences. We also found that task relevance and trait autonomy jointly attenuated the positive relationship between flow and task performance such that performance was constantly high when both were higher (irrespective of levels of flow experiences).

Limitations: Correlational designs do not allow causal conclusions in a strict sense.

Conclusions: We first investigate how configurations of resources and affect at the morning shape daily motivational and performance processes at work, and identified how personal and job-related contingencies mutually amplify each other in stabilizing employees' effectiveness even when a day does not start optimally. Thus, our research extends resource-based theories by showing how both affects and resource levels characterize morning event and jointly shape employees' daily functioning. Moreover, the three-way interaction between task relevance, trait autonomy and daily flow experiences emphasizes mechanisms of self-determination that stabilize and facilitate employees' effectiveness, when perceived meaningfulness of the job aligns with autonomous functioning.

Relevance to the Congress Theme: Our study aligns with the two congress themes: Contribution (in-depth understanding of how employees benefit from optimal affect-resource patterns and how job characteristics (task relevance) and trait autonomy jointly stabilize employees' functioning); Delivery (future avenues: strong scope on both employees' affect and resources and facilitating employees' autonomous functioning and experiences of meaningfulness at work).

Relevant UN SDGs: We address the following Goals: Good Health and Well-being (morning profiles and flow experiences as important psychological processes for health and well-being); Decent Work and Economic Growth (Task relevance as a job characteristic (decent work) and task performance as a growth-related outcome).

*Keywords: Event-level profiles of affect and resources, Flow experiences, Task performance*

## Oral presentation OP755

### Examining Informal Learning during crises: the case of UK healthcare practitioners

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science

The project investigates how informal learning materialises through interpersonal interactions under extreme adversity and crisis. Our research objectives are to:

examine how healthcare professionals learn through interpersonal interactions during intra- and extra-organisational turbulence,

explore the interpersonal interactions through which healthcare professionals seem to learn the most (e.g., peer-to-peer, manager-to-employee, manager-to-team) during a crisis, and

identify the individual, contextual, and organisational factors that influence the degree to which healthcare professionals learn through interpersonal interactions in the midst of adversity.

The work has been worth doing because it advances our theoretical understanding of informal learning in a volatile, uncertain, complex, and ambiguous (VUCA) world and because it has clear practical implications for healthcare professionals and organisations.

#### Theoretical background

Informal learning is learning “predominantly unstructured experiential, and noninstitutional” and takes place while individuals are conducting their jobs (Marsick & Volpe, 1999 p. 4). It is achieved through a plethora of different behaviours, including self-reflection, experimentation with new work processes, interaction with others, and innovation (Noe, Tews, Marand, 2013; Bednall, Sanders, Runhaar, 2014), and is predominantly based on the individual learner’s volition (Tews, Michel, Noe, 2016). In other words, the learner has “the intent to learn or improve” and thus, the learning experience, while informal and unstructured, is not incidental or unintentional (Tannenbaum et al., 2010, p.306). Reference to the concept of informal on-the-job learning can be found through the seminal works of Lindeman (1926), Dewey (1938), and Knowles (1970) on adult learning and andragogy. However, it was not until 1990 when Marsick and Watkins coined and popularized the term informal learning’ that research on the phenomenon has begun to flourish.

Despite a plethora of studies on antecedents and consequences of informal learning (see Cerasoli et al., 2017; Colognesi et al., 2020), we still know little about how individuals learn informally in the midst of adversity and turbulence (Watkins & Marsick, 2021). Recent research heeds that interpersonal employee interactions amidst unprecedented volatility are pivotal in triggering informal learning which in turn may redress employee withdrawal reactions (Nyfoudi et al., 2020) and lead to breakthroughs (Biron et al., 2021).

Against this backdrop, the study draws from Noe, Tews, and McConnell Dachner’s (2010) theory of learner engagement to explore how interpersonal exchanges influence learner motivation during turbulence and any subsequent pathways to informal learning.

#### Design/Methodology

The study has adopted an inductive research design with semi-structured interviews as the way of data collection.

Our sample consists of medical doctors, nurses, and professional staff members who are involved in clinical research programmes. The rationale is that this segment of healthcare staff not only has faced significant adversity over the past two years but also has to deal for the foreseeable future with an unprecedented backlog of multiple competing priorities in terms of restarting clinical trials outside the remit of Covid-19 (NIHR, 2020). In other words, the sample is instrumental in examining how healthcare professionals, who are facing adversity, learn through interpersonal interactions at work.

Results obtained or expected (if not available, it must be made clear when they will be)

We are currently analysing the data already collected (i.e. 20 interviews) using thematic analysis, as per Gioia et al.'s (2013) methodology. We envisage that by January 2023, we will have completed our data collection (40 interviews in total) and by April 2023 we will have finalised our data analysis and findings.

#### Limitations

Albeit we have been careful to recruit diverse members of clinical teams (e.g., consultants, registrars, nurses, co-ordinations), our data may be less informative for healthcare professionals not part of clinical teams.

#### Conclusions

Our research advances not only our theoretical understanding of informal learning but will have clear practical implications for healthcare organisations

#### Relevance to the Congress Theme

The study is in line with the three facets of the Congress Theme: a) Contribution: It helps uncover how healthcare practitioners learn informally, a key competence for the future of medical professionals; b) Urgency: it focuses on informal learning during crises, an unexplored but highly topical area, and c) Delivery: learning is change. By examining how healthcare professionals learn, the study offers more informed recommendations for the changing world of work.

*Keywords: informal learning; crisis; healthcare*

## Oral presentation OP215

### Examining the Effects of Islamic Work Ethic values Effect on Quality of Working Life Perception Among UK Employees

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science&practice

Most of the literature on industrial/occupational psychology is conceptualised and published by Western researchers using Western participants. While it is commonplace that this body of research is adapted to non-Western contexts, it is rare for non-western research to be adapted and applied to Western settings. To address this gap in the literature, the present research project aimed to investigate the effects of the Islamic Work Ethic rules on the work-related wellbeing and measures of quality of working life (QoWL) of British employees.

#### Theoretical background

The most used work ethic surveys in the world are based on the Protestant Work Ethic values (PWE), which are said to be derived from ways in which workers can assuage their primordial or non-contingent guilt. However, relatively little is known about the equivalent Islamic Work Ethic, which is based on the concept that work provides a means for Islamic employees to achieve self-actualisation and equilibrium between the pressures of work and home life, especially outside the Muslim work environment.

#### Methodology

This study's data analysis was based on correlational statistical methods. The data were collected using the General wellbeing sub-scale from the Work-Related Quality of Life scale, an Islamic Work Ethic scale, and a four-question COVID-19 scale. The participants (N=481) were all UK based employees and were grouped into religious (participants with a religious belief; n=237) and non-religious (participants with no religious beliefs; n=244). Structural equation modelling techniques were conducted to model the effect of religiousness and Islamic Work Ethic on work-related wellbeing.

#### Results

The results showed an acceptable fit for this research project ( $\chi^2(678) = 1210.5^{***}$ ; TLI = 0.92; CFI = 0.93; RMSEA = .04; SRMR = 0.05). Islamic Work Ethic values were found to be valid predictors of UK employees' job characteristics regardless of their belief system. When divided into religious and non-religious groups, the results showed that the model accounted for more of the religious participants' general wellbeing (68%), than that of the non-religious participants (49% of the variance in wellbeing being for). The short COVID-19 scale did not significantly influence religious workers' perception of stress; however, COVID-19 increased the stress at work for the non-religious participants. Overall, religious participants reported having higher levels of work-related wellbeing compared to non-religious participants.

#### Limitations

As these results are based on self-reported surveys, it is acknowledged that this could cause problems such as common method bias. To overcome such potential problems, the researcher employed statistical suggestions by Podsakoff et al. (2003).

#### Implications

The most important implication of this study is the recognition of the influence of religiosity, and especially of Islamic Work Ethic values, on British workers' perception of their wellbeing and QoWL. It is hoped that this finding may help harness the impact of religious values to positively influence all workers' wellbeing. The practitioner literature is saturated with Western-based research, indicating that little is known about how to employ non-Western concepts such as Islamic Work Ethic, this research is the first step that address this gap. However, the results of the present study provide empirical evidence that such an understanding may improve the work-related wellbeing and QoWL of all employees. As globalisation continues to connect people and cultures around the world, this type of research could also help Western countries provide adequate support to their non-Western employees by recognising the cultural similarities (and differences) between ethnically and culturally diverse employee groups.

#### Originality

For the first time, the present research provides evidence that non-Western-based research constructs such as the Islamic Work Ethic can be applied to Western employment contexts. It also demonstrates that there is an association between Islamic Work Ethic values, wellbeing and the QoWL perceptions of workers.

*Keywords: Well-being, stress and burnout, Work-life balance*

## Oral presentation OP169

### Examining variables of the job context as predictors of nurses' demand appraisals

Martha Fernandez de Henestrosa, Georges Steffgen & Philipp Sischa | University of Luxembourg science

**Research goals:** The present study examined whether (a) time-related factors of the job context, namely working time and job tenure, predict nurses' challenge/hindrane appraisals alongside job demands themselves, and whether (b) both factors might act as boundary conditions of nurses' workplace stressor appraisals.

**Theoretical background:** Based on the transactional theory of stress (Lazarus & Folkman, 1984), studies have so far examined employees' subjective evaluations of workplace stressors as challenging and/or hindering and their associations to different well-being outcomes (e.g., Webster et al., 2011). Although these studies have helped us to get a more nuanced insight into work-related demands and how they may affect employees, little is known on the question of whether the job context itself might shape how employees experience certain workplace stressors (LePine, 2022). Yet, knowing whether contextual factors of the job might impact employees' stress appraisal may help us to handle the negative effects of such job stressors (LePine, 2022). Thus, the current study aimed to investigate the role specific contextual variables of the job play as regards to nurses' subjective appraisals of job demands as challenges and/or hindrances.

**Design/Methodology/Approach/Intervention:** The current study was conducted as part of a broad scientific project on nurses' working conditions in Luxemburg. Cross-sectional data was collected via an online survey (French/German). The effective sample consisted of 460 nurses (76.9 % female,  $n = 352$ ;  $M$  age = 39.40,  $SD$  age = 9.95). Statistical analyses were performed using IBM SPSS (version 25) and the PROCESS macro for SPSS (Hayes, 2018). To examine the associations between job demands, contextual variables and appraisals, a total of four simple moderation analyses (Model#2; Hayes, 2018) were conducted with challenge and hindrance appraisal as the criterion variables. Per criterion variable we performed two moderation analyses (i.e., one including time pressure as predictor, one including emotional demands as predictor). Working time and job tenure were specified as the moderator variables and were jointly introduced into the regression models. Predictor and moderator variables were mean centered prior analysis.

**Results:** Regression analyses showed that time pressure and emotional demands significantly related to their challenge (for time pressure:  $b = -.19$ ,  $p < .001$ ; for emotional demands:  $b = -.11$ ,  $p < .05$ ) and hindrance appraisals (for time pressure:  $b = .33$ ,  $p < .001$ ; for emotional demands:  $b = .32$ ,  $p < .001$ ). Moreover, job tenure significantly predicted nurses' appraisal of time pressure as challenging ( $b = -.001$ ,  $p < .05$ ). In other words, an increased job tenure went along with a decreased perception of time pressure as challenging. Yet, working time did not significantly predict nurses' appraisals of job demands (i.e., time pressure, emotional demands). Furthermore, we did not detect significant interaction effects.

**Limitations:** The current study focused on two time-related factors of the job context (job tenure and working time) as predictors of nurses' appraisals. Yet, other contextual factors of the job (e.g., shift work, breaks) might affect how employees appraise certain demands. Moreover, we implemented a cross-sectional design precluding a causal interpretation.

**Conclusions:** The current research identified time-related, contextual factors of the job, which contribute to how nurses appraise specific job demands. Results suggest that nurses with a higher

job tenure experience time pressure at work as less of a challenge. This might suggest that they may be better at coping/dealing with time pressure at work than their colleagues with fewer years working in nursing. Note, however, that nurses' self-reported working time was unrelated to their challenge and hindrance appraisals of job demands. These findings suggest that scholars might need to adopt a more differentiated perspective when conducting research on time-related, contextual factors of the job and their role within the stress appraisal process.

*Keywords: job demands, job context, challenge/hindrance appraisal*

## Oral presentation OP711

### Expanding behavioral and occupational health research in understudied populations: Military police

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science&practice

**Research Goals:** There is value in accounting for the context of an industry or occupation when assessing behavioral and occupational health (Horan et al., 2021), as the unique job demands, work environment, and norms within an occupation or industry can shape how employees experience occupational health risks and outcomes. The goal of this paper is to examine trends in incidence rates for behavioral and occupational conditions among military police officers.

**Theoretical Background:** This work builds on the work of Moore and colleagues (2022), who examined behavioral and occupational conditions among military firefighters. An analysis of data from the Defense Medical Epidemiology Database found that from 2001 to 2015, there were substantial increases in tinnitus, PTSD, insomnia, and obstructive sleep apnea for military firefighters, modest to large increases for depressive disorders, adjustment reaction, generalized anxiety disorder, and panic disorder, and decreases in rates of alcohol dependence, hypertension, and tobacco use disorder (Moore et al., 2022). According to the job overview 31A “Military Police Officer” on the website of the U.S. Army, military personnel officers are responsible for “ensuring the safety and protection of Army personnel, equipment and resources... control[ling] and secur[ing] terrain inside and outside military installations... and secured areas” (U.S. Army, 2022). The demands and context of this job likely expose individuals to several behavioral and occupational risks. The job represents an intersection of two inherently demanding occupations, law enforcement and active-duty military occupations. Employees in these contexts encounter risks above and beyond the general working population, including physical and psychosocial stressors (McCreary & Thompson, 2006; Pflanz & Sonnek, 2022) and risk of injury and fatality (National Occupational Research Agenda, 2019).

**Method:** A retrospective cohort design study was conducted to assess the incidence rate trends of adjustment disorder, alcohol dependence, generalized anxiety disorder, hypertension, insomnia, major depressive disorder, obstructive sleep apnea, panic disorder, PTSD, tinnitus, and tobacco use disorder among active-duty military police between 2005 and 2021. The Defense Epidemiology Database (DMED), a database within the Defense Medical Surveillance System provided the data using ICD-9 and ICD-10 diagnostic codes. Data for medical diagnoses were limited to the first occurrence and primary diagnosis to prevent oversampling. Incidence rates were calculated per 10,000 between 2005 and 2021. Standardized residuals were examined to analyze the size of differences between the observed and expected values. DMED data was accessed in September and October 2022.

**Results:** From 2005 to 2021, three conditions displayed steady or only slightly increasing rates: alcohol dependence, generalized anxiety disorder, and panic disorder. Two conditions displayed slightly to moderately increasing incident rates: adjustment reaction and hypertension. Four conditions displayed moderate to large increases: major depressive disorder, insomnia, obstructive sleep apnea (OSA), and tinnitus. Two conditions displayed decreasing rates: posttraumatic stress disorder (PTSD) and tobacco use disorder.

**Limitations:** The present study is limited in that only diagnostic and basic demographic information maintained in the database. It is therefore impossible to understand individual or organizational factors that promoted the development of a condition or aids in its treatment.

**Conclusions:** Military police officers encounter a heightened physical and psychosocial risks through their work. The present study analyzed trends in incidence rates of behavioral and occupational conditions among military police officers across time and among demographic categories. The results replicate several key findings from Moore and colleagues (2022), such as decreasing rates of tobacco use disorder and increasing rates of sleep disorders. This paper also illustrates the need for additional research and intervention for highly specialized subpopulations within high-risk contexts. Several interventions could be employed to prevent, treat, or manage the conditions studied within this paper, including psychoeducational programs on lifestyle medicine to cognitive behavioral therapies for mood and sleep disorders.

**Relevance to Congress Theme:** This presentation is relevant to the Contribution and Urgency facets of the Future of Work Theme of the congress. Increases in behavioral and occupational health conditions creates a substantial individual, organizational, and societal burden and multiple areas of expertise are needed in the ongoing monitoring, diagnosis, prevention, and treatment of these conditions, particularly in high-risk contexts.

**Relevant Sustainable Development Goals:** This presentation relates to the “Good Health and Well-being” Sustainable Development Goal.

*Keywords: Military police, occupational health psychology, epidemiology*

## Oral presentation OP722

### Experiences of Positive and Negative Feedback in Surgical Training

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science&practice

#### Research goals

Effective feedback is regarded as a powerful tool which can improve surgical skill acquisition and performance, as well as confidence and motivation. However, poor feedback can be experienced as undermining behaviours which may have a negative impact on training, wellbeing and career intentions.

This study sought to understand positive and negative experiences of giving, receiving and observing feedback in surgery. In order to inform future interventions, this study also aimed to identify the enablers of, and barriers to, effective feedback in surgery.

#### Theoretical background

Feedback is regarded as one of the most influential and powerful elements of learning (Hattie & Timperley, 2007). However, evidence suggests that there is variability in feedback delivery in surgery (McKendry et al., 2017).

In medical education, there has been an increased focus on the relational aspects of feedback, and on the nature of the learning climate (Ramani et al., 2019). When trainees feel that corrective feedback is overly harsh and unjustified, they report it having minimal educational benefit, contributing towards perceptions of undermining and bullying and leading to negative feelings about their performance and career (Kamali & Illing, 2018).

Furthermore, reports of bullying and undermining are widespread in surgical training (Bradley et al., 2015; Clements et al., 2020; Ling et al., 2016). Evidence indicates that these negative behaviours have serious implications for patient safety (Paice & Smith, 2009; Kennedy, 2013), the quality of surgical education (Kamali & Illing, 2018), staff wellbeing (Bonde et al., 2016), and recruitment and retention (Carter et al., 2013; Jackson et al., 2012). In surgical training, negative behaviours are often experienced and witnessed as undermining feedback in theatre. While constructive feedback can augment training, overly critical feedback from seniors during training may have a negative impact on training and wellbeing (Kamali, 2016).

#### Method

Semi-structured telephone interviews (n=18) were conducted with surgical trainees, surgical consultants, and the wider surgical team in general surgery and trauma & orthopaedic surgery in the North of England. These qualitative interviews explored positive and negative experiences of giving, receiving and observing feedback in surgery. Data were analysed using framework analysis.

#### Results

Key features of positive feedback were identified, including specific evidence-based feedback with actionable advice, engaging in a two-way conversation when the recipient has the cognitive capacity to focus on it, taking a holistic perspective and considering an individual's broader skillset. Framing mistakes in the context of learning and career development was viewed as valuable, as was seniors

sharing 'war stories' from their own learning process. Conversely, poor feedback was generic with no actionable learning points, overly critical with no acknowledgement of positives, and incorporated negative behaviours such as public humiliation and shouting.

Feedback and learning occurred within a complex context which was shaped by workplace cultures and hierarchies; social relationships; individual differences in insight, skill and engagement; and the work environment with its stresses and pressures. These factors, along with aspects of the delivery of feedback, acted as enablers and barriers to effective feedback.

Feedback was associated with a range of emotional and psychological responses and had a significant impact on confidence. Feedback experiences were related to career progression and intentions to remain in surgery. Finally, individuals actively sought opportunities to work with effective trainers and feedback culture influenced organisational reputation, which may in turn influence recruitment.

#### Limitations

Participants were based in one region in Northern England. Although the sample size was fairly small, in-depth interviews were conducted, there was consistency across the data and key findings were supported by the wider literature on feedback in surgical training.

#### Conclusions and Implications

Findings can be used to inform training on effective feedback in surgery, drawing on the key features of positive and negative examples. The study findings also highlight the importance of a culture of positive, constructive feedback for wellbeing, recruitment and retention. These are of particular concern in specialist training where there can be critical shortages of staff and losses cannot be readily replaced (BMA, 2016; UKFPO, 2016).

#### Originality/Value

There is a lack of research exploring the wider impact of feedback on recipients and bystanders in surgical contexts, as well as on those providing feedback. In addition, there is a strong need for the development of effective interventions to address undermining behaviours and feedback in surgery, and this research should help to inform the development of interventions for this context.

*Keywords: Feedback, Surgery, Bullying*

## Oral presentation OP275

### **Experimental Manipulation of Perseverative Cognition alters Psychological and Physiological Stress Responses. Preliminary Findings from an RCT.**

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science

Research goals and why the work was worth doing

This study aims at investigating differential effects of affective rumination and problem-solving pondering on psychological and physiological recovery from acute psychosocial stress. The results add to the understanding of how the valence of perseverative thoughts can alter individual recovery processes.

Theoretical background

Rumination about work can prolong work-related mental effort beyond working hours, thereby impair recovery from stress and thus lead to long-term health impairments. Studies on affective rumination and problem-solving pondering suggested that not perseverative cognition per se predicted poor wellbeing, but the valence of work-related thoughts is important. Growing evidence showed a link between negative thoughts about a stressor and the activation of psychological, cardiovascular and endocrine stress markers; i.e. rumination about a stressful event lead to decreased mood and heart rate variability as well as increased saliva cortisol secretion. The differential effects of different types of perseverative cognition on psychological and physiological recovery from stress are however still unclear.

Design/Methodology/Approach/Intervention

Participants (n = 52) in a randomized controlled and double-blinded study completed the Trier Social Stress Test (TSST) to trigger psycho-biological stress responses in a laboratory environment and were then instructed to engage in affective rumination (n = 19) or problem-solving pondering (n = 16) about the TSST. Participants in the control group (n = 17) engaged in cognition about neutral issues. Participants wore heart-rate sensors throughout the experiment and reported their mood at dedicated time points. Participants mean age was 23.7 years (SD = 4.6 years); 65% were female. We used simple slopes analysis to test for significant changes in stress parameters from before to after experimental manipulation across groups.

Results obtained or expected (if not available, it must be made clear when they will be)

After experimental manipulation, valence (-0.63,  $p < .05$ ), calmness (-0.68,  $p < .05$ ) and energetic arousal (-0.84,  $p < .05$ ) significantly decreased in the affective rumination group but not in the problem-solving pondering and control group. Heart-rate variability significantly decreased in the affective rumination (SDNN: -11.75,  $p < .05$ ) and problem-solving pondering (SDNN: -8.29,  $p < .05$ ) groups and increased in the control group (HF Spectrum: 294.25,  $p < .05$ ).

Limitations

Stress manipulation and subsequent recovery occurred under controlled laboratory conditions in a predominantly student population. Investigating the extent to which the effects of perseverative cognition on the recovery from psychosocial stress can be generalized to real-world job demands is a task for future research.

#### Conclusions – research and or practical implications/Originality/Value

Preliminary results of this ongoing study add to the understanding of the differential mechanisms by which different types of perseverative cognition affect individual recovery processes and highlight the complex interaction of psychological and physiological processes in coping with stress. Knowledge of these processes is an important prerequisite for understanding the mechanism by which work-related stress impairs individuals' recovery.

#### Relevance to the Congress Theme

In view of increasing (cognitive) job demands and new patterns of work, employees' ability to switch off from work will become increasingly important for sustaining a healthy workforce. The results of this study therefore provide important information for designing healthy working conditions that foster recovery from work-related mental efforts.

#### Relevant UN SDGs

In providing a basis for identifying good practices for recovery from work-related stress, this work contributes to finding pathways that lead to good health and wellbeing .

*Keywords: Rumination, Trier Social Stress Test, Heart-Rate-Variability*

## Oral presentation OP397

### Explaining teachers' life satisfaction through experienced compassion at work. The mediating role of collective school performance and burnout

Martina Pansini, Paula Benevene & Ilaria Buonomo | LUMSA University of Rome, Italy

science

#### 1) Theoretical background

Compassion at work (CAW) includes noticing others' suffering, feeling empathy, and taking effective actions to reduce their pain (Kanov et al., 2004). Employees can receive CAW from three different sources: colleagues, supervisors, and the organization at large (Lilius et al., 2008). Literature shows that receiving compassionate acts from co-workers means strengthening emotional connections at work, boosting a sense of community, and increasing employee performance (Aboul-Ela, 2017; Ko et al., 2022). A supportive network within the workplace can be helpful to share a load of job demands and notice when one is suffering (Dutton et al., 2014). Overall, receiving CAW benefits personal and work well-being and reduces negative beliefs and conditions (e.g., burnout, low efficacy) in employees. In healthcare professionals, receiving CAW from colleagues reduces depersonalization and emotional exhaustion and increases professional accomplishment (Román-Calderón et al., 2022). Such effects are crucial for teachers, considering the heterogeneous web of relationships and interactions that characterizes their job role (Pereira et al., 2015). In this regard, the greater the workplace support from colleagues and supervisors, the lower the burnout experienced by teachers (Fiorilli et al., 2019). Despite this, limited research investigated the role of compassion in the educational field. Most of the studies focus on the teacher-student relationship, neglecting compassion's potential effects when oriented toward colleagues in distress at work. Secondly, the role of CAW has mainly been analysed in social and healthcare contexts. This research aims to fill this gap.

#### 2) Research goals

Based on COR theory (Hobfoll et al., 2018), we conclude to the hypothesis that relational job resources, when strategically used, can be a positive impact on teachers' extra-work life. Building on this, the contribution aims to explore the role of received compassion at work on teachers' life satisfaction while considering perceived school collective performance and burnout conditions as mediators in this link.

#### 3) Methodology and design

A sample of 136 Italian teachers (mean age=48.46, SD=9.46, females=85.4%) working in primary and secondary schools completed an online survey including: the Received Compassion scale (Lilius et al., 2008), Perceived organization-level performance (Salminen et al., 2017), Burnout (COPSOQ; Kristensen et al., 2005), and Satisfaction with life scale (SWLS; Diener et al., 1985). The hypothesized associations between the variables were analysed with a Structural Equation Model (SEM; Kline, 2011).

#### 4) Results

The final model showed a good fit to the data  $\chi^2(21) = 30.716, p = .08, CFI = 0.989, TLI = 0.981, RMSEA = 0.050$  (90% CI=0.000–0.080,  $p = .465$ ), SRMR=0.038. More specifically, findings showed that received CAW was significantly associated with life satisfaction (bDIRECT = .239,  $p = .007$ ), and

perceived performance partially mediated this link (bINDIRECT =.230, p=.000), while burnout did not (bINDIRECT =ns). Overall, the model explained the 42% of life satisfaction.

#### 5) Limitations

This study shows several limitations: 1) the cross-sectional data; 2) the involved convenience sampling does not represent the whole Italian teaching community; 3) this study involves only teachers, while school administrative staff members and other employees that support the teaching-learning processes can be involved in future research.

#### 6) Research/Practical Implications

Based on our findings, future research may consider other subjective well-being outcomes besides life satisfaction. Furthermore, other related dimensions such as compassion dispositional components could be tested. Regarding practical implications, compassionate behaviours can be promoted through personal and organizational training (Trzeciak et al., 2019) and other organizational actions. Through building a compassionate culture, employees feel recognized as individuals with personal needs, desires, and scopes (Shuck et al., 2019).

#### 7) Originality/Value

Literature shows that the role of received CAW has mainly been analysed in social and healthcare contexts. However, limited research investigated the role of compassion in the educational field despite it being a caring context. This research aims to fill this gap and expand current research on the implications of CAW.

#### 8) Relevance to the Congress Theme

This contribution responds to Congress's attention to the themes of well-being promotion and stress/dysfunction prevention.

#### 9) Relevant UN SDGs

This study contributes to the SDGs' goal of promoting "Good health and well-being" in the helping professions, specifically, in the teaching profession.

*Keywords: Compassion at work, life satisfaction, work well-being*

## Oral presentation OP90

### **Exploring career experiences in the emerging world of work: The impact of career choices, career expectations, and career enablement**

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science&practice

#### Research Goals

The purpose of this research was to study career experiences with a specific focus on the role that career choices, career expectations, and career enablement play, within the context of organizational talent practices. The research aimed to achieve the following goals:

Explore the influence of career choices, expectations, and enablement on individual career experiences;

Evaluate the interplay of organizational realities and talent practices on career experiences through a career experience management model;

Propose a methodology for career experience design and application in practice.

#### Theoretical Background

The effectiveness of people practices has come under scrutiny as rising levels of employee turnover impact organizational performance (Younas & Waseem Bari, 2020). Trends such as the “Great Resignation” are dominating the talent landscape, prompting organizations to re-evaluate and redesign more human-centric workplaces (Fenton-Jarvis & Bull, 2022; Zaware, 2020). Positive employee experiences have the potential to create commitment and value for employees (Tucker, 2020). However, career experiences have remained largely unexplored, despite a lack of career opportunity being cited as one of the main drivers of attrition across organizations. The extent to which career experiences are designed, managed and supported within organizations directly impacts their access to talent and ability to respond to talent challenges.

A challenge within career management is balancing organizational benefit and individual gains (Barnett & Bradley, 2007). From an organizational perspective, career management practices are aimed at providing access to development opportunities to individuals, to pursue their own development and growth within the organization (Bagdadli & Gianecchini, 2019). However, individuals often experience career management practices as misaligned to their needs, overly focused on developing organizational skills, or vague with little transparency or support.

#### Research Design and Methodology

The study forms part of a broader research initiative aimed at conceptualizing an adaptive talent model. The study utilized an exploratory research approach, conducted in three phases. Phase one was a critical review of the current literature pertaining to careers. Phase two utilized semi-structured interviews (n=13) with talent management practitioners to inform the development of a conceptual framework. Themes were derived through a thematic analysis of the data. The findings were presented to an expert panel (n=8) and validated through the utilization of the Delphi method during the third phase of the study.

#### Results

The study found that career experiences are impacted by individual career choices, which leads to certain expectations from organizations. This includes the extent to which the organization plays an active role in managing careers and the type of support available to individuals. Organizational level career enablement practices and talent practices have a significant impact on the extent to which organizations deliver on expectations. The psychological contract was found to play an important role in managing mutual expectations.

Based on these findings, a model of career experience management is proposed to intentionally design practices that align career enablement to talent practices, and manages mutual expectations. A framework for designing career experiences was also defined as a practical methodology for practitioners, which takes into account both individual career journeys and organizational practices.

#### Limitations

Although various industries were included in the study, sample size impacts the generalizability of the study. As the participants of the study were talent management practitioners, the individual perspective of careers may not be fully represented. Given the timing of the study and current economic conditions, situational factors may impact on participant perspectives pertaining to.

#### Conclusions

The study highlighted the impact of career choices, expectations and career enablement on the career experience. Through the career experience management model, the interplay between these factors are outlined and made practical through a framework that could inform career experience design within organizations. The study confirmed the need for intentional career experience design that balances the expectations individuals with what is offered by the organization, through talent management practices.

#### Relevance to the conference theme

The study highlights the changing nature of careers and highlights the importance of creating meaningful career experiences as part of the employee value proposition. At a macro-level, the study also contributes to understanding the relationship between talent management and career experiences and the impact of situational factors.

#### Relevant to UN SDGs

This study contributes with a specific focus on Goal 8 with a focus on productive employment.

*Keywords: Career, Experience, Talent Management*

## Oral presentation OP402

### Exploring career uncertainty among young people: Meanings, sources, and coping resources

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science

The aim of this research is to explore the experiences of young people as they navigate through their careers in light of the uncertainties caused by changes in the environment (e.g., globalization, alternative work arrangements). Specifically, the meanings and sources that young people attribute to career uncertainty are explored with respect to the perceptions they hold of themselves and the labour market. The psychosocial resources that young people deem important to successfully navigate through the uncertainties in the world of work are also considered. This research is important in the context of modern careers as increasing uncertainties become the "new normal" in individuals' career development (Callanan et al., 2017). The research findings can inform both researchers and practitioners concerned with early careers into better equipping young people at the initial stages of their professional development.

Using the conservation of resources theory (Hobfoll, 1989) as a theoretical lens, career uncertainty is viewed as a career-related stressor in a shared social context. The theory posits that resources are fundamental for individuals to successfully cope with the stressor (i.e., accumulating sufficient resources allows individuals to increase their coping capabilities in handling future challenges). The insights of modern career theories are also considered in this research, especially in understanding young people's psychosocial resources to deal with uncertainty. Specifically, Savickas' (2005) career construction theory delves into individuals' successful adaptation to their environment by considering individual differences in preparedness to change (i.e., adaptivity) and resources to manage change (i.e., adaptability resources). The research sample consists of students enrolled in an Italian university. We used a mixed methods research design with a qualitative phase (i.e., online focus group discussions of experiences and resources to cope with career uncertainty) and a quantitative phase (i.e., survey research using measures from previous studies on career uncertainty).

Data collection and analyses finish by the end of 2022 in which the findings from both qualitative and quantitative phases are integrated in the interpretation of results. Specifically, the themes that emerge from the focus groups help inform the conceptualization of career uncertainty and its related coping resources. Whereas the survey results inform the relationships between factors and resources that contribute to the experience of career uncertainty. The results of this research include the identification of aspects that characterizes young people's career uncertainty (e.g., fit between one's degree/interests and the opportunities available in the labour market). Additionally, the distinction and/or interaction between personal factors (e.g., self-perceived skills and experiences) and environmental factors (e.g., perceptions of economic crises and labour market competition) are examined with regards to young people's sources of career uncertainty. Furthermore, the results highlight young people's psychosocial resources (e.g., protean career orientation, future orientation, career adaptability) and its relations with aspects and sources of career uncertainty. Some limitations that need to be considered from this research include the heterogeneity of the sample and the cross-sectional data collected.

This research has implications in the conceptualization and operationalization of career uncertainty as a psychological variable. It contributes to the expansion of knowledge regarding the dimensions and measures of career uncertainty, and it provides further insights on career uncertainty's

relationships with psychological variables that are relevant for coping with the changes in the labour market. The research also has practical implications to universities and employers, especially in addressing the career uncertainty of young people and enhancing their competencies to develop their careers. In line with the congress theme, this research delves into the experiences of young people as they become the new workforce that will confront the anticipated trends and changes in the world of work. By exploring the career uncertainty of young people, this research invites scholars and practitioners to essentially act in implementing solutions and interventions that benefit the long-term career development of the future workforce. This research contributes to Sustainable Development Goal 3, Good Health and Well-being, which highlight the psychosocial support or resources that young people need, especially after the impact of the COVID-19 pandemic in their experiences of uncertainty about the future. The research also contributes to Sustainable Development Goal 8, Decent Work and Economic Growth, considering the projected global unemployment rate that disproportionately impacts young people.

*Keywords: career uncertainty, coping resources, adaptability*

## Oral presentation OP726

### Exploring decisions to reduce workplace language barriers: A policy-capturing study

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science&practice

In an increasingly globalized economy, many organizations must operate outside of their home country to prosper. Multinational corporations (MNCs), defined as any organization “that owns or controls the production of goods or services in one or more countries other than its home country” (Chipulu et al., 2018, p. 228), are characterized by linguistically diverse globalized work teams that span time zones, cultures, and languages. As a result, these organizations must work to sustain competitive advantage; while simultaneously ensuring reliable communication between headquarters and its subsidiaries (Harzing; Pudelko, 2014). On the communication front, these firms must reconcile linguistic and cultural differences within their workforce that if not properly managed, may lead to language barriers. In some cases, language becomes a barrier in MNCs inhibiting information flow and shared understanding. Several studies have discussed how language barriers reduce decision-making efficiency, foster feelings of exclusion, adversely influence organizational efficiency, and inhibit venture growth (; Fiset; Bhave, 2021). Research also indicates that exposure to others speaking a non-mutually understood language affects individuals’ willingness to communicate and participate in workgroup activities (Lauring; Klitmøller, 2017). Scholars have proposed several responses to alleviate language barriers and improve overall communication in organizations (Janssens et al., 2004). These solutions include implementing a common corporate language (CCL) or lingua franca policy where all employees are mandated to speak a mutually understood language, offering translation and interpretation services to organizational members, and integrating language and/or cultural training into organizational development initiatives. Despite research examining how language use is experienced in MNCs, little is known about managerial preferences for initiatives that attempt to solve existing language barriers in organizations. Thus, the goal of this study is to assess individual judgements of several proposed organizational-level language barrier solutions by drawing on theoretical work developed by Janssens et al. (2004) to assess MNC manager preferences for various international organizational language barrier solutions.

To achieve this, we use policy-capturing methodology to assess how decision-makers use available information when making evaluative judgments, or, how they “weight, combine, or integrate information” (Zedeck, 1977, p. 51) by having respondents respond to a number of realistic, yet hypothetical vignettes (Connelly et al., 2016). Therefore, a policy-capturing approach provides an effective means to understand how MNC managers weigh the perceived effectiveness of a variety of language barrier solutions as it identifies both the within- and between-person variance of each strategy (Karren & Berringer, 2002). In addition, we also asked managers which solution they preferred and why. This was done to complement our quantitative analysis as well as to gain a more profound and more holistic understanding of how managers attempt to solve these issues. To test the perceived efficacy of these organizational language barrier solutions a 3-way repeated measures ANOVA within factor analysis was performed using SPSS (2 levels x 2 levels x 3 levels). The analysis revealed a statistically significant three-way interaction between language policy, translation and training (  $F(2, 243) = 3.58, p = .03, \eta^2 = .01$ ), such that managers preferred a lingua franca language policy when professional translation and cultural/language training are recommended. Our findings suggest that managers are keenly aware of the challenges presented by language barriers. Moreover, it appears that supervisors are acutely aware that remedies to workplace language issues do not lend themselves to simplistic solutions. Rather, the current sample of MNC managers often discussed the

nuanced and often culturally and politically fraught challenges that they must navigate when operating in a multilingual work environment (Ahmad; Widén, 2015). Limitations of our study include only using managers and having a large portion of our sample from English-speaking countries. Future studies could focus on employee's perspectives as well as having a more well-rounded sample.

Given the rise of globalization and the increase of multilingualism in contemporary organizations, managers must find effective ways to solve language-related issues at work. In an effort to address this issue, the current study aims to understand managerial preferences for well-established organizational solutions to address workplace language barriers in MNCs. By achieving this, we hope not only to shed light on driving factors behind language policy decisions but also to give managers recommendations as to how to best navigate these issues at work. Thereby, this work is intended for both academics and practitioners.

*Keywords: language barriers; policy-capturing; multinational corporations*

## Oral presentation OP164

### Exploring hybrid work design profiles, their antecedents and wellbeing outcomes: A person-centered analysis

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#### Research goals and value

Hybrid work - working partly in the office and partly from home - has dramatically increased since Covid-19 and looks set to persist. It is therefore important that we understand how to design good quality work which spans these domains. Work design refers to the roles, responsibilities and tasks carried out in a job. Established research shows that jobs high in resources, with moderate demands, are beneficial for wellbeing and performance. However, it is not yet known how work experiences at home and in the office combine holistically for different subgroups of people and influence outcomes.

Focusing on hybrid workers, we aim to: 1) examine the nature and number of hybrid work design profiles that emerge, and the extent to which levels of work characteristics differ between home and the usual workplace within profiles; 2) explore the factors that shape hybrid work design profiles; and 3) explore how hybrid work design profiles impact thriving and mental health.

#### Theoretical background

Drawing on the job-demands resources model and previous person-centered research, we focus on work characteristics pertinent to hybrid work and expect at least three general profiles – high strain, low strain, and active. We propose differences between levels of work characteristics at home and in the workplace within some profiles, as some resources (e.g., autonomy, support), and demands, may vary between locations for some people. Additionally, some profiles may demonstrate similar levels of work characteristics, as the forces that shape work design, such as organizational policies, leadership, and individual differences, may be similar in both locations.

#### Methodology

Hybrid workers (n=386) completed an online survey (May 2021) focusing on: scheduling autonomy, colleague and manager support, workload, and close monitoring when in the workplace and, separately, when at home; and antecedents (gender, age, occupation, influence over work location, organizational support). Four months later, we assessed thriving and mental health. Latent profile analysis was conducted using home and workplace work characteristics as profile indicators.

#### Results

The four profile solution was considered optimal and comprised: 1) an “active, low monitoring, convergent” (20%) profile with relatively high resources and workload, and significantly higher autonomy at home than in the workplace; 2) a “demanding, high monitoring, divergent” profile (21%), where workload and monitoring were relatively high and differences were observed between levels of home and workplace characteristics; 3) an “average, low monitoring, divergent” profile (26% of sample), with average levels of most work characteristics, and significant differences between locations in autonomy and monitoring; and 4) a “passive, high monitoring, convergent” profile (33%), with relatively low resources and workload, and no significant differences between locations.

Males, older workers, those in skilled jobs higher up the hierarchy, or more influence over their work location, or more organisational support, were more likely to be in active, low monitoring jobs. Those in profiles with the highest autonomy and support experienced the highest thriving. Mental health was significantly lower in the two low monitoring profiles.

#### Limitations

Significant drop-out between Time 1 and 2 occurred, however, drop-out analysis revealed almost no significant differences between groups and we modelled missing data using the full information maximum likelihood approach. In addition, respondents completed both sets of questions about work characteristics at the same time rather than while actually in the relevant work location.

#### Conclusions

Our study shows that close monitoring drove lower mental health and resources drove thriving. There was no clear pattern of association between antecedents or outcomes and differences in levels of work characteristics between location within profiles. It is important to ensure high resources and low monitoring across locations when designing hybrid work.

#### Relevance to congress theme & UN SDGs

The nature of work is changing, with more people working flexibly, and many reassessing what they value most in life and their careers. Some are choosing to leave jobs amidst the “great resignation”. Hybrid work is one way leaders can meet individuals’ needs for flexibility and retain workers. Yet we understand little about how to design good quality work which transcends location, such that individuals can achieve optimum wellbeing and performance wherever they work. Our study paves the way for leaders to design motivating hybrid work and remain adaptable into the future.

Relevant UN SDGs are “Good health and wellbeing”, and “Decent work and economic growth”. We show which hybrid work design profiles promote optimal wellbeing, and identify factors which predict who is in these profiles, which can inform interventions to foster “decent work” for all.

*Keywords: Hybrid work, work characteristics, latent profile analysis*

## Oral presentation OP716

### Exploring the intention to work remotely: A moderated mediation model on the interplay between leadership, autonomy and trust-building self-efficacy

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science&practice

#### Work patterns and conditions

Research goals. Since the COVID-19 outbreak, many organizations have reported a permanent shift to remote or hybrid work (Milasi et al., 2020). However, from employee's perspective remote working may be associated with both advantages and disadvantages. To date, the understanding of the individual and contextual factors that drive employees wanting to keep working remotely is still limited. In this study, we developed a moderated mediation model in which job autonomy plays a mediating role between remote leadership and the intention to work remotely and trust-building e-work self-efficacy acts as a moderator.

Theoretical background. Increased autonomy is a key predictor of remote workers' job attitudes and well-being (e.g., Allen et al., 2013), although its positive effects are determined by job-related and individual characteristics (Kubicek et al., 2017). Supervisors play a role in the autonomy-control dialectic in determining the effectiveness of new ways of working (e.g., Iannotta et al., 2020) and generally influence employee's outcomes by shaping job resources (Schaufeli et al., 2020). Hence, we hypothesized that the leader's remote support may relate to employees' intention to keep working remotely through the enhancement of job autonomy. Whether or not remote workers can handle greater discretion in performing their work is partly dependent on individual factors (Van Yperen et al., 2014). We hypothesized that trust-building e-work self-efficacy (i.e., one's confidence in meeting company policies and high performance standards under minimum supervision; introduced by Tramontano et al., 2021) may have a moderating role, so that employees with higher scores may capitalize more from the hypothesized process.

Design. The total sample consisted of 773 remote workers. The survey assessed: Remote Leadership (LEAD; 5 items), developed to measure leaders' behaviours that support the effectiveness of remote co-workers, like strengthening digital skills and virtual interactions; Job Autonomy (AUT; 3 items; Morgeson & Humphrey, 2008) measuring the degree of discretion in one's job; Trust-Building e-work Self-Efficacy (TBSE; 3 items; Tramontano et al., 2021) measuring beliefs about one's capability to build trustworthy relationships by achieving remote outcomes responsibly; Intention to Work Remotely (RINT; 1 item; adapt. from Davis et al. 1989), assessing the intention to keep working remotely for the next 6 months. Preliminarily, participants were randomly divided into two groups to perform validation analyses of the scales. Then, we tested on the overall sample: a) the measurement model through CFA; b) the structural moderated mediation model with path analysis according to suggested procedures (Hayes, 2015; Preacher et al., 2007). Alternative structural models were tested. Models were controlled for sex, age and type of contract.

Results. Preliminary analyses on the split halves of the sample confirmed the reliability and factorial validity of the scales. The measurement model on the overall sample fitted the data well ( $\chi^2=4595.664$ ;  $df=55$ ;  $RMSEA=0.06$ ;  $SRMR=0.03$ ;  $TLI=0.95$ ;  $CFI=0.96$ ). The test of hypotheses revealed that: a) LEAD was directly related to AUT ( $b=.26$ ;  $p<.001$ ) and RINT ( $b=.18$ ;  $p<.001$ ). In turn, AUT was directly related to RINT ( $b=.23$ ;  $p<.001$ ). Hence, the LEAD-RINT relationship was partially mediated by AUT ( $ab=.08$ ;  $p<.001$ ;  $LL=.04$ ;  $UL=.12$ ). b) TBSE significantly moderated the LEAD-AUT relationship ( $b=.08$ ;  $p<.05$ ), so that LEAD was related to AUT only at higher values of the moderator ( $b=.12$ ;  $p<.05$ ); c) Consistently, TBSE significantly moderated the mediating effect of AUT in the relationship between LEAD and RINT ( $IMM=.02$ ;  $p<.05$ ;  $LL=.003$ ;  $UL=.044$ ). Alternative mediation models showed a worst fit to the data than the hypothesized one. TBSE did not moderate any of the other structural paths.

Limitations. The cross-sectional and self-reported nature of the data. The sampled employees do work remotely at least 2 days per week, thereby results were not controlled with differences in

intensity of remote working. Moreover, the results should be generalized to other national contexts, since our sample reflect the remote working as normatively defined by the Italian context.

Conclusions. Our results contributed to the understanding of the mechanisms involved in employees' intention to keep working remotely. This study suggests the importance of training the leaders of the future on the management of remote co-workers, with an emphasis on the enrichment of their job autonomy. For capitalization purposes, our results suggest that organizations should invest in empowering employees' capability to perform remotely in an autonomous and accountable manner.

Relevance to the Congress Theme. Our study is helping to develop research and applications with regard to the attitude of employees towards new ways of working.

Relevant UN SDGs. Work patterns and condition

Audience. Both practitioners and academics

*Keywords: Remote working; Leadership; e-work self-efficacy*

## Oral presentation OP507

### Exploring the role of Existential Labour on Work related Well-Being: A weekly diary study.

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science&practice

Researchers have consistently found that the experience of meaningful work is associated with various positive benefits at various levels of work (May et al., 2004; Rosso et al., 2010; Steger et al., 2012). Certain theorists have gone so far as to posit that the experience of meaningfulness is a fundamental human need, which makes studying the concept more propelling than ever, especially within an organisational setting (Bailey & Madden, 2017; Frankl, 1962). That said, research on both the antecedents and consequences of meaningful work is maturing, but understanding how individuals experience meaningfulness in the context of organisational mandated protocol remains limited (Bailey & Madden, 2017; Lips-Wiersma et al., 2015; Rosso et al., 2010). More specifically, processes of deteriorating meaningful work need to be examined to understand how employees might cultivate counterproductive attitudes at work, i.e. cynicism and alienation due to organisational mandated meaningfulness (Cartwright & Holmes, 2006).

As a result of meaningfulness dissonance, i.e. tensions between experiencing meaningfulness at work, employees are often forced to adopt strategies to regulate their own versus organisational expectations to maintain meaningfulness (Lips-Wiersma & Wright, 2012; Tummers & Knies, 2014; Veltman, 2015). These strategies involve faking genuine experiences of meaningful work for the sake of adhering to organisational expectations and norms, also known as existential labour strategies (Bailey et al., 2017). This could benefit employees in the short-term to get through the day or week, but can have severe negative affective outcomes on employee wellbeing over time, including exhaustion and feelings of alienation (Bailey et al., 2016; Hirschfeld et al., 2018; Trougakos et al., 2015). Existential labour is thus experienced when the employee is 'pretending' that their role is meaningful, perhaps to cope with the monotony of the role when in reality they are only performing the role to further their self-interest in promotions, money or prestige (Bailey et al., 2017b).

In this weekly diary study, examining the within-person relationships between meaningfulness dissonance and work-related well-being through existential acting strategies was given importance. Adopting a within-person lens in examining the effects of existential acting on well-being outcomes allows researchers to account for fluctuations with regard to both constructs over time and is particularly useful when attempting to investigate the processes underlying these relationships. Week-level data was collected from 273 working professionals in UK using Prolific. Data was collected across 12 weeks. All employees were working professionals; 62.1% were female, 37.2% male and 0.8% non-binary; 81% had permanent contracts; 34% belonged to the public sector, 59% to the private sector and 6% to either non-profit organisations or other businesses; 38% had leadership responsibilities of which 15.8% were team leaders, 16% line managers, 5% senior managers and 3% CEOs or directors. The age of participants ranged from 20 to 61 (M= 33.3; SD= 9.27). Tenure ranged from 1 to 52 years (M= 6.9; SD= 6.5) and 98% had a bachelor's degree or better. Finally, 55.3% were working from home, 33.9% were commuting to work and the rest were furloughed.

ICC results show that within-person constructs exhibited considerable variance at the weekly level, ranging from 22% to 49%, thereby justifying the multilevel approach. Multilevel mediation analysis showed that weekly deep and surface existential acting significantly mediates weekly perceptions of MD and negative well-being outcomes (i.e. cynicism, depersonalisation and alienation). Cross-level interactions with organisational psychological safety as the moderator showed interaction effects

between weekly deep existential acting and depersonalisation. In other words, employees that perceived high organisational psychological safety had lower experiences of weekly deep existential acting and depersonalisation at work.

#### Relevance to EAWOP Theme

Given the nature of workforces and organisations today, one may argue that these findings are not surprising. The more the changes and insecurity around one's job occur, the more it becomes difficult for employees to experience meaningful work authentically. Thus, organisations need to be aware that employees are no longer experiencing meaningfulness as passive receivers (Bailey & Madden, 2017) but are actively 'faking' their sense of meaningfulness when required at work. HR professionals should consider the factors that are likely to give rise to forms of organizational acting, such as reward systems that emphasize "fitting in", and mechanistic structures and systems that allow little room for an individual's sense of meaningfulness, therefore exploring its implication on employee's well-being.

*Keywords: Meaningful Work; Existential Labour; dissonance; alienation; burnout;*

## Oral presentation OP4

### Exploring the Role of UK Middle Managers in Organisational Change

Natalie Fisher, QinetiQ; Georgie Akehurst, IES; Valentina Battista, Cranfield University; Emma Parry, Cranfield University; Dilys Robinson, IES; Melanie Wood, Dstl

science&practice

#### Research goals

This study was commissioned to explore the role of middle managers in organisational change, with a view to identifying how middle managers could be enabled so that change was more likely to be delivered effectively/at pace. Within the organisation in question, discussion at senior level had highlighted concerns about how messages were sometimes diluted as they transcended the organisation. Questions were raised regarding how the organisation equips its middle manager to facilitate change.

#### Theoretical background

Evidence from the change management literature suggests that managers are critical agents of change (Tabrizi, 2014). In organisations that consistently deliver change successfully, middle managers are actively involved in change. As part of this research, a literature review was conducted which explored both traditional approaches to organisational change, alongside newer approaches (high involvement change, behavioural nudging etc.).

#### Methodology

The research was conducted in three stages by a team of academics and social research practitioners.

##### Defining and understanding the issue:

Ten stakeholder interviews were conducted with individuals in change management roles to gain an understanding of the change context.

A literature review was undertaken to explore the enablers of change and factors that were critical in securing effective change implementation.

Nine interviews were conducted with representatives from organisations that were comparable to the study organisation to establish best practice in organisational change in other settings.

Engaging with middle managers : 72 telephone interviews were conducted with middle managers to better understand how they perceive their role in change management.

Identification of interventions : Using the outputs from stages one and two, 31 interventions were developed by the research team. An expert judgement panel of six experts assessed the list of interventions, and based on their feedback the long list of interventions was reduced to a prioritised list.

#### Findings

The findings indicated an expectation from the organisation that middle managers would take on a key role during change; they should be agents of change responsible for translating the vision into action. Despite agreement from middle managers that this should be their role, there was a disconnect between expectations and reality. Middle managers were not fully equipped and

supported by the organisation to manage change. It was evident that middle managers faced a number of barriers in conducting their role:

Middle managers were frequently not involved in shaping larger-scale change. Their role was often focused on implementation of the vision/strategy set out by senior leaders.

A lack of involvement often left them feeling like change was being 'done to' them.

The culture of the organisation was not always conducive to open communication, particularly in an upward direction. There was often a failure to explain the 'why' of change.

Often middle managers were required to implement a change initiative in addition to their 'day job' without any additional resources (financial, people, equipment, time).

Middle managers typically received very little change-related training and were just expected to 'get on' with implementation.

All the above meant an inconsistent approach to change was being taken across the organisation.

### Conclusions

This study provided useful insight into a topic that had not been researched in this large, complex organisation.

Study findings made it clear that the solution to effectively managing change within this organisation does not lie solely with middle managers. In fact, to focus only on the role of middle managers would mean that many of the challenges that the organisation faces would be left unaddressed. With this in mind, four key interventions were suggested:

Adopt a change management framework to guide change management processes.

Provide managers with change management training.

Introduce a governance process to keep track of large-scale change initiatives.

Take a high involvement change approach which genuinely attempts to involve employees at every level in co-producing change.

In addition to the interventions a series of recommendations, alongside a short video outlining good practice, were also developed that could be implemented in quicker time.

### Limitations

As only part of the organisation was sampled it is suggested that the project should be scaled up to include other areas which may have a different experience with regards to change.

### Relevance to congress theme and UN SDG

The pace of organisational change continues to accelerate with the introduction of new technology and ways of working. Being good at managing change is no longer a choice but a necessity. Bringing people along on the journey, allowing them to shape the change, and involving them in the process is key to success.

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*Keywords: Organisational Change*

## Oral presentation OP413

### **Facing early career trauma without a safety net: the role of career resources for a sustainable start to careers**

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science

**Research goals:** For young people transitioning from education to work, the COVID-19 pandemic in 2020 was a traumatic career event which impacted the course of life plans as well as health and wellbeing (Blustein et al., 2020). Groups with fewer safety nets were shown to be especially vulnerable in the pandemic context (Pierce, et al., 2021; Understanding Society, 2021). Such patterns are likely to have exacerbated the shock and uncertainty associated with young people's transitions to employment. This research examines the nature of such early career trauma and the potential protective factors which may help build resilience and purposefulness (indicators that reflect a sustainable start to careers), and help towards sustainable career outcomes, for vulnerable young people transitioning to the labour market. The aim is to understand the role of career resources relevant for career self-regulation (i.e., proactivity, adaptability, and career competencies), for young people who may not have financial and social safety nets.

**Theoretical background:** We build on theorising related to person-career fit and career self-management (Hirschi and Koen, 2021) which suggests that career self-regulation is critical in crisis situations, such as the pandemic. This allows understanding of (i) which resources help a sustainable start to careers for young people; (ii) to what extent career resources differ based on social and financial insecurities; and (iii) how financial and social insecurity differentially impact the efficacy of career resources on sustainable career outcomes. We adopt the broad dimensions recommended by the sustainable careers framework (De Vos, Van Der Heijden, & Akkermans, 2020) to examine relevant education-to-work outcomes at the start of one's career including employment status, perceived financial stress, life satisfaction, mental health and social wellbeing one year on from graduation.

**Design:** Data is drawn from two waves of a longitudinal study of UK education leavers in the 2020 cohort (Time 1 (T1), N=502; Time 2 (T2), N=197). Study 1 used T1 data in a structural equation model to identify the most vulnerable groups in early pandemic labour markets. Financial insecurity (Netemeyer et al., 2018) was measured at T1 and T2. Other T1 measures were: indicators of social vulnerability (socio-economic status, level of education, and mentoring support (Scandura, 2004)); career resources relevant for career self-regulation, namely proactive personality (Seibert, Crant, & Kraimer, 1999), career adaptation (Savickas, Porfeli, Hilton, Savickas, 2018) and career competencies (Akkermans, Brenninkmeijer, Huibers, & Blonk, 2013); state resilience (Connor-Davidson Resilience Scale (CD-RISC); Connor & Davidson, 2003); and purposefulness (Organ & Greene, 1974). Study 2 examined the relationship between financial insecurity and career resources (T1) and career outcomes at T2 for the reduced longitudinal sample. T2 outcome variables were employment status, salary, perceived life satisfaction (Diener, et al., 1985), mental health measured using the GHQ12 (Goldberg, 1992) and social wellbeing (or loneliness) (Hays & DiMatteo, 1987).

**Expected results:** Results will be available during the EAWOP Congress in 2023.

**Limitations:** Although the longitudinal data one year following graduation provides some indication of early employment, health and wellbeing outcomes in relation to financial security and career

resources, conclusions on the longer term economic, social and individual scarring effects on young people is limited based on this data.

**Conclusions:** Theoretically, the study examines how self-regulation of careers operates differently with implications for a sustainable start to careers for those who experience social and financial insecurities. Moreover, the study broadens the scope of sustainable careers to those who are at the start of working lives. Young people are always among the most vulnerable in labour markets and experience the economic, social and individual scarring effects of early unemployment. The study provides unique and in-depth data on first labour market experiences of a cohort of young people in the transition from education to work during a global pandemic. The availability of data on employment and life outcomes one year following graduation in the pandemic context provides insight into the sustainability of early career trajectories in times of crisis, taking into account health and wellbeing as well as employment outcomes.

**Relevance to the Congress Theme:** The study raises urgency with respect to required interventions to redress potential negative consequences of the pandemic as a career shock. We may see inequality emerging in terms of employment outcomes as well as health and wellbeing.

**Relevant UN SDGs:** The study directly addresses several UN SDG themes, most obviously 'Good health and wellbeing', 'Decent work and economic growth', 'Gender equality' and 'Reduced inequalities'.

*Keywords: Education-to-work transitions, sustainable careers, financial vulnerability*

## Oral presentation OP256

### Factors Affecting Normalisation of Deviance – Perspectives of Workers Within the Energy Industry

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science

The present study aims to explore the influence of factors relevant to work safety and operating procedures on the normalisation of deviance (NoD). NoD describes the gradual degradation in workers' compliance with set norms as a result of a prolonged absence of perceived negative consequences. While the phenomenon has been identified across a wide array of industries and has been noted in numerous high-profile industrial incidents (Texas City Explosion, Chernobyl, etc.), there is a notable lack of research into the factors contributing to the acceptance of procedural deviations. Non-compliance with safety procedures is often a key weakness of many safety systems. The risk of non-compliance is what renders administrative, work practice, and personal protective equipment controls to be among the least effective safety measures according to the hierarchy of control. Historically, deviations from procedures were often viewed as the errors or malpractices of individuals (termed active failures), however focus has since shifted to understanding these from the perspective of latent failures within the system itself (operational pressures or conditions, outdated or difficult to follow procedures etc.), which may enable, or even promote, non-compliance with procedures.

In order to identify the factors associated with the NoD, we conducted a qualitative analysis of incident investigation reports. Through this, a number of factors reported as contributory to the initiation and subsequent normalisation of deviant actions were identified. These were categorised according to the socio-technical model of risk management. At the organisational level, factors relating to the imposition of production pressure, as well as the failure to effectively monitor conditions and learn from past incidents or near misses were noted. These were seen to contribute to the development of factors pertaining to worker (e.g., inadequate staffing or supervision) and operation (e.g., use of inadequate procedures or tools) management, which in turn influence the working conditions of operators. Factors relating to operators' lack of knowledge or reporting were also noted.

We now aim to build on these findings by further exploring these contributory factors from the perspective of operators and those involved in daily operations within high-risk industry. We hope to identify and investigate the factors that are perceived to impact their ability to conduct tasks in accordance with operating procedures, as well as identify the factors that they believe are contributory to NoD. To investigate this we are conducting 9 semi-structured interviews with workers from within the energy industry. These focus on investigating participants' perceptions and understanding of the factors affecting their and others' safety behaviours, with specific questions exploring previous experiences of intentional or unintentional non-compliance.

Following the completion of the interviews, a directed qualitative content analysis will be used to analyse the data. The coding framework developed during the analysis of incident investigation reports will guide the coding process. This will allow for the further development of the framework and the identification of gaps or discrepancies. The aim is to complete the interviews by the end of October 2022, and for the subsequent analysis to be completed before the end of the year.

A core characteristic of normalisation of deviance is its insidious nature, meaning that those deviating from procedures are often unaware of their deviance, or have rationalised the deviation as

acceptable. As such, it should be noted that interviews may not be the most effective means of capturing the actual normalised deviations that are taking place. Rather, participants may rely on retrospective analysis of their actions and surrounding factors or may focus on observations of other workers. While still beneficial, it is likely that accounts may suffer from retrospective bias and/or a reliance on second hand reports and observations.

Regardless, the aim of research within this area, including that of the present study, is to improve the overall safety and wellbeing of workers and operators within high-risk environments such as those present within the energy industry sector. This is achieved through the study and development of strategies which improve the interactions between workers and the systems within which they operate. Findings from our research will hopefully help specify the intra-organisational factors that influence operator compliance and deviance normalisation within the energy industry. With the help of the framework, NoD specific risk assessments may be developed which will aid in the early identification of the phenomenon and the implementation of appropriate interventions. The framework may also be used as an aid in explaining the downstream effects of organisational factors on frontline workers' behaviours and attitudes.

*Keywords: normalisation of deviance, procedure compliance, high-risk industry*

## Oral presentation OP601

### Factors influencing mental ill health disclosure in the workplace: a two-part study

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science&practice

Background and importance of research Mental illness is a growing public health concern globally, with significant costs to employers and employees. 1 in 6 employees report depression, anxiety, and stress at any one time; 72 million working days are lost due to mental illness; costs of mental illness in England are estimated at 105 billion (GBP) per year, employees with a long-term mental health condition lose their jobs at double the rate to employees without a mental health problem (MHFA England, 2020; Stevenson & Farmer, 2017). Unfortunately, many people with mental ill-health experience stigma and discrimination. This can take place at various stages in the employment cycle including at the application stage of employment, during work and/or returning to work after a period off work due to mental illness, (Dinos et al., 2004; Hielscher & Waghorn, 2017). Consequentially, many employees question the impacts disclosure decisions relating to concealing or revealing mental illness at work. Yet, research has found that disclosure is also vital for employees to access work adjustments and support that can be beneficial to sustaining work (Brohan et al., 2012).

This two-part study answers calls to better understand the complexities related to the subject (Hastuti & Timming, 2021; Brohan et al., 2012). First, a systematic literature review (SLR) examines what is known about the factors influencing a decision to disclose or not to disclose a mental health problem in the workplace. Second, a qualitative empirical study addresses an identified gap in the literature and explores the conditions for a positive experience of disclosure of mental illness in the workplace.

Theoretical framework Goffman's (1963) theoretical framework is most widely used for disclosure decisions and consists of categorising the social world in two groups the "stigmatised" and the "normals". The stigmatised group are often discredited by the normal group resulting in the stigmatised group "passing" as normal and not revealing their stigma (Link & Phelan, 2001). With that in mind, it explains job applicants and employee's decision to conceal mental illness in the workplace. Organisational and environment social support also inform individual's decisions to conceal or reveal a stigma such as mental illness at work, Chaudoir and Fisher (2010) and Jones and King (2014).

Method: SLR Relevant literature was identified following PRISMA guidelines, encompassing the period 1980-2021. A data extraction tool was developed, and quality was assessed (Snape et al., 2019). Snape et al.'s (2019) quality assessment integrated guidance for assessing research quality for quantitative (GRADE) and qualitative research (CERQual CASP). A narrative synthesis was used to synthesising the data and the IGLOO (individual, group, leader, organisational and overarching contextual factors) model (Nielsen et al., 2018) was used as an analytic framework to provide a thematic understanding of the disclosure decision factors at the individual, group, line manager, organisation and overarching level.

Method: Empirical Study A qualitative study including 15 one to one semi-structured interviews was used. Interviews were recorded and transcribed. Analysis is ongoing and deductive and inductive thematic analysis will be used to identify themes at the IGLOO levels.

Results: SLR Searches yielded 48 studies which was systematically reduced to seven studies that met the inclusion criteria. Four of the seven studies adopted quantitative methodology and three utilised

qualitative methodology. Findings revealed use of small sample sizes, self-reported mental illness, homogeneous samples, and the use of measures of likelihood of anticipated disclosure in a hypothetical situation rather than lived experience.

The systematic review findings showed disclosure decision making as complex, and that one employee's enabler is another employee's barrier to disclosing mental illness in the workplace.

Results: Empirical Study Ongoing with overarching themes at the individual, group, line manager, organisational and outside level, available May 2023.

Limitations: SLR The SLR was limited to the search strategy adopted, however the research team consulted experts prior to conducting the search and were reflexive during the process.

Limitations: Empirical study The empirical study was limited to a small sample size from a UK population, while not longitudinal, this study extends our understanding of the lived experience of positive mental ill health disclosure at work

Conclusions The findings from the two-part study identified several factors at the individual, group, line manager, organisational level and outside the workplace that influence decision making when disclosing mental illness at work. The findings aim to offer practical insights to facilitate positive decision making to disclosure, advance knowledge of various stakeholder groups and embracing a workplace culture of true inclusiveness.

*Keywords: Mental illness, disclosure, employment*

## Oral presentation OP277

### Fair Work Labelling as An Intervention to Reduce Inequality: How Would Consumers React to Fair Work Information Disclosure?

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science

In the wake of the role played by organisations, a recent intervention for controlling inequalities has been to mandate disclosure of information on an organisation's pay practices to the general public. Although the potential of information disclosure to reduce inequality has been widely recognised, it has not been yet materialised. We propose that a direct link between the disclosed information and consumers' awareness of it at the point of choosing which organisation to support through their purchase can help realising that potential. Inspired by the successful fair-trade movement and research on other social labelling programmes, we propose a fair work label, which discloses a combination of information on an organisation's pay practices and employee's subjective experiences of work (i.e., CEO-to-worker pay ratio, gender pay gap, real living wage, and employee satisfaction), might provide the link between information that is already available in the public space and consumers. We conducted three experiments to examine how Scottish citizens would respond to fair work information disclosure in their role as consumers. Study 1 (N=175) and Study 2 (N=140) adopted a between-group experimental design, while Study 3 (N=127) employed a pre-post design with real organisations to examine whether fair work information disclosure would induce changes in consumers' perceptions and attitudes. We found that Scottish residents perceived fair work labelled fictitious organisations as caring for consumers and employees, and were more likely to trust, buy from and even pay more for products of labelled organisations. Our preregistered pre-post experiment also indicated that fair work information disclosure indeed exerted an effect on consumers' perceptions and attitudes towards organisations that they already had previous experience. Furthermore, we also found that organisations with bad performance in fair work criterion were more likely to be boycotted.

There two main limitations. First is the question of how externally valid these findings are. It would be useful for future research to address the external validity of findings via field experiments. Second is that none of the four elements we included in the fair work label directly address procedural justice—the third dimension of fairness, nor employees' voices—a dimension of fair work initiative. This is due to the lack of clear, objective, and available measurement. Future research might focus on measurements development and the effects of fair work label when they are included in the framework.

The current research extends the literatures on public disclosure of pay, intraorganisational inequality, and more broadly interventions for controlling socioeconomic inequalities. Moreover, the current research also has some potential implications for organisations and policymakers. Scotland, where our studies were particularly targeted, has expressed its ambition of building an inclusive economy for all, outlined fair work initiative as one key action to achieve inclusive growth. However, the existing framework of fair work has not directly called to vertical pay inequalities within organisations nor provided clear definitions or objective measurements for existing dimensions. Although the Fair-Work initiative is a part of building inclusive economy, consumers have not yet been included into the conversation. The researcher-constructed Fair Work label might be a way to increase the involvement of consumers both in building inclusive economy and tackling social inequalities. Furthermore, this research answers the call from the "Build Back Better" movements.

Current research evidenced that consumers can be engaged as a player in the inclusive recovery of the economy after the pandemic and it is achievable through fair work labelling programme.

This research is highly relevant to the Congress theme in three ways. First, the broad issue we targeted – socioeconomic inequality – has illustrated its urgency through previous evidence on its relevance to various social and health problems. Such urgency motivates us to investigate what else can be done to change the status quo. Second, this research was built on the blueprint for an inclusive economy in Scotland. Being like political democracy in which citizens vote on the political leadership, citizens also “vote” on how organisations look like in the future in their role as consumers. A future of more inclusive and sustainable economy not only requires professionals’ dedication but also contributions from every citizen. Third, considering that both tackling socioeconomic inequalities and building inclusive economy need contributions from the public, this research provides a possible way to achieve the democratic participation to broader economy.

This research relates to several UN SDGs, including gender inequality, decent work and economic growth, reduced inequalities, and responsible consumption and production.

*Keywords: Fair work labelling, Consumer' Willingness to Support, Economic Democracy*

## Oral presentation OP494

### Fairness in Diverse Teams and Team Cohesion

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science&practice

#### Research Goals

Deep-level diversity refers to the differences between individuals in their psychological characteristics, including personality, attitudes, and values (Harrison et al., 2002). Our study explores the role of deep-level diversity in teams as a predictor of team justice climate and, in turn, team cohesion. We also examine the role of ethical leadership as a moderator of these effects.

#### Theoretical Background

Drawing on similarity-attraction theory, we propose that the emergence of shared justice perceptions in teams is contingent upon deep-level differences (or similarities) among team members. In short, in deep-level diverse teams individuals may limit the sensemaking interactions with their teammates that help to inform their justice judgments. In turn, this vacuum of information may lead to low perceived distributive, procedural and interactional justice. We propose the following hypothesis:

H1: Team sensemaking mediates the negative relationship between deep-level diversity and team distributive, procedural and interactional justice perceptions.

In turn, and drawing on uncertainty management theory, we argue that perceptions of team justice climate will be positively related to team cohesion (Nauman & Bennett, 2000). However, we propose that ethical leadership may moderate this relationship. In short, we argue that collective perceptions that a team leader is unethical creates uncertainty in the team, thus making more salient issues of organisational and team leader (in)justice. We propose the following hypothesis:

H2: Team distributive, procedural and interactional justice perceptions are positively related to team cohesion and mediate the positive relationship between team sensemaking and team cohesion, and this relationship is stronger when perceptions of ethical leadership are low.

#### Design and Method

A multi-source cross sectional survey study was conducted in the Middle East. The sample was composed of 249 individuals working across 58 teams in two hospitality organizations. Team members rated perceived deep-level diversity, team sensemaking, distributive, procedural and interactional justice climate, team cohesion, and ethical leadership. Team leaders rated perceived deep-level diversity, team sensemaking, and team cohesion. Data was aggregated at the team level and hypotheses were tested using SPSS and Hayes's PROCESS Macro (Models 4 and 14).

#### Results

Overall, we found partial support for our model. As hypothesised, team sensemaking was found to mediate the negative relationship between team deep-level diversity, procedural and interactional justice climate (but not team distributive justice climate). We also found that team interactional justice climate (but not distributive and procedural justice climate) was, in turn, positively related to

team cohesion and that this relationship was stronger when team perceptions of ethical leadership were low.

#### Limitations

A number of limitations are recognised. First, while a sample of 58 teams is reasonable this is still small and may impact on our confidence regarding the salience of our findings. Second, this is a cross sectional study, and while multiple sources of data were collected, we cannot with any confidence test the causal relationships in our model. Finally, our Middle Eastern and hospitality context is specific and may limit the generalisability of our findings to other contexts. Future research should seek to overcome these limitations.

#### Research/Practical Implications

Our study highlights the importance of deep-level diversity as a potential predictor of team justice climate and cohesion. Managers, therefore, should consider deep-level differences when composing teams and highlight – through training to both managers and employees – the significance of the deep-level aspect of diversity and inclusion. Moreover, the study highlights the potentially important role of ethical leaders in supporting and enabling deep-level diverse teams, and organisations should seek to develop and recruit/appoint ethical team leaders.

#### Originality

We provide the justice climate literature with a new deep-level diversity lens through which team justice and cohesion may be better understood. We also contribute new empirical research to the ethical leadership literatures, examining – for the first time – the role of ethical leadership as a boundary condition of the effects of deep-level diversity, sensemaking and justice climates. Finally, we provide much needed research on this issue in a Middle Eastern context.

#### Relevance to the Theme

In a team-led work environment, the manager's roles and behaviours are crucial for the effectiveness of teams. Our study highlights the need for greater sensemaking within diverse teams to encompass its impact on team members' perceptions of justice and the importance of employing ethical leaders to manage and lead teams effectively.

*Keywords: Fairness, Deep-level Diversity, Ethical Leadership*

## Oral presentation OP161

### **Fake it 'til you make it – An investigation into current Impostorism research and development of the Occupational Impostorism Scale**

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science

The impostor phenomenon (IP), also known in popular culture as imposter syndrome or impostorism, describes a subjective feeling whereby people perceive themselves as frauds, despite objective evidence of success and accomplishment. Initially observed in professional and successful women in their psychotherapy practice, Clance and Imes (1978) used the term, Imposter Phenomenon, to describe individuals who were not able to internalize their success, suffered from fear of failure and felt undeserving of their achievements. In the workplace, impostor feelings are frequent (Harvey & Katz, 1985) and detrimental to job attitudes (e.g., Vergauwe, et al., 2015), behaviours (e.g., Vergauwe et al., 2015), and career-related outcomes (e.g., Neureiter & Traut-Mattausch, 2016).

Even though the IP is a widely researched and popularised construct, researchers have not based their research on a common conceptualisation of the phenomenon, giving prominence to more distal attributes of the concept (e.g., self-esteem, personality traits, anxiety) instead of determining the core of the phenomenon. This becomes evident when reviewing the literature: several definitions and conceptualisations have arisen throughout the last few decades, each of them pointing out the problems and shortcomings of the previous one (e.g. Leary et al. 2000; Kolligian and Sternberg, 1991). Resulting from conceptual ambiguities is a lack of appropriate and psychometrically sound measurement of Impostorism (Mak et al., 2020).

This study fills the caveat resulting from previous Impostorism research. By having reviewed the emerging topic of Impostorism in several research areas, we clarify the nature of Impostorism in the workplace by providing a clear theoretical framework with which to examine the construct, accompanied by a newly developed scale to measure Occupational Impostorism (OI). Anchored in a self-regulation/cybernetic control theory framework, OI is defined as a person's subjective feeling of fraudulence when doing one's job. Underlying this experience is a discrepancy between one's self-appraisal (i.e., one's skills, abilities, and experiences) and the formal requirements of a job role. Since self-discrepancy processes have been picked up on (but not sufficiently elaborated on in its role for OI) (e.g., Tewfik, 2022; McElwee & Yurak, 2007), we build on this perspective to advance the development of a scale capturing the feelings of fraudulence stemming from this precise imbalance.

A classic scale development approach (DeVallis, 2012) was chosen for this study. The first stage focused on generating items to capture the Occupational Impostorism construct based on a literature review with reference to previously developed scales to measure impostor constructs. Content validity was assessed by having PhD students of the university's management department rate the suitability and readability of 12 items. In the second stage, online data of 266 UK residents at two timepoints were collected. Exploratory factor analysis (EFA) was used to reduce the number of items and assess the scale structure and properties. The nomological network was checked to establish that the scale assessed a distinct construct and explained additional variance in relevant organisational and general outcomes. Construct validity was assessed by correlating scores on the scale with those of constructs from the nomological net. Results show that the OI scale has high reliability, with a Cronbach's alpha of .94 and shows appropriate correlations with related and distinct constructs. Using a second sample, confirmatory factor analysis (CFA) will be used to test the

identified factor structure upon completion of the next data collection phase in December 2022. However, the study design and methodology bear some limitations. Since this scale development study is embedded in a larger PhD research project, the scope of data collection and sample sizes are limited. Furthermore, future research needs to validate the scale in multi-national samples to confirm cross-cultural generalisability.

By providing a solid theoretical foundation from which to examine this emerging construct with a psychometrically sound measurement, this study contributes to workplace behaviour and Impostorism research and practitioners' understanding of how to support employees' OI experiences. Thereby, this study contributes to the UN Sustainable Development Goal of fostering good health and wellbeing and integrates well with the congress theme – our study emphasises that the emerging construct of impostorism should receive more attention in management and organisational behaviour research and in the workplace, since it can have a strong impact on employee's work behaviour, their attitudes and performance outcomes; a better understanding of the phenomenon will contribute to better workplace wellbeing and health, thus contributing to a positive change in in the world of work.

*Keywords: Impostor phenomenon, scale development, self-regulation*

## Oral presentation OP59

### **Feeling stuck: How does career plateauing affect emotions and counterproductive work behaviours?**

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science

#### Research goals

Although career plateauing has been studied for decades, we know very little about how it affects employees' emotions and behaviours. Early theorists suggest that plateauing is a universally unpleasant phenomenon and leads to similarly unpleasant emotions, like frustration or anger. Moreover, early researchers have proposed that plateauing is associated with unethical acts, like counterproductive work behaviour (CWB), though these claims have not been rigorously tested.

#### Theoretical background

Career plateauing describes a subjective state in which employees perceive that, in their current role, their chances of future promotion (hierarchical plateau) or new opportunities, responsibilities, challenges (job content plateauing) are very low. It has been associated with poor outcomes, such as worse well-being and job attitudes. Although early researchers have linked career plateauing with both negative emotions and unethical behaviours, these claims have been untested or poorly tested (e.g., with correlational and/or cross-sectional methods). Further, researchers have not offered theoretical explanations as to why plateauing is linked with feeling 'bad' and employee deviance.

To elucidate the theoretical mechanisms linking plateauing and CWB, we draw on the stressor-emotion model of CWB and situate plateauing as a stressor. The stressor-emotion model also emphasises how stressors are subjective, as individual differences influence the extent to which we perceive job or environmental factors as stressful. Specifically, employees who view plateauing as a threat are likely to experience negative emotions, which means they are more likely to engage in destructive behaviours as a way to relieve frustration and anger. We propose that emotion regulation ability moderates this relationship, such that employees with lower emotion regulation ability are less able to recognise and manage negative emotions caused by plateauing, leading to maladaptive responses, like an increased tendency to CWB. Alternatively, employees with higher emotion regulation ability are better able cope with unpleasant feelings, leading to them reporting experiencing fewer negative emotions and subsequent CWB.

#### Design

This study was part of a wider project on plateaued employees. Data were collected using a three-wave survey of 193 working adults.

#### Results

Using SPSS and PROCESS, we found that both plateauing types were related to negative emotions, but not to CWB. Rather, plateauing was indirectly related to CWB, only via negative emotions. Lower emotion regulation ability strengthened the relationship between only job content plateau and negative emotions, while higher emotion regulation ability had no moderating effect.

#### Limitations

We conceptualised negative emotions as a general construct. Future researchers may wish to examine this model using discrete emotions, such as anger or sadness. We conducted our surveys at the height of the COVID-19 pandemic; this extraordinary, exogenous event may have affected how participants perceived their work, how they experienced negative emotions, and the extent to which they could engage in CWB.

#### Research/Practical Implications

Regarding research implications, we examine early claims that plateauing leads to destructive behaviours; claims which weren't well supported empirically and lack theoretical explanation. By contextualising plateauing in an established CWB model, we elucidate plateauing's emotional and behavioural outcomes, and show how emotions play a role in whether plateaued employees engage in CWB. To explain why only low emotion regulation ability moderated only job content plateauing, we suggest that experiencing job content plateauing may encourage worse emotional states that are beyond one's emotion regulation ability. Past work suggests job content plateau is associated with boredom and depression, employees may feel less stimulated and there is a greater chance for them to engage in dysfunctional cognitive processes, like rumination, which can worsen one's emotional states.

Regarding practical implications, we show that plateauing itself is not harmful. Managers should therefore not see plateaued employees as inherently problematic. While we acknowledge that plateauing is inevitable in many workplaces, managers can try to reduce job content plateau, as it results in more negative emotional states and has harmful organisational implications, as employees are more likely to engage in CWB. Managers may seek to reduce job content plateau through participative interventions, such as job redesign.

#### Originality/Value

Our study is one of the first to examine career plateauing's emotional and behavioural consequences using stronger empirical methods. We highlight how plateauing is not only leads to individual-level harm, but also affects the workplace at the organisational level.

#### Relevance to the Congress Theme

Careers and the labour market

Relevant UN SDGs

Decent work and economic growth

*Keywords: Career plateauing; Counterproductive work behaviours; Emotion regulation ability*

## Oral presentation OP60

### **Female entrepreneurs need to be self-efficient and not risk-taking: The validity of personality differences throughout the entrepreneurial journey**

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science

Research goals and why the work was worth doing: The aim of the present research was to examine interindividual differences in personality traits among female entrepreneurs throughout the entrepreneurial journey. In particular, we aimed to examine whether successful female entrepreneurs differ from less successful ones in their personality traits and which personality traits are relevant at different entrepreneurial phases. This is important as research so far has suffered from an overemphasis on male entrepreneurs as women are still underrepresented in the start-up scene. This work a) contributes to existing knowledge on female entrepreneurship and b) helps integrating the process perspective into empirical entrepreneurial research.

Theoretical background: In recent years, there has been growing interest in successful entrepreneurship, however, little is known on female entrepreneurship. Most studies to date either neglect a gendered perspective, the consideration of entrepreneurial success variables or the investigation of the entrepreneurial journey as a multi-phased construct. In summary, research to date has a) not been able to provide satisfactory data on successful female entrepreneurs and b) not empirically tested the importance of specific personality traits holistically across the entire entrepreneurial journey. This is important as the phases pose different demands on the individual, hence, it is likely that the relevance of personality traits changes during the entrepreneurial process.

Methodology: Data on personality and perceived, phase-specific success variables were drawn from a cross-sectional study with N = 305 female entrepreneurs in the DACH-region. Data were collected via a self-assessment tool for entrepreneurs. The research questions were elaborated using independent t -tests and multiple regression analysis.

Results: The results showed that successful and less successful female entrepreneurs significantly differed in eight out of twelve personality traits. The largest differences were found for proactivity, self-efficacy, need for achievement, and internal locus of control, which were more prominent in successful female entrepreneurs than in their less successful peers. Successful females also showed a higher need for autonomy, higher innovativeness, openness, and perseverance. Interestingly, risk-taking, an often-studied personality construct in entrepreneurial research, was not identified as a success driver for female entrepreneurs. Furthermore, phase-specific findings point to the importance of self-efficacy throughout the whole entrepreneurial journey. Need for autonomy was important for pre-launch and launch, while locus of control was important for pre- and post-launch, but not for the launch phase. Again, risk-taking was not a crucial trait for female entrepreneurs in any phase as it did not correlate with phase-specific success.

Limitations: The generalizability of the results might be influenced by the use of cross-sectional and self-reported data. Future research should enhance a longitudinal design with multiple data sources to avoid common method bias. Also, the data might be affected by an overrepresentation of successful entrepreneurs. Furthermore, the study had a focus on personality. Future studies should extend the analyses to other potential success factors, such as access to funding, team composition, personal socio-economic status or micro- and macroenvironmental country-specific factors.

Conclusions: A female-specific lens for both, practice and research, is needed. The study points to the importance of self-efficacy for female entrepreneurs for overall and phase-specific success. Hence, trainings or coachings should concentrate on increasing female's self-efficacy and belief in their entrepreneurial skill-set. Furthermore, coachings and trainings should be designed more specifically to what female entrepreneurs really need in a certain phase, not only in regard to self-efficacy, but also in regard to other traits, e.g innovativeness or proactivity. The investigated personality traits, which were crucial for perceived success, should not be understood as a certain typology of "the" female entrepreneur, but should rather be interpreted in terms of a strengths-and-weaknesses profile.

Relevance to the Congress Theme: The study contributes to the congress theme in the sense that we focus on current issues such as gender and equality in connection with start-ups and entrepreneurship as important future topics in today's working world. Therefore, the study sheds light on the subtheme of "creativity, innovation and risk-taking".

Relevant UN SDGs: The study contributes to the goal of gender equality as we derive implications for a gendered perspective in entrepreneurial education and reinforce support formats that specifically address the needs of women.

*Keywords: Female entrepreneurship, self-efficacy, risk-taking*

## Oral presentation OP123

### **Finding a Silver-lining in Presenteeism: Examining the antecedents and consequences of autonomous versus controlled motivation for presenteeism**

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science

Research goals and why the work was worth doing

Working while sick, or presenteeism has attracted increasing research attention due to its significant impacts on employees, employers, and various stakeholders. While much research has been done to understand this important phenomenon (Lohaus & Habermann, 2019), there are two important limitations. First, although literature suggests that employees may have different motives for presenteeism, there is a lack of research to systematically differentiate them; even less has been done to understand the antecedents and consequences of these motivations. Second, while much research has identified a wide range of personal and contextual factors leading to presenteeism, and the outcomes of presenteeism, research has yet to examine the mechanisms that explain the relationships between antecedents and outcomes of presenteeism. Thus, in line with self-determination theory (SDT) (Deci & Ryan, 1985), this research aims to: 1) differentiate autonomous versus controlled motivation for presenteeism; 2) examine if autonomous versus controlled motivation for presenteeism mediate the impacts of ego resiliency and wellbeing supervisor support behavior (WSSB) on task performance and emotional exhaustion.

Theoretical background

According to SDT (Ryan & Deci, 1985), individuals who are internally driven or experience the support of basic psychological needs from the external environment are more likely to develop intrinsic and internalized motivation for their behavior, leading to better performance and well-being. Based on the theory, this research proposes 1) ego resiliency and WSSB are positively related to autonomous motivation but negatively related to controlled motivation; 2) while autonomous motivation positively relates to task performance and negatively relates to emotional exhaustion, controlled motivation negatively relates to task performance and positively relates to emotional exhaustion. 3) autonomous motivation mediates the relationships between ego resiliency/WSSB and task performance/emotional exhaustion; in parallel, controlled motivation mediates the relationships between ego resiliency/WSSB and task performance/emotional exhaustion.

Methodology

To test our proposed model, we conducted two empirical studies. In Study 1, we used data obtained from 240 full- and part-time employees recruited via Qualtrics. In Study 2, we replicated the study with a time-lagged design with data obtained from 190 full-time employees of the subsidiary of a multi-national company in China. All the participants in the two samples had varying levels of presenteeism behavior in the last three months prior to the data collection. Both studies were conducted between April and October 2021.

Results

The results showed that (1) both ego resilience and WSSB are positively related to autonomous motivation for presenteeism, but not controlled motivation for presenteeism; and (2) autonomous motivation is positively related to task performance, but negatively related to exhaustion; in

contrast, controlled motivation is positively related to exhaustion but negatively related to task performance. (3) autonomous motivation mediates the relationships between ego resilience/WSSB on task performance.

#### Limitations

This research has some limitations which suggest directions for future research. First, our studies were based on self-reports. This gives rise to the possibility of contamination of the reported relationships due to common-method bias (CMB). Future studies can improve the design by including data from other sources. Second, although our results were consistent with theory, the causal effects of the relationships discussed in our studies cannot be clearly determined, future research needs to use experiments to ascertain the causality and reciprocity of the study variables.

#### Conclusions

This research offers several important theoretical and practical implications: first, our research differentiates two different motives for presenteeism. By demonstrating their different impacts on task performance and emotional exhaustion, our research highlights the importance of examining the motives behind employees' presenteeism behavior. While autonomous motives can benefit performance and well-being, controlled motives can harm both. Second, our research provides evidence for the utility of SDT, unpacking why individual personal factor (ego resiliency) and contextual factor (WSSB) can influence the outcomes of presenteeism both in terms of performance and well-being.

#### Relevance to the Congress Theme

This research is relevant to the theme of employee wellbeing. Our research goes beyond the previous research which sees presenteeism as universally negative and provides a more nuanced understanding of this important phenomenon.

#### Relevant UN SDGs

This research is relevant to two UNSDGs: good health and well-being and decent work and economic growth.

*Keywords: motives for presenteeism, ego resiliency, wellbeing supervisor support behavior*

## **Oral presentation OP796**

### **Finding and developing Game Changers to transform organisations**

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science&practice

**Background:** Innovation and transformation are much mythologised in business storytelling. The economic need for growth requires doing transformation well, particularly identifying people who think differently and who can focus on making it happen. As the result of a corporate client asking 'what are the differentiating characteristics of people who can drive transformational change?' the researchers were able to more scientifically investigate what makes a game changer.

**Goals:** This paper presents the development of an Index, represented as an Organimetric, that measures and describes proclivities, rather than personality. Case studies will show that when it comes to making an impact, the language and concept of proclivities both resonates and is practical, as it can rapidly be applied at the individual, team and organisational level.

**Methods:** The development of the Index is described. Three years of research followed in 3 main phases: Phase 1 was an initial exploration of the characteristics of these individuals - called 'Game Changers' - using Repertory Grid interviews which yielded 180 observations from 20 interviews. Phase 2 built on phase 1 suggesting defining characteristics for Game Changers under 2 broad constructs: Imagination and Obsession. External experts were involved to test a set of items designed to measure individual differences in the perception of Imagination and Obsession. Phase 3 expanded initial interest in Game Changers on the basis of self-perception data. As a result of feedback with talent specialists, a factor analysis of 1000 completed questions was completed to explore the meaning of different responses to the questionnaire, e.g. how to make sense of people who score low on both Imagination and Obsession?

**Results:** Game changers do exist, so do four other distinct proclivities. The three phases of research yielded reliable and valid measures of five different proclivities when it came to making an impact at work. These differences are now represented as an Organimetric identifying both individual and collective impact of how people contribute to the achievement of strategic goals.

**Limitations:** Case work was originally based on UK samples. Whilst ongoing international sampling has found very few differences across group proclivity scores, more data needs to be gathered to fully confirm, and replicate the formative validation studies.

**Conclusions:** Through a series of practical application case studies, the Index is shown to provide a language and framework that can be used to inform key business decisions (from talent management to digital transformation) across a range of organisations and sectors for human benefit and economic growth.

**Relevance to the conference theme:** The future is being created now through the ideas of Game Changers, alongside their effective collaboration with colleagues of different proclivities, to make transformation happen. The Index provides an inclusive approach by acknowledging the diversity of thought and action that come from different proclivities.

*Keywords: Change, Innovation, Development*

## Oral presentation OP289

### **Flattering to deceive: Understanding the disparity between obligations and actions to support employee wellbeing**

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science&practice

**Research Goals:** It is not only what organizations do in relation to employee wellbeing that matters, but also how this is perceived by employees and the extent to which it meets expected obligations. If organizations are not regarded as authentic in pursuing wellbeing they are unlikely to effectively support employee wellbeing. The disparity between organizations' obligations and their actions on employee wellbeing as perceived by employees is likely to be critical to our understanding of employee experiences and wellbeing more specifically. Our aim was to investigate this. We developed and tested a new scale, 'Perceived Organizational commitment to Wellbeing' (POW) that measures employees' perceptions of their employers' obligations and their actions. In short, what employers do in relation to wellbeing, but also what they should do and importantly the disparity between the two. This is a key contribution to literature on organisational and employee wellbeing.

**Theoretical Background:** Existing concepts and measures such as psychosocial safety climate (PSC), aim to capture the extent to which organizational climate supports employee wellbeing but do not account for the perceived gap in obligations versus the support they provide for employee wellbeing. Psychological contract theory understands the relationship between employee and employer as a social exchange based on the norm of reciprocity, whereby the terms of the employment contract are constructed psychologically. Terms of exchange are typically considered as economic (transactional) and social (relational), but ideological is another dimension that highlights the importance of alignment between employer and employee perceptions and "contract breach" arising from disparity. Our research underlines the importance of how an organization pursues or realizes employee wellbeing in ideological, relational and transactional terms and whether this aligns with perceived obligations.

**Research Design:** We developed the POW scale by adopting a multi-method multi-study approach. Initial scale items were informed by the theoretical background and case study research of organizational wellbeing. After developing an initial list, we sought qualitative and quantitative feedback on these items from a group of experts on organizational wellbeing. Following this, the validation of the scale and the posited model were investigated through three quantitative studies. Study 1 included 307 UK employees (69% women). Study 2 and Study 3 were 3-wave studies. Study 2 included at T1 523 UK employees (44% women), and Study 3 included at T1 512 UK employees (34% women). Structural equation modelling was used for all the analysis.

**Results:** Results of the Confirmatory Factor Analysis (CFA) evidenced the good fit of the POW CFA model assessing both perceived obligations and actions for wellbeing. Results also showed that the two POW dimensions were different from existing related measures of organizational wellbeing climate. All the three studies attested the suitability of the POW scale to assess the disparity between perceived obligations and actions for wellbeing. Finally, we found support for our hypothesized model: A disparity in obligations and perceptions of employer actions towards employee wellbeing at T1 was associated to higher imbalance in Efforts and Rewards at T2 that in turn was associated to poorer employee wellbeing at T3 (Study 2:  $SB\chi^2(213) = 354.010$ ,  $p < .001$ ; CFI = .98; SRMR = .063,

RMSEA=.036, 90%CI: .029 .042, p=1.00. Study 3: ( $SB\chi^2(213) = 294.174$ ,  $p < .001$ ; CFI = .99; SRMR = .058, RMSEA=.027, 90%CI: .019 .035, p=1.00).

**Limitations:** We present evidence for the validation and application of a new scale, which is yet to be extensively tested. However, our initial analysis uses a robust range of methods to establish validity and in its application supports hypothesized relationships with employee wellbeing.

**Conclusion:** The POW scale demonstrates the importance of understanding the disparity between employee perceptions of what actions employers should take versus what actions they are perceived to take in relation to wellbeing. POW is likely to have further application in understanding the importance of employees' perception of organizational wellbeing and has potential for exploration with a range of other variables and multi-level analyses. Cross-cultural variation in POW is also another interesting avenue for further research.

**Relevance to Congress Theme:** The experience of the COVID-19 pandemic over the last two years has underlined the agenda for employee wellbeing that was already established as an important responsibility and goal for organizations. Our paper establishes a new scale that can help organizations and employees better understand how to address employee wellbeing genuinely and effectively.

*Keywords: Organisation, Well-being, Scale validation,*

## **Oral presentation OP541**

### **Focus Time – Reducing stress and increasing productivity**

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Motivation and research goal

Knowledge workers are under increasing pressure to increase productivity. Tools and systems like SCRUM and Agile are used to streamline processes and ensure that agreed tasks are delivered. This works well when the knowledge workers can devote their full time to the projects.

When the knowledge workers also have a reactive role towards the organization e.g. support and development of new business ideas they get interrupted often. Knowledge work requires focus and preparation before actual work can be done. Preparation can be reading up on specs and understanding the problem. This mental preparation leads to solving the task and interruptions during this process mean the process has to be restarted and time is lost.

Hence interruption of knowledge workers has a detrimental effect on productivity and wellbeing as it leads to a sense of being unable to complete any tasks.

The purpose of this research was to examine if dedicated and uninterrupted time - Focus Time - to complete knowledge-intensive tasks would have a positive influence on productivity and wellbeing.

Study design

A programming department (33 employees) and a communication department (7 people) from a Danish insurance company participated.

During a 5 week experiment the participants agreed to:

Book up to 5 hours a week of Focus Time in their calendar

Every morning they should reflect on the most important tasks and plan their work.

All participants were offered a free Garmin fitness watch if they were willing to wear the watch and share pulse and stress data with the project.

We collected data on Focus Time from the participants calendars (outlook) and linked the data to the Garmin data.

We used Garmin's stress score, which is measured as heart rate variability (Garmin, 2020) as our measure of stress. Participants used the watches two weeks before the experiment for the watches to calibrate and create a baseline.

Following the experiment, we conducted focus group interviews with 16 participants.

Results

During the first week of the experiment, only few participants engaged in Focus Time. A pit-stop meeting in week two revealed that participants were not comfortable with signaling that they were not available to the rest of the organization. Availability was considered to be highly important to remain relevant for the organization. The managers had used Focus Time and praised it at the pit-

stop. This changed the perception and participants started using Focus Time. A key learning here is that managers must show the way by example for people to follow.

Not all employees used Focus Time which allowed us to ascertain the effect of Focus Time. Employees using Focus Time changed their physiological stress pattern and had a higher frequency of stress activation in the morning compared to the non-Focus Time group. The Focus Time group showed lower stress activation in the afternoon compared to the non-Focus Time group. The non-Focus Time group exhibited the highest stress activation in the afternoon toward the end of work.

This was cooperated by the interviews which showed that Focus Time and morning planning changed work patterns so that important tasks were prioritized and completed during Focus Time. Without Focus Time and morning planning employees started working on the task that was on top of their minds perhaps because they were randomly asked about a project. This meant that the first half of the day was spent on relevant but not important tasks. Approaching midday/afternoon they realized that some important tasks had to be completed and they scrambled to do so resulting in high stress activation. A further negative consequence was that the group without Focus Time and morning planning also experienced more overtime work.

#### Limitations

This study is limited to two departments in a single company. The experiment was done as an intervention with no comparison group. However, we established a baseline before the experiment. Further we were fortunate that a portion of the employees did not follow the guidelines allowing us to compare the two.

The study design does not allow us to separate the effect of Focus Time and Morning planning.

The researcher participated in planning and executing workshops as well as interviewing which may lead to biased inference and conclusion.

#### Conclusion

Focus Time and Morning planning can positively influence wellbeing i.e. reduce stress activation, reduce overtime and increase sense of accomplishment.

The experiment ran for just 5 weeks demonstrating that it is possible to make significant changes in work patterns leading to positive effects on employee wellbeing in a short period of time.

#### Relevance to Congress Theme

The study is relevant as it points to changes that can be made now to address the urgent problem of stress in knowledge work. The use of tracking stress activation with non-intrusive devices is an important next step in understanding the wellbeing effects of organizational interventions.

*Keywords: Intervention, stress, productivity*

## Oral presentation OP209

### **Folie à deux : How Mavericks shape the relationship between the dark and light personalities and deviant behaviors**

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science&practice

Theoretical background:

Deviant behaviours have mostly been investigated for their negative. Studies have linked deviant personality traits to equally deviant, however not all personalities are deviant and not all deviant behaviours have negative impact or intent.

In the field of extreme personality traits, two combinations stood out. The dark triad (DT), a trident of subclinical personality traits of narcissism, Machiavellianism and psychopathological traits mostly associated with detrimental effects within organisations. On the positive side of personality traits, the triad of light (LT) is defined as a constellation consisting of three personality dimensions - belief in the goodness of living beings (faith in Humanity), valuing dignity and every living being (Humanism) and treating people fairly and humanely (Kantianism). Not surprisingly, LT is linked to a set of positive impacts on the organisation in the form of individual outcomes such as leadership, resilience, creativity and performance.

Surprisingly maverickism, has not received much attention from the organisational sciences. Mavericks exhibit a personality characterised by being disruptive, translating into unconventional, creative, dynamic behaviours and an apparent disregard for organisational norms and policies. Characteristics such as dynamism, goal focus, creativity and disruption are critical to the innovation process and organisational survival in troubled times. Although there is a negative connection with maverickism, recent studies, associate it with positive organizational outcomes.

Deviant behaviours have mostly been investigated for their negative impacts. Studies have linked deviant personality traits to equally deviant behaviours, however deviant behaviours have mostly been assumed negative, with positive deviant behaviour being neglected.

Purpose:

Based on Trait Activation Theory (TAT) context can interfere with the relationship between personality traits). TAT presents a condition that is intrinsic to the individual in the form of personality traits and skills/abilities that being latent, are activated under certain contexts in order to obtain an intrinsic reward. Supported by the Trait Activation Theory our model analysed whether maverickism would moderate the relationship between the three dimensions of the Dark Triad, Light Triad and deviant behaviours (positive and negative).

Methodology: to achieve our proposed goal, we used a sample of 200 currently employed participants.

Findings: The results showed that individuals who scored higher on Dark Triad traits engaged in more negative deviant behaviours and individuals who scored higher on Light Triad traits engaged in more positive deviant behaviours. However, the mavericks intensified the engagement in each behaviour corresponding.

Limitations: The cross-sectional design should be regarded as a limitation, and we assessed all the variables through self-reported measures.

Originality/value: Such results allow a better understanding of employees' behaviour and extreme personality traits. It also allows understanding the relationship between maverikism traits and extreme personality traits, and what outcomes result from this coexistence. The present study is a warning sign for managers, mainly those in human resources, as well as an opportunity to develop mechanisms to identify the coexistence of such traits and/or create environmental and inter/intrapersonal conditions that suppress or exponentiate their impact.

Relevant UN SDGs: (3) Good Health and well-being; (8) Decent work and economic growth and (16) Peace, justice and strong institutions

*Keywords: dark triad, light triad, deviant behaviors*

## Oral presentation OP600

### **Friendly Phantoms: How do individuals use their feared selves to construct a positive work identity?**

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#### Research goals

How individuals think about their potential and themselves in the future has been the focus of research on “possible selves” in management and social psychology (Ibarra, 1999; Markus & Nurius, 1986). A person’s possible selves include who they would like to become, i.e., desired or wanted selves and who they want to avoid becoming, i.e., feared or unwanted selves (Markus & Nurius, 1986). Research shows that people strive towards their desired selves and avoid their feared selves (Carver et al., 1999). We aim to extend prior research and explore the role of the feared selves in achieving positive identity outcomes. Specifically, we ask the following research question: How do individuals use their feared selves to construct a positive work identity? This is important because the contents of people’s feared selves contain internalized unwanted emotions, hence, have stronger influence on motivation and goal-directed behavior (Carver et al., 1999). As such, these self-representations may constitute clearer self-guides for individuals to work on their identities.

#### Theoretical background

Research on possible selves has predominantly focused on how people continuously strive for their desired possible selves (e.g., Ashforth et al., 2014). For example, Ibarra (1999) described how newcomers experimented with their provisional selves by imitating their role models based on how they saw & desired to see themselves. It is surprising that the implicit assumption underlying most of the research is that individuals shape their work identities solely via their attraction to a desired self. Social psychology research, however, explored the self-regulatory role of both desired & feared selves. A very limited number of organizational studies examined the role of unwanted selves in the development of a work identity (i.e., Petriglieri & Stein, 2012; Vince & Mazen, 2014). These studies highlight the negative impact of leaders’ unwanted selves. A question that still remains is whether people’s feared selves may have benefits as well.

#### Methods

We draw on qualitative data from 68 independent workers in the UK to build a grounded model that addresses our research question. Independent work is a relevant context to study our research question because individuals need to exhibit agency & take the lead in crafting their possible selves in the absence of the holding environment of an organization.

#### Findings

Our findings show that workers’ lack of having clear sense of self at work have stimulated the activation of workers’ “feared selves” – what they dread and do not want to be. We theorize that workers deposit these images in what we call a repertoire of “Feared Selves”. This repertoire is a mental container in which workers accumulate all the work identities (or aspects of them) they enacted that are incongruent with their work self-concept. Workers proactively use the images to revise their work identity. Specifically, they engage in three identity work tactics: they embrace and integrate some of their feared selves (i.e., holism); rebuff some of these feared selves by developing

boundaries and using these images in defining who and what they are not (i.e., identity deflection); or selectively separate their work self from the enactment of their unwanted selves (i.e., identity decoupling). By engaging in these identity work tactics workers develop a sense of identity growth that helps them to sooth their sense of identity precariousness.

#### Limitations

It is important to note that we purposefully selected our sample. Through creating theoretical criteria, we selected workers who asserted having a degree of freedom in doing their work. We acknowledge that this might not be the experience of all individuals working in the gig economy.

#### Conclusion

Our study makes two main contributions. First, by tracing the role that feared and unwanted selves play in achieving positive identity outcomes, this study advances our understanding of positive identity construction. Second, our study advances our understanding of the different ways independent workers shape their work identities. This enhances our understanding of independent work, suggesting that workers could benefit from defining what they fear and do not want to be to grow and feel free.

#### Relevance to the Congress

This study complements the theme The 21 st EAWOP Congress. For many, based on the events of the past 3 years (e.g., the pandemic, wars...), the future could be associated with a lot of fear. Our study aims at helping people understand how to use their feared future selves to cultivate positive and resilient work identity, which is a fundamental personal resource that people can rely on in facing change and turbulences.

#### Relevance to the UN SDGs

Harnessing the benefits of the feared selves and understanding how it could help people cultivate positive work identity contributes to empowering individuals develop decent work opportunities for themselves and to their overall wellbeing at work.

*Keywords: Identity, possible selves, independent work*

## Oral presentation OP148

### From personal resources to proactive work strategies and performance: Testing the antecedents and outcomes of strengths use in a three-wave study

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science&practice

Research goals: Despite growing evidence regarding the positive consequences of strengths use at work, few studies have attempted to identify malleable precursors of strengths use that can fuel employees' engagement in such proactive behaviors. Furthermore, due to a lack of synchronous investigations, there still seems to be a high amount of ambiguity regarding the placement and temporal precedence of strengths use in relation to cognitive-affective factors and performance.

The present study addresses these gaps. We test employees' psychological capital (PsyCap – a second-order factor comprising self-efficacy, hope, resilience, and optimism; Luthans et al., 2007) as a person-dependent cognitive-affective factor that promotes performance through strengths use. Additionally, the proposed mediation model is tested through a cross-lagged panel model, which allows us to test reversed and reciprocal relationships between PsyCap, strengths use, and performance. This approach can enlighten a temporal sequence in the emergence of this study's variables, providing clarity regarding strengths use's placement within the JD-R theory.

Theoretical background : The proposed mediation model is rooted in the Job Demands-Resources (JD-R; Bakker & Demerouti, 2017) theory. From a JD-R perspective, employees who believe they can alter their work environment (i.e., personal resources) draw upon their "can do" mindset to also engage in proactive behaviors that translate their beliefs into action (e.g., strengths use), reflecting on their performance (Bakker & Demerouti, 2017). Based on these theoretical considerations, we argue that employees with a success-oriented mindset (i.e., PsyCap – "what one is") will possess the motivational propensity to initiate proactive behaviors tailored to their strengths ("what one does"), leading to increased performance.

Design/Methodology : Data were gathered online across three months (one monthly questionnaire) from Romanian employees (T1 – N = 463; T2 – N = 347; T3 – N = 287). We used Structural Equation Modeling (SEM) in Mplus 8.5 (Muthén & Muthén, 2017) to compare a series of alternative measurement (Harman's single factor; longitudinal invariance) and structural models (auto-regressive, causal, reversed, reciprocal). We tested the hypothesized indirect effect (PsyCap > strengths use -> performance) from 5000 bootstrap samples.

Results obtained : The best-fitting model was the causal model, showing that PsyCap predicts strengths use over time, while strengths use predicts employee performance over time. Furthermore, while no direct effect was found between PsyCap and performance, there was a statistically significant indirect effect through strengths use. As such, PsyCap appears to be a distal predictor of performance, with strengths use acting as a full mediator of the relationship.

Limitations : The investigation's design permits only causal-like inferences (Little, 2013). Second, we relied on single-source self-reported data; employing more diverse and objective means for data collection would lend further credibility to our model. Third, our sample consists of white-collar and highly educated workers from Western culture. This may inhibit the generalization of our findings.

Conclusions – research and/or practical implications/Originality/Value: The main theoretical contribution of this paper is uncovering the role and place of strengths use within the JD-R theory. "What one is" (i.e., PysCap) must be translated into behaviors or "what one does" (i.e., strengths use) to elicit an increase in performance. Next to uncovering antecedents and outcomes of strengths use behaviors, our model clarifies the directionality of relationships between the employed variables. Strengths use, as opposed to other individual strategies (e.g., job crafting), does not appear to trigger a positive gain cycle (Hobfoll, 2011), probably due to the usage of internal resources (i.e., strengths), which are harder to notice and link to positive work-related outcomes.

From a practical perspective, we provide practitioners with a model containing only person-contingent factors that can sustain performance over time. Even if organizations cannot foster organizational resources that can enhance performance from a top-down approach, they can train their employees from a bottom-up approach to reach augmented performance levels.

Relevance to congress theme and alignment with UN SDGs : The parsimonious bottom-up approach unveiled in this study is vital for employees who work from home and have limited access to organizational resources (e.g., social support) that can stimulate employee performance. Furthermore, developing such personal factors could facilitate learning by building the resources and skills necessary to perform better in new positions, reflecting on enhanced career self-management (Baruch & Sullivan, 2022). Overall, the model promotes sustainable economic growth and an optimal way to achieve better work functioning.

*Keywords: PsyCap, strengths use, employee performance*

## Oral presentation OP340

### Future Work Selves, Proactive Career Behaviours and Future-Oriented Emotions in the University-to-Work Transition

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science

Research goals: Graduates' proactive career behaviours are a key determinant of a successful school-to-work transition. Research suggests that salient future work selves motivate and predict both proactive career behaviours and job search success. However, future-oriented emotions, such as negative anticipatory emotions, are commonly experienced during the school-to-work transition and can influence goal-directed behaviour. Hence, such anticipatory emotions have the potential to change engagement in proactive career behaviour and ultimately transition success. The present study addresses this research gap by examining the moderating role of negative anticipatory emotions, on the relationships between graduates' future work self, proactive career behaviours and job search progress. By focusing on negative anticipatory emotions as a moderator, we aim to shed light on how emotions impact graduates' career development and derive insights for theory and practice alike.

Theoretical background: Salient future work selves provide graduates with a clear image of who they want to be in the future within a work context. In line with control theories, future work selves highlight the discrepancy between graduates' current and desired work self and therefore prompt proactive career behaviours that minimize this discrepancy. Engaging in proactive career behaviours in turn predicts increased job search progress. Hence, we expect that increased levels of future work self will have a positive indirect effect on job search progress through proactive career behaviours. Similar to future work selves, experiencing negative anticipatory emotions during the school-to-work transition may indicate a discrepancy between graduates' desired and current state of their career transition, and prompt behaviours that minimize this discrepancy. We propose that higher levels of negative anticipatory emotions will strengthen the positive relationship between future work self and proactive career behaviours because graduates' future work self will provide guidance in utilizing these emotions as an additional motivation to reduce discrepancies.

Design: Graduate students (N = 375) who are about to graduate within the same year participated in a three-wave study on a biweekly basis. Future work self salience and negative anticipatory emotions (worry, anxiety) were assessed in the first wave, proactive career behaviours (networking, job information seeking) in the second wave, and job search progress in the third wave using validated self-report scales. Control variables (gender, previous jobs, job counseling) were assessed in the preselection and fourth wave.

Results: We found support for the direct effect of future work self on proactive career behaviours, while controlling for initial levels of proactive career behaviours. An indirect effect of future work self on job search progress was found for job information seeking as a mediator, but not for networking. Negative anticipatory emotions moderated the indirect effect of future work self on job search progress through increased job information seeking. However, contrary to our predictions, simple slope analyses revealed that lower levels of negative anticipatory emotions strengthen the indirect effect of future work self and job information seeking on job search progress.

Limitations: The study measured self-reported job search progress. Therefore, conclusions about longer-term transition success cannot be drawn.

Implications: This study adds to the proactivity and career transition literature by highlighting the role of future work selves in predicting career proactivity and job search progress in the school-to-work transition. Further, this study is the first to include negative anticipatory emotions as a boundary condition of career proactivity and transition success. The results suggest that, counter to predictions in line with control theories, negative anticipatory emotions experienced by graduates did not motivate proactive career behaviours. Rather, the results are in line with empirical research suggesting that negative affective states have an inhibiting effect on proactivity by distracting individuals from their goal and depleting cognitive resources. These insights could inform career counseling for students by highlighting the importance of salient future work selves and minimized negative anticipatory emotions for a successful school-to-work transition.

Relevance/UN SDGs: The study provides insights into how cognitive and emotional factors impact graduates' navigation of their career development in a rapidly changing market. Understanding the emotional experiences during career transitions contributes to the UN Sustainable Developmental Goal of employee well-being.

*Keywords: negative anticipatory emotions, school-to-work transition, future work self*

## Oral presentation OP605

### Gender Identity Transition in Quebec Workplaces: A mixed-methods study

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#### RESEARCH GOALS AND WHY THE WORK WAS WORTH DOING

Recent social movements have advocated acceptance of different sexual orientations and gender identities. In Quebec, research focusing on trans workers' experiences being recent (SAVIE-LGBTQ, 2018), there's still a need to explore their reality. This research examines challenges faced by trans people in the workplace, such as inadequate administrative systems and the absence of diversity initiatives. This study also discusses protective factors that help trans people negotiate these professional challenges.

#### THEORETICAL BACKGROUND

The beneficial impacts of living as per one's own gender identity are multiple, especially for one's wellbeing (Grant, 2011). However, while it is possible for these individuals to surround themselves with positive relationships, they must contend with society's and workplaces' gender norms. Studies have shown that trans individuals are at risk of experiencing violent behaviors at work (Balley, 2014). In Grant's study (2011), 90% of trans people reported experiencing harassment or abuse at work. To avoid discrimination and stigma, some trans people report having to take non-managerial jobs, positions in which they would not be overly exposed (Sangganjanavanich, 2009) and thus keep their trans identity private. Finally, to avoid negative career impacts, some trans people in positions of authority choose to conceal their gender identity from their workplace (Totaljobs, 2016). In addition to the emotional distress experienced, many report a lack of social support from their peers in the workplace (Mizock, 2018). Despite the well-established research on stigma and violence among the trans population, little data is available regarding their professional reality in Quebec.

#### METHODOLOGY

Six one-hour semi-structured interviews were conducted with trans workers in Quebec; Trans people in Quebec who are "out", or whose trans identities are known at their workplaces. Questions focused on how the GI disclosure was communicated, the violence experienced, the stereotypes/prejudice encountered, and the support obtained. Participants also completed an online quantitative questionnaire (LGBTQI-TF; Brewster, 2012) measuring the degree to which the workplace is open to trans people.

#### RESULTS OBTAINED

The survey of themes emerging from the interviews reflects a nuanced experience before, during, and after the GI disclosure. For example, knowledge of one's rights is a facilitating factor, while differences between cisnormativity and LGBTQ+ culture pose a challenge. The quantitative questionnaire also illustrates a nuanced work climate, revealing that all participants felt accepted in their workplace, but the majority didn't feel they could be themselves in their workplace and were convinced their employer wouldn't defend their rights.

#### LIMITATIONS

This study is limited by its small number of participants, which is not abnormal for a qualitative study, but still limits the generalization of results. These results also only describe the situation in Quebec, Canada. Finally, all participants were volunteers, which inherently limits the diversity of experiences.

## CONCLUSIONS

Despite these limitations, this research still found insights for organizations and future studies. Particularly in Quebec, this study underlined the effect laws had on the experience of navigating administrative changes for those transitioning and on the protection against discrimination. Our research offers insights to other workplaces looking to improve the quality of life for their trans workers; the conclusions of this study may be used to smooth the relationship between organizations and non-gender conforming employees. For workplaces, this study highlights cumbersome administrative systems used in organizations, where name changes are sometimes impossible to do. It also accentuated the importance of offering support to the employees and not taking charge in their place. Detrimental effects could arise for trans people who realize they lost control of their coming-out process. This project also offers a case study of how an inclusive workplace enhances diversity and improves the quality of life for an organization's members.

## RELEVANCE TO THE CONGRESS THEME AND UN SDG

This study falls within the scope of this congress, showing strong links with the changes in the world. Its' goals are to contribute to the DIVERSITY AND INCLUSION of SEXUAL AND GENDER IDENTITIES, by fighting UNFAIR DISCRIMINATION, three topics identified as relevant for the congress by EAWOP. This study's goal is also directly linked to the UN SDG of promoting Gender equality, particularly trans genders vs cis genders.

*Keywords: Sexual and Gender Identities; Violence; Stigma*

## Oral presentation OP311

### **Gender-Work-Identity conflict and perceived equality at the job-level and implications for diversity and inclusion.**

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Research shows that values inherent in some professions such as medicine, law and government are directly in conflict with those associated typically to women (Fox and Hesse-Biber, 1984); explained by traditional labour divisions defined by the two sexes where those roles more higher up in these organisations require more 'masculine' traits including less prioritisation for out of work family time (Sacharin et al, 2009). The salience of masculine-work-gender identity traits would increase gender work identity conflict for those in the minority identities in these contexts (i.e. for women). It is well understood that a felt sense of discrimination can arise when there is an incompatibility or conflict in gender and work identity (Meeussen et al, 2016; Branscombe and Ellemers, 1998; Tajfel and Turner's, 1979; Turner et al, 1987). And can have an impact on career success (Sacharin et al, 2009) wellbeing (Ashforth and Mael, 1989), improved job satisfaction (Veldman et al, 2017) and group belonging (Driscoll and Goldberg, 1993) at the job level.

Therefore we argue that the reduction in gender work identity conflict at the job level can decrease perceived discrimination generally; that this can be achieved at the job-level through organising aspects of work to be congruent with one's preferred gender. This can also improve wellbeing and perceived equality and a system of equitable practices to help reduce hidden inequalities at the individual level (Syed 2007, Groutsis, Ng et al. 2014, Öztürk, Tatli et al. 2015, Knappert, van Dijk et al. 2019; Wimalasiri, 2021).

To investigate this, we undertook a study in IT sales work where traditional gendered roles are known to co-exist in jobs and are identifiable (i.e. Masculine: Feminine) (Leidner, 1991). We wanted to understand perceived equality and other consequences when people had agency over their gendered-work identities. And how this influences perceived inequality at work and career progress.

#### Method:

We interviewed 24 participants from a large IT sales company in the UK (N= 24; M: 13 F:11 ) Our questions focused on perceived gender-work identity (Veldman et al, 2017) (e.g. typical gendered ideals in society and career choices; perceived work identity in the current job. And perceptions of gender balance in IT sales; perceived equalities; societal influences on gender). Questioning laddered down to the job on a daily basis (i.e. how does perception of gender-work identity conflict impact daily work?).

We used Organisational Discourse Analysis (ODA) (Fairhurst and Cooren, 2018) to understand how narratives of participants were shaping their gender identities, their relationships with others and how these in turn influenced the way they organised their daily work and how these created and diminished inequalities related to gender at the local level. ODA also allowed us to understand the wider societal influences on gender narratives in the organisation which was an advantage of using this method.

#### Findings:

Our findings show that when there is a choice, people chose gendered roles congruent with their personal-gender identity. For example, those who identified as women tended to focus on job roles

aligned more to characteristics considered feminine including higher levels of emotional intelligence and sensitivity to others (Comer, 1998). Whereas those who identified themselves as masculine tended towards work which needed more aggressive 'lad' approaches, such as skills needed for securing new sales contracts; regardless of the dominant gender -identity group. Those aspects of jobs that conflicted with personal gender identities, when most aspects were congruent, were adapted by each worker at the job-level to create a minority advantage. For example, women used flirtation to win large contracts and gain advantage over men in their section and create a niche for themselves. A third theme described a change in the attitudes to parenting that reflect changing societal norms where those identifying as men showed work-life-balance preferences which were closer to the those who identified as women, than trends in findings a decade ago in this area (i.e. Meussen et al, 2016; Allen et al, 2000).

#### Conclusion:

Findings provide empirical support to show that diversity can be influenced at the job level by workers; influencing the overall felt sense of equality in this group of workers and create emic equality practices in organisations (Öztürk, Tatli et al. 2015). Insight emerged on how gender equality in organisations are affected by wider societal frameworks and can be subject to change in tune with changing norms.

*Keywords: Gender Equality; Identity; Qualitative*

## Oral presentation OP78

### Getting ahead through political skill: Testing the toxic career model for Machiavellianism

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science&practice

Research goals and why the work was worth doing

Previous studies have shown that dark personalities (low honesty-humility) can get ahead at work through a special set of social skills in the workplace (i.e., political skill). However, an open question is whether the toxic career model can also be applied to its core traits, namely the components of the dark triad (i.e., Narcissism, Psychopathy, and Machiavellianism; Paulhus & Williams, 2002). Therefore, our aim was to examine the role of Machiavellianism in the toxic career model and to shed light on why and how Machiavellians can be successful in their careers.

Theoretical background

According to the toxic career model, dark personalities may successfully climb the organizational ladder (Kholin et al., 2020; Templer, 2018). It suggests that dark personalities use political skill at work to create and maintain a positive reputation for political skill, which results in positive performance ratings by relevant others. Furthermore, previous research supports positive associations between Machiavellianism and work related outcomes (e.g., income; Kückelhaus & Blickle, 2021). Therefore, we used the toxic career model to explain the career success of individuals high in Machiavellianism, which is composed of agency, antagonism, and planfulness (Collison et al., 2018). We hypothesized an indirect link between Machiavellianism and workplace status via self- and other-rated political skill: Individuals high in Machiavellianism should strive for stronger political skill to create a positive façade, which should lead to higher other-rated political skill and in turn to higher workplace status.

Design/Methodology

In a first step, we conducted a power analysis using the Monte Carlo-based procedure with 1,000 Monte Carlo replications (Zhang, 2014). According to Kholin et al. (2020), we expected small to medium effect sizes for the path coefficients in our model and found a minimum sample size of  $N = 316$  participants for a power of .80 with an alpha of .05 for the indirect effect. To test the indirect effect chain model of the toxic career model (Templer, 2018), we conducted a study with a multisource design with 421 triplets, consisting of employed targets and at least two co-workers, using online surveys. To avoid common-source bias, we used a criss-cross-design, splitting co-workers' ratings of political skill and co-workers' ratings of workplace status (Podsakoff et al., 2012). The indirect effect chain model was tested in MPLUS, using bootstrapping methods. Since workplace status usually increases with chronological age, we considered chronological age as a control variable.

Results obtained

As expected, we found a significant positive indirect effect of Machiavellianism on other-rated workplace status via self- and other-rated political skill. The significant positive indirect effect was also shown for the Machiavellianism aspects of agency and antagonism, but not for planfulness. In addition, we analysed the indirect effect with the reversed co-workers' ratings. There were no substantial differences between the two criss-cross versions, thus supporting the robustness of our results.

### Limitations

The cross-sectional design and the use of subjective instead of objective criteria for career success.

### Research/Practical implications

Our research contributes to the understanding of why and how Machiavellians can be successful in their careers. Due to their strive for good political skill, Machiavellians can create and maintain a positive reputation for their social skills among their co-workers, which in turn results in higher workplace status in the eye of their co-workers.

### Originality/Value

Our research tests the toxic career model in relation to one of its core traits, namely Machiavellianism, explaining how individuals high in Machiavellianism may get ahead at work.

### Relevance to the Congress Theme

As toxic personalities can harm both their organization and their co-workers, it is important to identify mechanisms how these dark personalities still can get ahead in the workplace in order to prevent those harmful consequences.

### Relevant UN SDGs

Decent work and economic growth.

*Keywords: Toxic Career Model, Machiavellianism, Political Skill*

## Oral presentation OP363

### Getting Serious About Fun: The Role of Gamification in Organizational Socialization

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science

**Purpose:** Organizations are increasingly integrating gamification elements into their procedures, but there is a lack of research on how this affects newcomers. On the one hand, gamification may be associated with increased employee motivation, work engagement or commitment to the organization (Eikelboom, 2016; Hussain et al., 2018). However, gamification is also associated with competition or artificial attempts to evoke positive emotions, which are not always received positively by employees (Algashami et al., 2019). The aim and objective of a present study is to evaluate the relationship between gamification and organizational socialization process.

**Design/Method:** The data from 149 surveyed participants (129 female and 20 male, average age – 35.67 years old) was collected. Participants were presented with 9 descriptions of the most popular gamification elements (e.g., points, leaderboards, challenges) in the work setting, which had to be rated in terms of how often and how actively employees were engaged in them. Proximal socialization outcomes (role clarity (Morrison, 1993), task mastery, social integration (Morrison, 2002)) and distal socialization outcomes (job satisfaction, organizational commitment (O'Reilly & Chatman, 1986), turnover intentions, perceived organizational insider status) were measured in this study. The relationships between variables were assessed with correlation and regression models.

**Results:** More than half of respondents (54.4%) have encountered at least 1 gamification element in their workplace. This number ranges from 1 to 7. Also, participants vary in terms of their average engagement and frequency of interactions with gamification elements. The results of this study suggest that gamification plays a minimal role in the socialisation process. However, there are some weak relationships between gamification elements and socialisation outcomes. Role clarity, social integration, task mastery and organizational commitment were found to be related to employee interactions with gamification elements. Of all these variables, gamification was most linked to role clarity. No relationships were found between interactions with gamification and job satisfaction, turnover intentions, or perceived organisational insider status. Of all the gamification elements studied, challenges were the most related to socialisation outcomes. There was also found a negative link between competitions and organizational commitment.

**Limitations:** In this study we used a cross-sectional design which included a limited sample size and a fixed number of gamification elements.

**Implications:** This study provides new insights into understanding the relationship between gamification and newcomer's socialisation and provides practical value for the managers in terms of gamification usage. According to the results of the study, the application of different gamification elements to new employees may have different consequences, which makes a rational and considered gamification design to be essential. Competitions may negatively affect new employees, while appropriate number of challenges may help them to grow professionally.

*Keywords: Gamification, Organizational socialization, Newcomers*

## Oral presentation OP320

### Getting social in leadership: A study of how social technologies affect leaders' influence process and subsequent outcomes

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science&practice

#### Research goals

Organisations are increasingly adopting social technologies for internal communication (Holland et al., 2019). Subsequently, the proportion of leaders' interaction with their employees virtually has increased, leading to a scholarly focus on e-leadership, defined as "a social influence process mediated by advanced information communications technology (ICT) to produce a change in attitudes, thinking, feeling, behaviours and performance of individuals, groups, and organisations" (Avolio et al. 2000., p.617). Scholars have argued that we cannot assume leadership in the offline world will transfer unchanged to a virtual context (Lu et al., 2014). However, the e-leadership literature has focused on leadership mediated by web 1.0 technologies – e.g., email/video conferencing (Gilson et al., 2015) and there is less research on web 2.0 technology, exemplified by social technology (e.g., Facebook Workplace, Microsoft Teams). More research on web 2.0 technologies would be instructive since they have different affordances to technologies that preceded them and are increasingly used by leaders at work. This study hence examines the effects of social technologies on a central mechanism of leadership, namely influence.

#### Theoretical background

Drawing on well-established literature that different leadership styles emphasise different means of achieving goals through others (Anderson & Sun, 2017), the study focused on two specific influence tactics, i.e., collaboration and consultation. This is because social technology is "an open, interactive context in which rich two-way communication occurs between any of the members at any time" (Wang et al., 2021) and so lends itself to facilitating collaboration and consultation. These tactics have been associated with transactional and transformational leadership respectively (Curtis, 2017) and we thus examined the relationship between each leader style and outcomes - follower effort and leadership effectiveness - via these two tactics.

To conceptualise the effects of social technology, the study drew on the technology affordance literature. ICTs can be differentiated by their affordances - the properties of a communication medium that define its possible uses (e.g., Boyd, 2010). Although several affordances characterise social technologies, the interdependence affordance – the ability to work with and build on others' inputs - was the focus of the present study because when leveraged by leaders in their use of social technologies, it provides more opportunities to work on tasks simultaneously or sequentially in a way that creates a shared output regardless of physical presence (McFarland & Ployhart, 2015). Hence, we predicted that the interdependence affordance may strengthen the relationship between a leader's tactics and outcomes.

Specifically, we hypothesise that the relationships between leadership (i.e., transformational, and transactional leadership) and outcomes will be mediated by leaders' influence tactics (i.e., consultation and collaboration, respectively). Further, the strength of these relationships will be positively moderated by interdependence affordance.

#### Methodology

Three waves of data from 228 UK sector employees were collected via the online platform Prolific. Participants rated their leaders' leadership style at Time 1, their influence tactics, and adoption of the interdependence affordance at Time 2 and assessed leadership effectiveness and extra effort at work at Time 3.

### Results

Regression analyses suggest that transformational leadership positively affects follower effort (but not leadership effectiveness) via consultation influence tactics, and the strength of the indirect effect increases as more interdependence affordance is adopted. Additionally, transactional leadership positively affects leadership effectiveness (but not follower effort) via collaboration influence tactic. Interdependence affordance also moderates this indirect effect, but as it increases, the effect weakens and eventually diminishes.

### Limitations

The study focuses on the service sector, which limits its generalisability. It also predominantly focuses on Microsoft Teams, although the measuring of affordances mitigates this limitation.

### Conclusions

We provide insights about how social technologies affect leadership and its outcomes, highlighting where they can be both beneficial and overused. We present novel findings by applying technological affordances to the leadership context.

### Congress Theme/SDGs

The 'changing world of work' includes evolving ways of working, and technology is key to such changes. This study thus speaks directly to the congress theme and a work-based experience that is only going to become more prevalent. Understanding how social technologies shape our workplaces becomes imperative for guiding us to build relevant competencies amongst organisational leaders for competing and collaborating. This also speaks to SDG for fostering decent work and economic growth.

*Keywords: E-leadership, Social technology, Technology affordances*

## Oral presentation OP299

### **Giving voice to employees in low-skilled jobs works: evaluation of an organizational intervention promoting sustainable employability**

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science&practice

Research goals and why the work was worth doing: Our aim was to study the effectiveness and implementation process of a participatory organizational intervention “Healthy HR” (HHR) which through targeting job control was designed to promote sustainable employability (SE) in employees in low-skilled jobs. Addressing this vulnerable and hard-to-reach group via the work setting can help reduce socio-economic health inequalities.

Theoretical background: Many work organizations are still unsuccessful in promoting employees’ SE. More insight is needed into the extent to which such interventions are effective for employees in low-skilled jobs, who often are an underrepresented group in the field of occupational health. We assume that the focus on dialogue and active involvement will increase voice and hence the job control of this particular group, an important job resource for their health. This might lead to improved SE in the long run.

Design/Methodology/Approach/Intervention: An effect evaluation was conducted with a pretest-posttest design with a one-year follow-up among employees in two Dutch work organizations. Quantitative data were collected at baseline (N=120) and 12 months (N=71). Paired t-tests and dose-response analyses were performed (N=50). Parallel, a mixed-methods process evaluation was conducted to understand the implementation process (i.e. recruitment; reach; dose delivered; dose received, fidelity; satisfaction, and context) and perceived changes at the workplace using questionnaires, individual interviews with employees (N=15) and employer representatives (N=11), focus groups (N=4) and logbooks. Process data were obtained throughout the entire process, at 6 months and 12 months. Qualitative process data were analyzed thematically.

Results obtained or expected (if not available, it must be made clear when they will be): HHR had a positive effect on job control, but no significant effect was found on SE and only a small change in experienced productivity at 12-month follow-up. A higher dose of HHR resulted in better job control. HHR was partially implemented as planned. The overall reach was high, but despite HHR was delivered by the project leaders, the dose received of HHR among the employees varied. The process evaluation confirmed that a better implementation in terms of a higher dose received supported the positive effect of job control. Moreover, HHR had a positive impact on the awareness level among all stakeholders and helped to open the dialogue about health and create healthy workplaces. We also observed an increased feeling of a collective voice among employees.

Limitations: Limitations of the current study were the small sample size, the low response rate at follow-up, and the absence of a traditional control group. The latter was counterbalanced by the dose-response analyses and a comprehensive mixed-methods process evaluation.

Conclusions – research and or practical Implications/ Originality/Value: Despite the relatively small sample size and partial implementation, we found a positive effect on job control among employees in low-skilled jobs. This was supported by the qualitative process data. Effects on SE were, however, not confirmed. The overall dose received by the employees was limited for certain departments, but

the dose-response analyses showed that a better implementation resulted in better control. Hence, we expect that the effect would have been stronger after prolonged and more extensive implementation. This study demonstrated how job control of employees in low-skilled jobs can be improved through a participatory approach. The HHR philosophy of active involvement and genuine dialogue in terms of giving employees an active voice at work appears to be effective. This may eventually contribute to employees' SE and help to reduce health inequalities in the workplace.

*Keywords: effect and process evaluation, employees in low-skilled jobs, organizational intervention*

## Oral presentation OP472

### Going beyond commitment - Development and validation of identification, instrumental, and acquiescence bond type scales

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#### Research goals

The goal of the present research project was to develop and validate short, unidimensional, target-free scales for three types of workplace bonds: identification, instrumental, and acquiescence, in a manner consistent with the established KUT scale for commitment (Klein et al., 2014).

#### Theoretical background

Workplace bonds have received a lot of interest from research and practice because of their relevance for outcomes such as absenteeism, turnover, motivation, prosocial behaviors, performance, and well-being (Cooper-Hakim & Viswesvaran, 2005; Klein & Park, 2020; Meyer, 2016; Simon, 1976). Indeed, a wide variety of constructs have been used to assess workplace bonds (e.g., commitment, identification, embeddedness, entrenchment, continuance, obligation, involvement). To overcome theoretical overlaps and ambiguities in conceptualization, Klein and colleagues (2012) developed a systematic framework of bond types including commitment accompanied by three other types of bonds: identification, instrumental and acquiescence. While with the KUT a validated short uni-dimensional target-free measure of the commitment bond is already available (Klein et al., 2014), the purpose of the current study was to develop measures for the other three bond types.

#### Methodology

Based on previous works (Klein et al., 2012; Klein et al., 2014), the project started by conceptually refining the three bond types beyond the commitment bond. Then, items were compiled from reviewing existing related measures and evaluated regarding their general fit to the construct definitions, their target neutrality and their clarity in formulation. Thus, scales were developed in alignment with the KUT scale. Content validity of initial items was established by obtaining 45 subject-matter expert ratings (Study 1). A cross-sectional panel aimed to provide first empirical results for the quality of the scales with a preliminary set of eight items per bond type and three targets (organization, supervisor, career) as well as a related nomological net (Study 2). Using an additional cross-sectional panel (Study 3), the item sets should be further reduced and tested with two additional targets (team, goal). The aim of Study 4 was to test the final four items per bond longitudinally.

#### Results

In Study 1, subject-matter expert ratings showed high fit to construct definitions and accurate assignment of the items. Some items were revised based on the received feedback. In Study 2, factor analyses supported the expected four-factor solution representing the four bond types for each of the three targets and psychometric properties lend further support to the initial scale development. By evaluating a series of alternative models, six items per bond type were identified best representing the constructs. In general, the used scales related to nomological network variables as expected, but to a weaker extent for the acquiescence bond. Data collected in Study 3 were used to further reduce scale length and identify the best four items per bond type. CFA, ESEM, and LCA

analysis supported the scale structure for the four bonds across five targets demonstrating good fit. Study 4 results cross-validated the final scale structure showing good factor reliability and test-retest reliability. Additional analyses regarding longitudinal measurement invariance and convergent and divergent validity with nomological network constructs will be reported at the conference.

#### Limitations

Scale development largely relied on self-report data, pointing to the need of future research linking workplace bonds to the other data sources e.g., leader ratings or organizational indicators of performance, retention or employee well-being.

#### Implications

While representing work in progress, current results are promising and bring clarity into the conceptual domain of workplace bonds. Specifically, refinements of the conceptual definitions for three bond types as distinct constructs advance existing research. Moreover, new uni-dimensional, target-free scales are developed and validated to assess the three bond types beyond the commitment bond. Hence, together with the established commitment scale (Klein et al., 2014), now all workplace bonds proposed by Klein and colleagues (2012) can be assessed in reference to solid theoretical framework of workplace bonds.

#### Relevance to Congress Theme

For ensuring sustainable workforces and strong institutions in the future, the present research project offers important conceptual developments and provides new scales for understanding and assessing workplace bonds, overcoming theoretical overlap and ambiguities of previous conceptualizations.

*Keywords: Bonds, Attachment, Commitment*

## Oral presentation OP569

### Going deeper into bad behaviors at work: the incremental predictive validity of moral disengagement over the Dark Tetrad traits

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science&practice

Theoretical background and research goals

Counterproductive work behaviors (CWBs) can be defined as deliberate actions displayed by employees that damage the well-being of the organization (CWBO) or its members (CWBI). So, more strong efforts are needed to determine their antecedents. Previous research has found a strong relationship between CWBs and the Big Five personality traits, with conscientiousness being its main predictor. Latest studies also highlighted that all Dark Tetrad traits (i.e., narcissism, Machiavellianism, psychopathy, and sadism) were positively related to CWBs. On the other hand, moral disengagement (MD) has also been identified as an antecedent of CWBs. Recent meta-analytic evidence showed that, at least, Dark Triad traits (i.e., narcissism, Machiavellianism, and psychopathy) share a common, latent dark core with MD. However, there is no previous evidence about the relationship between Dark Tetrad (Dark Triad plus everyday sadism) and MD, and if MD incrementally predicts organizational outcomes beyond Dark Tetrad.

To overcome this gap, the aim of this study was to explore the incremental validity of the MD over and above the “bright” and “dark” personality approaches in the prediction of CWBs. We intend to provide two specific contributions. First, to evaluate whether MD scores explain additional variance of CWBs beyond several basic sociodemographic and work experience characteristics, Big Five and Dark Tetrad scores. If so, we could consider that MD, despite the shared conceptual foundation with dark personality traits, uniquely predicts CWBs. Second, to evaluate whether MD plays a moderating role between Dark Tetrad traits and CWBs considering the target of workplace deviance.

Methodology

Our sample was composed of four hundred and fifty-five employees (58.7% women), aged between 18 and 70 years (  $M$  age = 39.29,  $SD$  = 13.81), from different organizations. Data were collected with non-probability sampling.

Measures included sociodemographic and work behavior characteristics, Big Five and Dark Tetrad traits of personality, and frequency of CWBs.

Regarding analytic strategy, we computed descriptive statistics, Pearson and point-biserial correlations, and reliabilities (Cronbach's  $\alpha$ ). Hierarchical regression analyses were performed with control variables (Step 1), Big Five (Step 2), Dark Tetrad (Step 3), and MD (Step 4). Moderation analyses were performed with the INDIRECT macro for SPSS (model 1).

Results

Hierarchical models showed that the incorporation of MD to the models incremented by 4.6% the explained variance of CWBO and by 4.9% the explained variance of CWBI. Regarding CWBO, conscientiousness ( $\beta$  = -.263), and narcissism ( $\beta$  = -.184) were related to lower frequencies of these behaviors, whereas psychopathy ( $\beta$  = .196), sadism ( $\beta$  = .221), and MD ( $\beta$  = .244), were related to higher frequencies of CWBO (all  $p$  < .001). Regarding CWBI, whereas extraversion ( $\beta$  = .128,  $p$  < .05),

sadism ( $\beta = .269, p < .001$ ), and MD ( $\beta = .251, p < .001$ ) had positive coefficients with workplace deviant behaviors aimed at individuals, agreeableness ( $\beta = -.244, p < .001$ ), and narcissism ( $\beta = -.118, p < .05$ ) had negative associations.

Moral disengagement significantly moderated the effects of Machiavellianism, psychopathy, and sadism on CWBO. Under medium or high levels of MD (not low), the effects of high scores on these dark traits on deliberate actions that harm the organization were stronger. Concerning CWBI, results showed that the positive associations between psychopathy or sadism and CWBI were stronger when MD was medium or high (not low).

### Conclusions

Findings revealed that MD explains unique variance beyond Dark Tetrad, so it seems to be something conceptually unique about MD relative to other dark traits that drive outcomes of interest in the organizational behavior. In addition, this study complements precedent research that did not explore the predictive validity of MD considering the target of CWBs. Finally, we provide evidence about the moderating role of MD in the relationships between Dark Tetrad and workplace deviance. Overall, our findings suggest that some dark personality traits may be effective predictors of CWBs especially when employees present medium or high levels of MD.

The current study has a number of limitations that deserve mention here, such as the use of convenience sampling, the cross-sectional design, and the overreliance on self-report measures. However, as the study of Dark Tetrad in organizational settings is still in its youth and the debate regarding dark traits are theoretical correlates rather than antecedents of MD remains ongoing, our results may contribute to going conceptually deeper about MD relative to other dark constructs in the explanation of bad behaviors at work.

*Keywords: counterproductive work behaviors; Dark Tetrad; moral disengagement*

## Oral presentation OP384

### Going to the Office while Telecommuting is Ubiquitous: the Role of Need Satisfaction and Media Richness Theory

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#### Introduction

With the digitization of work, employees can work from any location. Telecommuting – a work arrangement that allows employees to execute working tasks from home during at least some portion of the working week by using ICTs – has gained popularity over the years. After a massive increase in telecommuting due to the pandemic, many organizations are asking employees to return to work at the office a few days a week. The idea is that office days can motivate employees because one can have face-to-face contact with colleagues. But is that always the case? Are all office days equally motivating? What needs to be done on office days to motivate employees and how does that work exactly? Indeed, to date, we lack knowledge on which aspects of working in the office are unique and therefore add value for telecommuters.

Following insights from research on self-determination theory, we therefore focus on how office days can contribute to basic need satisfaction; an aspect fostering a range of well-being and performance outcomes. Moreover, some studies have indicated that face-to-face interaction – typical of working in the office instead of home – is related to need satisfaction and longer lasting gains to psychological well-being as compared to digital social interactions. In addition, despite the opportunities to interact with others through computer-mediated communication, it cannot really provide the vibrancy and convenience (i.e. “the human touch”) that results from two people interacting in-person. Therefore, one might expect in-person contact to be an important, distinguished feature of office days for employees. However, what forms of in-person contact increase need satisfaction, and why, is still unknown.

In reply, the current research investigates how formal and informal face-to-face communication – two typical forms of in-person contact in the office – relate to need satisfaction. Reasoning from media richness theory, we argue that in-person contact affects need satisfaction through role ambiguity and social support. Indeed, face-to-face contact entails rich communication which is characterized by synchronous communication, immediate feedback, multiple cues, and personalized messages adding to role clarity and instrumental as well as emotional contact with others. We hypothesize that formal and informal face-to-face communication on office days will contribute to need satisfaction after work by decreasing role ambiguity and increasing social support during that day.

#### Methods

A daily diary study was conducted to investigate the role of role ambiguity and social support in the relationship between formal and informal communication, and need satisfaction. Only employees who regularly work from home as well as at the office were selected. During 10 consecutive workdays 111 employees filled in a daily questionnaire at the end of their office workdays. Multilevel modeling was used for the data analysis.

#### Results

The results show that employees experience more need satisfaction on office days when having more informal communication. This relationship is partially mediated by an increase in social support on that day. In addition, daily formal communication is related to daily need satisfaction, and this relationship is fully mediated by daily social support. The amount of role ambiguity experienced on an office day is related to daily need satisfaction, however not to formal nor informal communication. Therefore, the relationship of formal and informal communication with daily need satisfaction was not mediated by daily role ambiguity. As such, our research model is partially confirmed.

#### Contribution

Our research extends the literature on telecommuting by explicitly looking at the value of office days in a telecommuting context; introducing media richness theory in this line of research. In all, this study contributes to promoting wellbeing and performance by exploring through what and in what ways employee needs can be fulfilled by going to the office, given the ubiquity of telecommuting.

#### Relevance to the Congress Theme and Relevant UN SDGs

Since the pandemic, the line of research on telecommuting has become even more important. Yet not only research on the practice of telecommuting itself is relevant. Given the changing nature of work (e.g., digitization of work, hybrid work, reorganizations of office work), a thorough understanding of the processes involved in office days is at least as important to achieve desirable outcomes. In doing so, organizations can learn about how to organize work in a way that is beneficial for employee need satisfaction, and in turn, for organizations. Therefore, the current study is a first – in the light of recent developments – to investigate tangible aspects of office days that affect the wellbeing of telecommuters. As such, our research contributes to EAWOP's conference theme 'The changing world of work' and the UN's third SDG 'Ensuring healthy lives and promoting well-being'.

*Keywords: Telecommuting, in-person contact, need satisfaction*

## Oral presentation OP784

### Gossip and coping in a challenging job: The case of migrant truck drivers in Western Europe

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science

Research goals and why the work was worth doing

According to the Job Demands-Resources Model (Demerouti, Bakker, Nachreiner, Schaufeli, 2001), many jobs entail high demands and low resources, putting workers at risk of strain and burnout. One such particularly challenging job is that of long distance truck drivers, who stay on the road for weeks at a time, endure difficult work conditions (e.g. shift work, physical demands, risk of accidents), and prolonged social isolation. However, it is currently not well understood how these drivers cope with the challenges associated with their work. Being a truck driver presents two particular challenges: due to working in isolation drivers may experience a high need for information related to work, and a high need for social contact with others. One solution for coping with these challenges may be to seek social contact with colleagues by engaging in gossip. Therefore, we examine the role of gossip as a coping mechanism among long distance truck drivers.

Theoretical background

Coping represents the cognitive and behavioral efforts made in order to manage demands that exceed one's resources (Lazarus & Folkman, 1984). Problem-focused coping is aimed at changing one's relation to the environment (e.g. seeking information). Emotion-focused coping is aimed at regulating one's negative emotions caused by the harm or threat (e.g. seeking social support). Gossip, defined as communication about someone who is not present (Dores Cruz et al, 2021; Foster, 2004), has been shown to be pervasive across social contexts. Although gossip has not been studied as a coping mechanism, gossip could help drivers engage in problem-focused coping, and emotion-focused coping. By facilitating information access, Thus, given that gossip can help people exchange information, and seek emotional support (e.g. Beersma & Van Kleef, 2012; Foster, 2004; Martinescu et al, 2019), we explore whether gossip may play a role in coping with the challenges encountered by long distance truck drivers.

Design/Methodology/Approach/Intervention

We conducted a qualitative study by interviewing 32 migrant truck drivers in a Western European company.

Results

Results showed that gossip was essential in coping with high work demands (e.g. work pressure, living in difficult conditions, social isolation) and low work resources (e.g. low autonomy, low support, low fairness, lack of training). First, drivers gossiped with close friends at work to regulate emotions and maintain social bonds, which enhanced psychological well-being. Second, drivers gossiped with distant colleagues to establish rapport and to exchange useful information about people, procedures, or practical issues, which enhanced task performance and physical well-being. Third, drivers perceived few benefits of non-instrumental gossip with distant colleagues, and therefore avoided such communication.

Limitations

The work context of truck drivers is rather particular, therefore current findings should be interpreted within this context, and ideally extended and validated in other settings. Furthermore, among methodological limitations of our study are social desirability concerns, low sample size, and using an inductive, therefore subjective approach. Although these concerns are considered, we believe that the advantages of our methodological choices exceed their associated drawbacks. As a first study documenting the role of gossip as a coping mechanism, we deemed an inductive approach most appropriate for capturing the ethos of the phenomenon, and giving voice to our participants

Conclusions – research and or practical implications/Originality/Value

Overall, these findings show that drivers relied on different layers of their informal social network to cope with challenging work conditions. Adding to previous research which highlights gossip as a means to exert social control and enhance cooperation, this study shows that gossip represents an essential resource for emotion-focused and problem-focused coping in a challenging work context. As such, we extend theorizing about the use of gossip as a coping mechanism in the workplace.

Relevance to the Congress Theme

There is increasing societal attention to the responsibility companies bear in treating their employees well and enabling them to develop and flourish in their roles. However, as show in this study, employees in a job designed and managed by Taylorist principles often reached a high degree of exhaustion, and needed to harness all available support from their social network in order to cope with the difficulties encountered in their jobs. Hopefully this study will draw attention of researchers and practitioners to what challenging work might entail and how employees cope with it, and will build on our findings to design jobs better

Relevant UN SDGs

Please see above.

*Keywords: Gossip, coping, job demands & resources*

## Oral presentation OP485

### Happy Followers of Happy Leaders: Leader-Follower Well-being Cross-over and the Role of Leadership Style

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science

#### Research goal

Well-being (WB) of employees is largely dependent on behaviors of leaders. But does it matter for the happiness of followers if the leader is happy as well? And do happy leaders behave differently towards their subordinates than unhappy ones? The purpose of the paper is to investigate the direct effect of leader's WB on follower's WB as well as indirect effect mediated by positive leadership behaviors, namely supportive leadership and empowering leadership. In this study we make an attempt to unpack the mechanism of cross-over of WB from the leader to the follower. We ask the question of how happiness changes the way in which the leader behaves, and how is that conveyed to happiness of followers.

#### Theoretical background

WB of employees as an outcome of behaviors of the leader has been a matter of intense scholarly investigation (Inceoglu et al., 2018). It has been found mainly related to specific leadership styles, such as transformational (Nielsen et al., 2008) and authentic leadership (Ilies et al., 2005). However, few studies considered the cross-over effect of WB from the leader to the follower and its underlying mechanism (Skakon et al., 2010). The existence of such cross-over effects has been proven in relation to some WB-related outcomes, such as emotional exhaustion and work engagement (Wirtz et al., 2017), job dissatisfaction (Sutherland & Davidson, 1989) or burnout (Ten Brummelhuis et al., 2013; Huang et al., 2014). Moreover, while there is evidence on the effect of specific leadership styles on both follower's (see e.g. Inceloglu et al., 2020) and leader's WB (Ilies et al., 2005), little is known about the dependence of certain leadership behaviors and style on the level of leader's WB.

Maurya and Agarwal (2015) found that followers are satisfied with their jobs if their leaders supportive behaviors are linked to leaders' WB, and Rafferty and Griffin (2006) state that support has positive effect on WB of the recipient of support. The positive effect of received support on follower's WB has been also supported by others (e.g. Schmidt et al., 2014; Ceasens et al., 2016; Kim & Beehr, 2018; Skakon et al., 2010). There is also some evidence that happy leaders are more empowering (Chi et al., 2011; Joseph et al., 2015) while the effect of leader's empowering behaviors on follower's WB is rather well-documented (Tuckey et al., 2012; Skakon et al., 2010). We therefore claim that both supportive and empowering leadership are mediating mechanisms in WB cross over from the leader to the follower.

#### Methodology

We use the data from 406 leader-follower dyads and structural equations modeling to test the hypotheses. We measure WB using SWLS (Pavot & Diener, 2008), support using Survey of Perceived Organizational Support (Eisenberger et al., 1986) and empowerment using Spreitzer's (1995) scale. We control for leader's and follower's age, gender and tenure.

#### Results

We confirm the expected cross-over effect of WB from the leader to the follower. This corroborates earlier findings in relation to WB-related constructs. We further unpack the mechanism of such cross-over effect and conclude that it is partly due to affective cross-over also referred to as emotional contagion. We also found that majority of the cross-over effect is indirect and mediated by supportive and empowering leader's behaviors. It seems that those two styles of leadership, and their consequences are reinforcing themselves, their combination is beneficial for WB and, as a consequence, performance of employees (Butts et al., 2009).

#### Implications

We contribute to the body of literature on leader's behaviors and WB. We contribute by reversing the question on the effect of leadership style on WB. Instead of asking what is the effect of certain leader's behaviors on leader's WB (Ilies et al., 2005, Bernerth & Hirschfeld, 2016; Kaluza et al., 2020) we ask and investigate how are leader's behaviors driven by the level of leader's WB. We also further unpack the mechanism by which the WB of the leader crosses over to the WB of the follower. We point to relational leadership styles: supportive and empowering as mediators and empirically prove that they play important role in the WB cross-over effect. This finding is important as earlier studies almost exclusively focused on WB of employees and very few that took into consideration WB of the leader used it as dependent variable. We uncover that leader's happiness might be an important resource in leading employees (Chi et al., 2011; Joseph et al., 2015).

#### Relevance to the Congress Theme

We provide understanding of the changing world of work by pointing to WB of leaders as a leadership resource.

#### UN SDGs

Our research especially strongly promotes UN SDGs 3 and 8 by highlighting the role of leaders' and followers' WB.

*Keywords: well-being, supportive leadership, empowering leadership*

## Oral presentation OP306

### Happy-Productive Worker thesis revisited: a mixed method approach of well-being and performance patterns

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science

Research goals and why the work was worth doing:

The systematic review of the relationship between performance and well-being at work in Brazil revealed that contextual and task performance shows an unclear relationship with well-being, particularly when well-being is operationalised as hedonic (e.g., emotions) (Pérez-Nebra et al., 2021). Although previous studies have added knowledge to understand this relationship by proposing discriminative variables (Ayala et al., 2017), there is still much to be known from a mixed methodology integrating quantitative and qualitative data. Thus, this work aims to describe qualitatively how people dealt with and what contributed to having positive experiences working remotely, comparing well-being and performance patterns based on a person-centred approach.

Theoretical background: The happy-productive worker thesis (Staw, 1986) suggests that, *ceteris paribus*, happy people are more productive. However, this relationship, more than disappointing, is unclear, for many reasons (e.g., high levels of positive emotions may be unproductive or may be detrimental to performance, Grant, & Schwartz, 2011; or it could be due to different operationalisations of well-being and/or performance, Peiró et al., 2021). Based on the aforementioned reasons, Peiró et al. (2014) called this Sustainable Productivity and Well-being Synergy, describing the emergence of 4 profiles characterizing the relationship between well-being and performance: happy-productive, unhappy-unproductive, happy-unproductive and unhappy-productive. We expanded their proposition exploratorily by applying mixed methods.

Methodology: 236 valid questionnaires were analysed from Brazilian workers (56% of females, 54,6% undergrad degree, 43,7 years old ( $SD = 10,6$ )). We conducted an embedded mixed method approach, asking people about their emotions at work (positive emotions,  $\Omega = .94$ ; negative emotions,  $\Omega = .92$ ) and general performance (composed of in-role and extra-role performance,  $\Omega = .81$ ). In a person-centred approach, we tested the best number of clusters. The different indicators suggest between 3 and 10, for parsimonious and theoretically reasons, we decided for 3 clusters with positive silhouettes. We controlled for personal and labour variables. The next step was to conduct the lexical analysis using Iramuteq (R interface), which organizes five different classes of words in the dendrogram. The last analysis, chi-square, tested whether different classes of words were more prevalent for different clusters.

Results: The cluster analysis suggested three clusters: Cluster 1: happy-productive, Cluster 2: unhappy-unproductive and Cluster 3: unhappy-productive. Any control variable increases the odds of being in any cluster. The five classes of words that emerged were: Class 1: mobbing; Class 2: domestic routine; Class 3: children routine; Class 4: time and home limits; Class 5: Commute and housekeeping. It is noticeable that Classes 2 to 4 aggregate different nuances of work-family conflict. The chi-square analysis suggests that Class 1, mobbing, aggregates more people from Cluster 3 (unhappy-productive); Classes 2 to 4, work-family issues, aggregate more people from Cluster 1 (happy-productive); and Class 5 aggregates people from Cluster 2 (unhappy-unproductive).

Limitations: Cross-sectional data were used; therefore no strict causal conclusion can be drawn. All variables were measured as self-reports, so common-method bias could limit the findings. Although it is a small sample, the study meets the minimum size required.

Conclusions – This work provides complementary theoretical lenses and antecedents of what helps to increase and decrease the odds of being in different clusters of happy and productive measures, particularly when we are measuring emotions at work. Also, it shows that work-family conflict could be an issue for a happy-productive relationship which is a less explored avenue of research. It is worth noting the role of cyber-mobbing after Covid-19, particularly in a country such as Brazil, where the evidence is scarce and suffers from many vulnerabilities. Finally, commuting and housekeeping themes include some sort of work withdrawal, where the function of withdrawal behaviour is to ameliorate a dissatisfying job situation.

Relevance to the Congress Theme : 18 Well-being

*Keywords: Happy-productive worker thesis, mixed-method, performance*

## Oral presentation OP662

### **Harassment, bullying and psychological strain at work: Norwegian hospitality workers' experiences during the COVID-19 pandemic**

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science

#### Research goals and why the work was worth doing

This study aims to examine employees' experiences within the hospitality industry in Norway in the context of the COVID-19 pandemic, and to analyze how employment relationship problems were managed during the pandemic. The survey is part of a broader study on the same topic in Norway, Scotland, Ireland, Greece, Australia and New Zealand. The COVID-19 pandemic led to extremely challenging conditions for hospitality workplaces worldwide and has had dramatic consequences for employees in the industry. Hence, this study aims to increase knowledge about how employees in the hospitality industry in Norway experienced and managed workplace challenges in light of the pandemic. The study further aims to gain insights into hospitality workers' experiences of bullying, harassment, and psychological strain.

#### Theoretical background

Previous studies have shown that employees in the tourism and hospitality industry are more exposed to continuous workplace-related mistreatment than workers in other sectors (Ram, 2018). However, few studies have investigated how these behaviors manifest in periods of crisis when interactions with customers, supervisors and colleagues occur under circumstances characterized by social stress (Booyens et al., 2022, p. 2). Changes in work conditions under COVID-19 may have added additional stressors, thus decreasing workers' resources and increasing psychological strain. This study is theoretically informed by the job-demands-resources (JD-R) model which points towards strain as a result of lack of balance between job demands and job resources (Aguilar-Quintana et al., 2021).

#### Design/Methodology

A cross-sectional survey was conducted using self-report surveys. The survey was distributed through relevant industry contacts and social media channels (Facebook, LinkedIn) from September 2021 to March 2022. The sample consists of employees who had worked in the hospitality industry over the past two years. 853 respondents answered the survey, of which 585 responses were complete. Most of the participants had extensive work experience, and over 50% were between 26-45 years old, while only 12% were younger workers between 16-25 years. 66% identified as female, 32% identified as male, and 2% as other.

Most of the questions were developed by Curran (2021), while psychological strain was measured by the emotional exhaustion subscale of the Maslach Burnout Inventory (Maslach & Jackson, 1981). Both descriptive and inferential (correlation and regression) statistics were calculated using the statistical software SPSS, while the qualitative data from the open-ended questions was analysed through NVivo.

#### Results

The findings showed that both experienced and witnessed abuse (verbal/psychological and physical) were related to psychological strain. Verbal/psychological abuse showed highest correlation with psychological strain, followed by bullying and physical abuse. The most common unwanted workplace behaviors seen or observed by respondents were verbal and psychological abuse by customers, closely followed by supervisors or managers. However, although customer abuse was most prevalent, abuse by supervisors/managers or colleagues appeared to be more difficult to handle. In addition, the results showed that younger employees experienced increased stress related to psychological strain.

#### Limitations

Among limitations of the study are non-probability sampling, cross-sectional design, data based on self-reports, and common method bias.

#### Conclusions – research and practical implications

The study showed that there was a strong prevalence of abuse and harassment related to psychological strain during the COVID-19 pandemic. Furthermore, counterparty behavior appeared to deteriorate during the pandemic. Dismissive attitudes of managers emerged as an important predictor of such behaviors. The results also indicated that employees preferred to remain silent in the face of deteriorating conditions. The mentioned conditions can further be related to high job insecurity, depression, anxiety, turnover, poor work conditions and bad reputation in the hospitality industry.

#### Originality/Value

The hospitality and tourism industry has up until now largely neglected to focus on sustainable outcomes in relation to employment and workforce issues (Baum, 2018). Thus, there is a need for more research that addresses decent and dignified employment in the context of the hospitality and tourism sector.

#### Relevance to the Congress Theme

This study addresses how the COVID-19 pandemic changed work conditions for Norwegian hospitality workers, resulting in increased psychological strain and deteriorating work conditions. The results imply a need to address employees' experiences and well-being in light of changing work conditions.

#### Relevant UN SDGs

The aim of this study is grounded in the UN's Sustainable Development Goal 8, which promotes inclusive and sustainable economic growth, employment, and decent work for all.

*Keywords: Hospitality workers' experiences, COVID-19, decent work*

## Oral presentation OP173

### Health Culture in Occupational Integration Management

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Mental issues are no longer a marginal problem in society and working environment. In contrary, mental impairments and disorders often lead to long-term absences from work. Health culture is suspected of playing a key role in dealing with mental issues of employees. This research created a qualified measuring tool to examine how different participants in the return to work process perceive health culture. Furthermore, best practices and digital needs in health culture were examined to improve future working conditions.

In Germany Occupational Integration Management (ger.: “Betriebliches Eingliederungsmanagement”) is regulated by law (§167 Abs. 2 SGB IX), thus employers need to support their employees to return to work after sick leave. The critical period is defined to be more than six weeks of absence within the past twelve months. After this period of time employees are entitled to receive occupational support for returning to work. Since long-term illnesses particularly frequently affect mental disorders, project BEMpsy prioritizes on this phenomenon in particular. To successfully counteract the mental stress of employees, this research wants to follow the indications that suggest an appreciative health culture as a solution. International research shows that health culture in companies is associated with the mental health of their employees. In addition, health culture should act as a key enabler for employees and organizations to improve their performance and productivity and reduce costs due to absenteeism, accidents and sickness.

The project explored key aspects of return to work in German organizations following a mixed-method design: first, a quantitative online survey with N = 178 participants was conducted, followed by qualitative, guided expert interviews ( N = 42 participants of 21 organizations) according to the approach of Appreciative Inquiry. A new scale was developed in the survey to analyze health culture in Occupational Integration Management with three subscales “values and beliefs of the organization” (e.g. existence of specific corporate guidelines), “organizational activities for occupational health management” (e.g. occupational health care interventions) and “supportive social structures in the organization” (e.g. by management). The investigation included different target groups in the return to work process: affected employees and organizational stakeholders.

The results of the survey show that the health culture was perceived strongest at the level of “organizational activities for occupational health management” overall. The analysis separated according to target groups showed that the organizational stakeholders rated health culture significantly higher in all subscales compared to the affected employees. During the interviews, best practice examples were identified that provide valuable guidance for the design of the health culture, as well as a collection of supporting digital tool ideas.

The limitations of the present study lie mainly in the small size and variability of the sample. Even though the sample already includes nine relevant industries in Germany, further studies in more diverse industries in an international context are necessary. It should also be noted that the study was conducted in voluntary cooperation with companies that already have a well-implemented Occupational Integration Management. This is not the case universally in Germany and may have a biasing effect. The health culture questionnaire for Occupational Integration Management requires future validation.

In summary, the study provides a useful questionnaire tool for the health culture in Occupational Integration Management. Since experiencing an appreciative health culture is especially important for successful return to work, the question arises as to how this can be achieved. The digital tools identified in the interviews can provide an answer to sustainably improve the health culture and, thus, have an effect on the mental health of employees. This will hopefully reduce long-term absences caused by mental issues in the future.

This submission picks up on the theme of the upcoming EAWOP conference 2023 "The future is Now: the changing world of work", highlighting and developing people-centered and health-promoting working conditions with a digital approach.

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[1] This paper was created in the project "BEMpsy: Making digital simple – Promoting the participation of severely disabled people in working life through occupational integration management with special consideration of mental disorders". The project is funded by the Compensation Fund for Supra-Regional Projects for the Participation of Severely Disabled People in Working Life of the Federal Ministry of Labour and Social Affairs (BMAS, funding number: AGF.00.00009.19). Duration 01/10/2020 to 30/09/2023. Project management: Prof. Dr. Jochen Prümper, Hochschule für Technik und Wirtschaft (HTW) Berlin; Project partner: GAW.

*Keywords: health culture, Occupational Integration Management, return to work*

## Oral presentation OP21

### Healthier at home? A 5-day diary study on the effect of character strength application on health in traditional vs. remote settings

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science

Research goals and why the work was worth doing

With current trends in work design, an increasing number of jobs has switched to hybrid or fully remote. It is important to identify possible resources to help employees adjust to remote work. Applying one's character strengths at work has shown positive health-related effects in the context of traditional work settings. We used a 5-day diary to test, if positive effects of the application of the character strength zest on health are contingent on work location (remote vs. office-based).

Theoretical background

A central concept within positive psychology are character strengths, 24 positive trait-like constructs, which have been positively linked to health and thriving in the context of work. Regardless of the trait-component, individuals can apply their strengths at work to varying degrees. Strength application has been linked to health, happiness and perceiving one's job as a calling. The focus of this study is the application of the character strength zest, which is defined as "approaching life with excitement and energy; not doing things halfway or half-heartedly; living life as an adventure; feeling alive and activated". Zest has been shown to relate positively to life and work satisfaction, and showing overall healthier behaviours, such as stress-coping. Within the Job-Demands-Resources (JDR) model, character strengths and their application are conceptualized as personal resources. However, the new demands arising from working from home, such as isolation, substituting face-to-face communication with videocalls, and technical difficulties might hinder employees to apply zest in the context of their work.

Design & Approach

We recruited a sample of 98 German employees with various remote, hybrid, and office-based work arrangements from various occupational backgrounds. The sample completed a 5-day daily diary study (Level1 n = 420 observations) every evening and reported their work location, application of the strength zest, and health. Using hierarchical linear modelling, we tested whether zest was an antecedent of employee health and whether this relationship was moderated by daily work location.

Results

Results of the hierarchical linear model showed that zest was an antecedent of daily health across five consecutive days. Work location also significantly predicted application of zest in such a way that those who worked at the office (as opposed to remotely) were able to apply zest more frequently. We only found a marginally significant ( $p = .06$ ) moderating effect of work location on the relationship between application of zest and daily health, indicating that employees who work at the office might benefit more from the positive effects of zest on health. However, since the effect was not significant, further studies to clarify this relationship are required. A model with random intercepts and random slopes did not fit the data better than a model with random intercepts and fixed slopes.

Limitations

As many diary studies, this study was subject to dropout and missing data throughout the dataset. Based on theory, a model with random intercepts and random slopes would have been expected to show the best fit. However, model fit of a model with only random intercepts (and fixed slopes) showed very similar quality criteria. It is possible that due to low level 1 N , a model with fixed effects was favoured. Further investigations with additional character strengths as predictors for health, as well as samples with larger level 1 N are needed. Further studies could examine samples of only hybrid workers.

#### Conclusions

Investigating the relationship between zest and health in remote work settings contributes to our understanding of positive psychology and its implications in the contexts of new and digitalized ways of working. Results of this study show that applying the character strength zest is related to good health on a daily basis. Additionally, since we did not find a significant moderating effect of work location, the positive effects of zest on health seem to unfold regardless of work location.

#### Relevance to the Congress Theme & Relevant UN SDGs

Our study contributes to the congress theme and to the UN SDG by shedding light on antecedents of health under new working conditions. It will be essential for the future of work and the maintenance of good health to adapt work design and policies to cater to employees' needs.

*Keywords: health, remote work, character strength application*

## Oral presentation OP31

### High consequence listening in organisations: An integrated conceptual review

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science

Researchers, organisations, and policymakers have positioned voicing concerns as an effective way to prevent harms (e.g., death). Yet, organisational disaster investigations reveal that while many individuals raised concerns before scandals, listeners did not address these complaints.

'High consequence listening' is observable behaviour responding to raised concerns, where (in)action could result in significant proximal and distal consequences. For example, following a co-pilot's concern of an engine problem, the pilot can return to the originating airport (risking upset passengers) or continue the flight (risking crashing). While understanding high consequence listening is crucial for harm prevention, research is fragmented and inconsistently conceptualised and operationalised. Our conceptual review synthesises research on high consequence listening, proposing a unified conceptualisation and operationalisation of this phenomenon and suggesting factors underlying listening behaviours.

#### Methods

Our conceptual review included publications focused on listening to at least one high consequence concern in an organisational context. We performed a systematic review, examined publications citing and cited by included articles, searched relevant journals, and key authors' Google Scholar pages. We included 52 publications.

#### Results

Publications have variously termed high consequence listening (33 unique terms/definitions); however, they commonly position listening as based on listeners' motivations. Terms like 'wilful blindness' insinuate that (in)action is intentional, and conceptualisations frame listening as strategic (e.g., to minimise culpability). Narrowly focusing on motivations limits our understanding of the phenomenon and overlooks alternative explanations.

High consequence listening insights have primarily been obtained through methodologies employing imagined or recalled action following concerns (e.g., surveys, interviews, experiments). While using these methods is understandable given high consequence listening's elusiveness, they assume that findings in safe and controlled situations will extrapolate to dynamic environments with the threat of harm. In such decontextualised conditions, listening intentions or behaviours may be over-reported, misremembered, or misattributed.

The literature's conceptualisation of high consequence listening as motivational influences and is influenced by challenges obtaining behavioural listening data. Difficulties with reliably capturing listening behaviour likely led to using self-report methodologies; these methodologies' findings are prone to be interpreted in terms of listeners' motivations. Additionally, conceptualisations framing listening as motivational likely used self-report data with the assumption that listening is deliberate; these data then provided confirmatory evidence for explaining listening in terms of motivations.

We propose a conceptual model framing high consequence voice and listening in terms of shared cognitions. An individual first perceives a shared cognition discrepancy (e.g., an unnoticed hazard), are concerned, and engage in high consequence voice. The listener engages in high consequence

listening, demonstrated in their behaviours (failing) to address the voiced problem and to (re)establish similar and accurate shared cognition. Following high consequence voice and listening are the team's degree of shared cognition and the situation's outcomes (e.g., accident).

#### Limitations

We excluded unpublished work, and additional articles may have been published during analysis (June 2022 onwards).

#### Conclusions

Our review unifies the fragmented literature on high consequence listening in organisations, proposing a novel and standardised conceptualisation of this phenomenon. Broadening the literature's focus on listening as motivational, we suggest alternative factors underlying listening behaviours. For instance, listeners may have improvable listening skills or situation awareness leading them to miss, prematurely discount, or under-estimate concerns' importance; they may benefit from interventions encouraging listening behaviours. Alternatively, they might be situated in organisations with poor reporting systems.

Research should measure high consequence listening behaviour as it naturally occurs. Unconventional datasets (e.g., 911 calls) provide rich conversation data which can be analysed using natural language processing. Future research should create a reliable and valid method of coding naturalistic listening behaviours.

#### Congress theme relevance

To prevent possible future harms, individuals must hear voiced concerns and appropriately address them. High consequence listening in the present shapes proximal and distal consequences in the future. Consequently, understanding factors influencing and influenced by high consequence listening is crucial for intervention development and harm prevention.

*Keywords: Listening, voice, high consequence*

## Oral presentation OP612

### Hopping from GIG to GIG: Addressing GIG workers challenges through the prism of regulatory focus

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science

#### Introduction

The way work is accomplished has changed dramatically over the years. One trend dominating this change is the massive rise in employment through alternative work arrangements, such as GIG work, freelance work, and contract work (Barley et al., 2017). These modern work arrangements, and specifically their digital manifestation, the 'GIG economy', accounted for over 57 million adults, or 36% of the eligible workforce in the US in 2017 (Gleim et al., 2019; Hayzlett, 2018). While offering more autonomy and flexibility, modern-day work is often characterized by high levels of financial instability, job insecurity, and career path uncertainty, especially in the wake of the Covid 19 outbreak. These characteristics of modern work pose significant challenges for contingent and GIG workers, challenges that have thus far been under-theorized and under researched (Jabagi et al., 2019; Kuhn & Maleki, 2017; Petriglieri et al., 2019; Spreitzer et al., 2017).

Adopting regulatory focus perspective (Higgins, 1997; 1998), we suggest that workers who hold a prevention focus might be ill equipped to face uncertain times, and thus may be challenged by GIG work.

Drawing on the challenges identified by Ashford et al. (2018), we suggest four coping strategies ("anchors") that may support GIG workers with prevention focus: 1. Stability anchor: generating stability and maintaining status-quo, at least partially, through part-time work or through focusing on one or two substantial customers or projects. 2. Referential anchor: Ongoing work with a coach, buddy or business partner, in order to address prevention-oriented individuals' need to direct their sense of obligation and duty (Higgins, 1997; 1998) toward a reliable and stable figure. 3. Societal anchor: Association with a professional group or community, accommodating prevention-oriented individuals' interdependent self-perception which is supported by being part of a societal whole (Lee et al., 2000). 4. Facilitation anchor: using GIG marketplaces such as UPWORK or FIVERR that facilitate GIG workers' self-promotion and customer-acquisition needs, and so accommodate the avoidance tendencies of prevention-oriented individuals. The effectiveness of these strategic anchors was assessed in relation to three work related outcomes - work subjective success (Shockley, 2016), estimated potential income growth, and work engagement (Schaufeli, 2019). Thus, the following was hypothesized:

Hypothesis: The strategic anchors will moderate the negative effect of prevention focus on GIG workers' outcomes (e.g., subjective success), such that the negative effect will be attenuated when GIG workers are exposed to the strategic anchor.

#### Method

To test our hypothesis, we first ran a screening survey among 522 working adults (Prolific users; 52% men, M age=31), that were requested to fill in their work characteristics as well as their regulatory focus. Using a "GIG scale", constructed by the authors to reflect characteristics of GIG workers described in the literature, we identified 141 GIG workers that continued to the second stage. The

second stage included an experimental setting, in which the four anchors were manipulated. In each condition, one anchor was presented to the participants (the GIG workers). The work outcomes were measured before and after each anchor was displayed; before presenting the anchor, the workers reported their actual perceptions of their work outcomes (e.g., subjective success), whereas after the anchor presented, they were asked to estimate how much the anchor would affect their work outcomes. Results

Firstly, initial correlation tests revealed that whereas promotion focus was positively correlated with all three outcomes, prevention focus was not correlated with any of them. In addition, as predicted, under the condition of stability anchor (compared to the other three conditions) – prevention focus was positively associated with the engagement and subjective success work outcomes (Figure 1 presents the moderation effect of stability anchor on prevention focus – subjective success effect). The referential anchor found to moderated the effect of promotion focus on subjective success. Specifically, under the effect of the referential anchor, promotion focus was positively associated with subjective success (see Figure 2). These two interaction effects suggest that while stability (e.g., focusing on one or two projects) works for prevention focus, referential anchor (e.g., work with a partner) works best for promotion focus.

#### Discussion

Our results suggest that the effectiveness of different strategies in supporting GIG workers succeed and thrive in the GIG economy differs according to workers' regulatory focus. Specifically, in line with our hypothesis, stability strategies seem to fit individuals that are high on prevention (but not promotion) focus. However, contrary to our expectations, referential and societal strategies fit individuals that are high on promotion (but not prevention) focus.

The contribution of this research from a theoretical perspective, lies in the way it leverages the power of regulatory focus for explaining how individuals with different motivational orientations experience modern-day work challenges, and, moreover, how they can effectively address these challenges. From a practical perspective, this research may offer modern-day workers, as well as other stakeholders with a vested interest in their success, a better understanding of the challenges they face, and some practical strategies that may support them in coping and, moreover, thriving in these conditions. Future research could expand the investigation of strategic anchors that support individuals that are oriented to both prevention and promotion focus.

*Keywords: regulatory-focus, GIG economy, motivation*

## Oral presentation OP606

### **How do effort, reward, and their combined effects predict burnout, self-rated health, and work-family conflict among permanent and fixed-term faculty?**

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science

**Research goals and why the work was worth doing:** The goal of this study was to contribute to current knowledge of employment and working conditions in academia. As work in academia is increasingly described as stressful, academic faculty may be at risk for adverse health-related outcomes, which in turn may jeopardize the quality of education and research conducted at higher education institutions. Considering the crucial role that teachers and researchers in higher education play in society, it is important to strive to identify ways in which to improve their working conditions. In this study, we examine if and how faculty perceptions of the psychosocial work environment are associated with different health-related outcomes, and explore how these relationships play out for permanent and fixed-term faculty.

**Theoretical background:** Employment conditions and psychosocial factors have been associated with various health-related outcomes in different occupational groups, but few studies focus on the conditions in academia, particularly Swedish academia. Previous research suggests that the psychosocial work environment may contribute to impaired health and interference between work and family among faculty. Furthermore, temporary employment contracts are commonplace in academia, and may influence employee perceptions of the psychosocial work environment. Moreover, research from other sectors regarding the role of contract type may not generalize to academia. Thus, this study aimed to: 1) investigate the effects of effort, reward, and their interaction to explain burnout, self-rated health, and work-family conflict among faculty in Sweden, and 2) empirically contribute to the research on psychosocial working conditions, contract type, and associated health-related outcomes, including work-family conflict, in academia.

**Design/Methodology/Approach/Intervention:** Questionnaire data, collected online in 2016, came from 2335 faculty with a doctoral degree, working at higher education institutions in Sweden. The average respondent was 48 years of age, 57 percent were women and 78 percent held permanent contracts. Measures of the psychosocial work environment included effort and reward. Burnout, self-rated health, and work-family conflict constituted the health-related outcomes. Using structural equation modeling, multi-group analysis combined with latent moderation analyses was conducted.

**Results obtained:** Main effects of effort were found for all health-related outcomes revealing that effort was associated with higher burnout, poorer self-rated health, and greater work-family conflict. Main effects of reward were found for burnout and self-rated health in both contract groups revealing that reward reduced burnout and improved self-rated health. Reward was not significantly associated with work-family conflict. The interaction between effort and reward was significantly associated with all outcomes among permanent contract employees, but was non-significant among those with fixed-term contracts.

**Limitations:** Future research would benefit from longitudinal studies where both permanent and fixed-term faculty perceptions of the work environment in relation to outcomes of health and well-being could be compared over time.

Conclusions – research and or practical implications/Originality/Value: The results suggest that effort and reward may explain health-related outcomes among academic faculty, with the exception of work-family conflict. Reward does not seem to have beneficial effects for work-family conflict. Furthermore, the results indicate that reward may moderate the relationship between effort and outcomes among permanent faculty, while this may not be the case among fixed-term faculty. Perhaps this is because fixed-term faculty expect an imbalance between effort and reward for some duration of time, in anticipation of eventually securing a permanent contract. Overall, this study emphasizes the importance of psychosocial work environment factors to understand health-related consequences for permanent and fixed-term faculty in Swedish academia.

Relevance to the Congress Theme: The conditions in academia continue to change as the characteristics of the job and faculty responsibilities evolve. Moreover, the research and knowledge-production which characterizes academia is constantly reevaluated and updated, reflecting a context which is constantly changing. New research findings must be integrated with prior knowledge, and passed along to the next generation of students.

*Keywords: academia, psychosocial work environment, temporary employment*

## Oral presentation OP468

### How do Knowledge Workers Cultivate Opportunities for Creative Contributions in a Multiple Team Membership Context?

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science

**Research goal** – The proliferation of teamwork has lead employees to commonly be members of more than one team at a time. This practice of multiple team membership (MTM) is especially pervasive among knowledge workers who accomplish complex tasks. Despite recent scholarly interest in MTM (e.g., Margolis, 2020), our understanding of how members experience and leverage their multi-teaming for their challenging, nonroutine work remains lacking. In this study, we thus focus on creative contributions that are at the center of knowledge work and raise the question of how do knowledge workers cultivate opportunities from their MTM context for creative contributions.

**Theoretical background** – Prior research primarily studied the benefits and costs of employee multi-teaming. On the one hand, MTM is indicated to reduce idle time, promote efficiency, and disseminate knowledge within organizations. On the other hand, it is indicated to introduce additional workload, fragment attention, and compromise employee well-being (e.g., Margolis, 2020). The scholarly discussion thus focused on the impact of MTM (e.g., on employee performance, learning, strain), and overlooked how employees manage their MTM and make use of it for their work. Furthermore, research often studies MTM from a structural perspective that considers the impact of different MTM structures such as the concurrent number of teams (MTM number) and the differences across teams (MTM variety) on employees (e.g., Margolis, 2020). In that sense, our knowledge of MTM is largely bounded to the implications of these MTM structures on employees, and our understanding of employees' actual participation and experiences in multiple teams is lacking (e.g., Mortensen & Haas, 2018). Our research thus moves the scholarly discussion towards how employees actually work in multiple teams, and more specifically, towards how they cultivate opportunities from their MTM context for their creative work contributions. Our research focuses particularly on knowledge workers because a) they represent a dominant group of the workforce, b) they are typically multi-teamers (e.g., prevalence estimates placed as high as 95% for knowledge work), and c) creative contributions are imperative to accomplish knowledge work (e.g., problem solving).

**Design** – We adopted an inductive qualitative research approach that allows us to understand how knowledge workers interpret their MTM experiences in terms of opportunities for creative contributions. In particular, we employed grounded theory procedures (Gioia et al., 2013) and collected semi-structured interview data from 50 knowledge workers a) who are multi-teamers and b) whose work requires creative contributions (e.g., product development, marketing). Through theoretical sampling and constant comparisons, we organized and analyzed the emerging concepts.

**Results** – Preliminary results show that knowledge workers have different underlying MTM mindsets (i.e., mental representations of their MTM) that determine their experiences related to multi-teaming and how they thus establish connections for creative contributions. Building on workers' MTM mindsets, we then discuss whether and how multi-teamers attempt to find opportunities for their creative contributions. We also discuss the role of team centralization (i.e., the extent to which one team is considered central in comparison to the other concurrent teams) in shaping how workers

experience their MTM and the extent to which they engage in creative contributions across their teams.

Limitations – Though our focus on knowledge workers relates to the study's relevance, the transferability of our findings to other contexts where MTM may be common may be limited. Besides, although we think it is a strength to sample workers from different knowledge industries that necessitate creative contributions, we are aware that differences across industries are likely and future research should further examine these differences.

Conclusion – Despite the recent surge in MTM research, little is known about how knowledge workers make use of their multi-teaming for creative work contributions. Our research contributes to the literature by emphasizing the importance of a) studying the processes that accompany workers' MTM rather than mostly focus on MTM outcomes, and b) studying workers' experiences of MTM to move beyond the predominant study of MTM structures. We also derive insights for practitioners about how they can best manage their multi-teaming for creative work.

*Keywords: Multiple team membership, creative work, modern teamwork*

## Oral presentation OP518

### How do we Include? An investigation into Employee Inclusivity

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science

**Aim:** Despite the growing interest surrounding inclusion in the workplace (Roberson, 2019), research is yet to consider how individual employees contribute to the inclusive experience of those around them. This research seeks to examine the ways in which employees exhibit inclusion within their workgroup. That is, how do we include others?

**Background:** Increasing diversity in the workforce resulted in a focus shift from the challenges with diversity, to inclusion which promotes the integration and value of diversity (Roberson, 2019; Nishii, 2013). Creating inclusive environments has been described as the key to unlocking the many benefits of diversity (Shore, Cleveland, & Sanchez, 2018). These benefits include employee performance, creativity, helping behaviours, and commitment (e.g., Nishii & Rich, 2014; Cho & Mor Barak, 2008).

Yet, we have only recently agreed upon a definition for what it means to feel included at work (Chung; 2019; Tang et al., 2015). Drawing upon optimal distinctiveness theory (ODT; Brewer, 1991) Shore and colleagues (2011) established the first conceptual definition of inclusion; defined as the simultaneous fulfillment of one's need for belonging alongside their need for uniqueness.

To achieve real and felt inclusion, research agrees that inclusive treatment must come from all levels of the workplace, from organizational actions (e.g., Offerman & Basford, 2014; Roberson, 2006) to leader behaviours (e.g., Roberson, 2020; Nishii & Mayer, 2009). It has also been noted that one's local workgroup plays a significant role in determining experiences of inclusion (Nishii & Leroy, 2020). Despite this, very little conceptual or empirical work that considers how individual employees contribute to the inclusive experience of their fellow colleagues. Our research therefore aims to understand the ways in which employees contribute to the inclusive experience within their workgroups by examining how they exhibit and receive inclusive behaviours.

**Design:** An online, mixed methods study was conducted to explore the descriptive content of employee inclusivity as well as the related characteristics and associated motivations. Content analysis was used to analyse the data.

**Method:** An online survey was administered via Prolific Academic. The sample consisted of 251 (males=75; females=170; other=5) adult employees. Participants were asked to describe "four instances where they received an inclusive behaviour", and "four instances where they exhibited an inclusive behaviour". Participants were asked to rate the characteristics of each unique behaviour including its underlying motivation, genesis, target, goal, and resources. Commonalities were examined within qualitative responses using content analysis.

**Results:** Up to seven key themes of inclusive behaviours were revealed through content analysis. Across both received and exhibited behaviours, five core themes of inclusive behaviours emerged including 1) civility, 2) involvement, 3) value signalling, 4) compassion, and 5) identity acceptance. Within exhibited behaviours, two further themes emerged including 6) promoting egalitarianism, and 7) diversity and inclusion engagement.

**Conclusions:** Our findings offer several valuable contributions. First, they provide a tangible framework for understanding inclusion on the ground. Second, our results offer insight into the kinds of behaviours that (often resource-intensive) diversity and inclusion practices should be promoting.

Finally, they demonstrate the potential discrepancy between 'behaviours we think are inclusive' and 'behaviours that make us feel included'.

Congress Theme Relevance: Our research appeals the congress theme by 1) contributing to our understanding of the practice of inclusion, 2) creating urgency around the ways in which we incentivise diversity and inclusion engagement, and 3) delivering key outcomes that will help change the future of work for the better.

*Keywords: Diversity and Inclusion, Employee Inclusion*

## Oral presentation OP570

### How Does Trust Sound? The Influence of Voice Pitch on Trust

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Research goals and why the work was worth doing

The influence of voice characteristics such as voice pitch (the perceived height of the voice, see Titze, 2000) on trustworthiness inferences sparked interest during the last decade, but the results are contradicting. In fact, low-pitch voices were associated both with increased trustworthiness (Tigue et al., 2012) and decreased trustworthiness (Schild et al., 2019). Yet, studies investigating the influence of voice pitch on trust differ to a large extent. Hence, it is not clear what the directional effect of voice pitch on trust is, or if such an effect exists at all. The goal of the current investigation was thus to test whether voice pitch influenced trust inferences about a social interaction partner. The work was worth doing because it introduced a novel economics perspective to the study of voice by using a robust experimental design with real monetary incentives.

Theoretical background

Voice pitch is considered as “the perceived ‘height’ of the voice” (Titze, 2000, p. 236) and is a perceptual correlate of the mean fundamental frequency (Titze, 1994). Voice pitch shapes inferences about speakers trustworthiness in situations where they are unknown to raters (Apple et al., 1979; Oleszkiewicz et al., 2017) and this may be due to the effect of testosterone on seemingly unrelated phenotypic traits (i.e., pleiotropic effect; Tognetti et al., 2020) that are vocal pitch and cooperation (O'Connor & Barclay, 2017). In fact, vocal pitch and cooperation are both influenced by testosterone levels in males (Bird et al., 2019; Fitch & Giedd, 1999). This led O'Connor and Barclay (2017) to suggest that voice pitch may thus be a cue to cooperation and may help individuals to determine whether to trust or not.

Design/Methodology/Approach/Intervention

The present research was composed of two studies that used the same experimental design with the same set of stimuli. Study 1 and Study 2 only differed in the participants that were recruited, the type of task that was used, and the addition of a perceptual measure of trustworthiness in Study 2. In study 1, 265 participants were recruited at a Swiss University. They were asked to play a Trust Game (TG, see Berg et al., 1995) with real incentives. Before playing, investors heard a brief message from their counterpart saying “Hi, I’m your partner and you can trust me.” Investors then played the game, their gains were computed, and they were paid accordingly.

In Study 2, the same experimental design was used but participants played a hypothetical TG with no money involved. Perceived trust was also measured with a single Likert-scale item. To test this hypothesis, 318 Prolific participants were recruited and followed the same procedure as in Study 1.

Results obtained or expected (if not available, it must be made clear when they will be)

Overall, the results were consistent across both studies: voice pitch did not predict trust, neither measured as a behaviour or as a perception. The only consistent result was the effect of gender on trust, whereby male participants were more trusting than female participants, which is in line with previous meta-analytical results (van den Akker et al., 2020).

Limitations

Two potential limitations are noteworthy. First, the method used to modify voice pitch (shifting semitones) differed from earlier speech studies (e.g., Tigue et al., 2012) which used equivalent rectangular bandwidth shifting. This difference might have influenced how voice pitch was perceived by participants. Second, although the sample size was bigger than previously published studies in the field, it was still smaller than what was suggested by Monte Carlo simulations to ensure proper randomization of treatments to participants (Lonati et al., 2018).

Conclusions – research and or practical implications/Originality/Value

Across two studies with both perceptual and behavioral as well as incentivized measures of trust, the results consistently indicated that voice pitch did not affect trust. This calls into question the hypothesis that voice pitch could be a cue to cooperation. Further research is required to see if these findings are restricted to trust games or if they extend to other social dilemmas.

Relevance to the Congress Theme

One of the calls to action for the Congress is “How should we say it?” which is precisely the aim of the two studies. In fact, whenever someone speaks, listeners hear how high or how low they sound. By experimentally testing whether voice pitch influences cooperation, this research contributes to develop our knowledge on voice, and more broadly on interpersonal communication.

Relevant UN SDGs

By searching for insights into the mechanisms of cooperation between humans, the current research is highly relevant for economic growth (SDGs’ 8 th Goal) and ultimately peace (SDGs’ 16 th Goal).

*Keywords: Trust, Voice Pitch, Experiment*

## Oral presentation OP177

### How does workplace bullying influence personality change over time? Results from a Swiss panel study

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science

#### Research goals

Workplace bullying has deleterious effects on victims. However, little is known regarding if or how workplace bullying can change one's core personality traits. Most existing studies examine cross-sectional correlations between bullying and personality and are not well-suited to addressing questions of personality change. Accordingly, we investigated the relationship between workplace bullying and personality over 4-years to determine if and how bullying exposure relates to victim personality change.

#### Theoretical background

Leymann's (1996) classic theoretical model describes workplace bullying as a 'vicious circle' in which the bullying treatment intensifies in frequency and severity, and in which the victim's behaviour and personality change in response to this, thereby perpetuating the process. Leymann's (1996) model, aligns with the TESSERA framework of personality change (Wrzus & Roberts, 2017), which explains that the mechanisms we use to regulate our momentary thoughts, feelings, and behaviours in response to situational triggers can become habitual and produce personality change when the triggering situations and subsequent sequences are repeated. The regular and repeated nature of bullying suggests that those who are exposed may then experience the personality changes that Leymann describes, which include becoming withdrawn (less extraverted), defensive (less agreeable), and more sensitive and anxious (neurotic).

#### Methodology

We used panel data collected by the Swiss National Centre of Competence in Research Lives project (NCCR LIVES: <https://www.lives-nccr.ch/en>). The data were collected from a representative sample of the Swiss working population across seven yearly intervals. We used waves 1-4: nWave 1 = 2469, nWave 2 = 1944, nWave 3 = 1629, nWave 4 = 1535. Bullying was measured in each wave using the item: 'In the last 12 months at work, In your last job, have you personally experienced mobbing / bullying?', the response scale was yes/no in wave 1 and 'never, rarely, occasionally, frequently' in waves 2-4. The personality variables were measured in waves 1 and 4 using the NEO Five-Factor Inventory Revised (NEO-FFI-R; McCrae & Costa 2004).

#### Results

Personality demonstrated moderate-strong levels of rank-order stability, in-line with the broader literature, with test re-test correlations (T1-T4) ranging from .66-.77. Bullying showed greater variation with test-re-test correlations (i.e., T1-T2, T2-T3, T3-T4) ranging from .38-.43.

We used latent change score (LCS) analysis to test the study hypotheses (McArdle, 2009). LCS analysis is a general framework for examining intraindividual change in which a key feature is the modelling of change between two time points (e.g., change in personality from T1 to T4). Bullying was positively correlated with changes in Neuroticism. The effects were present for bullying at any

time point (i.e., T1, T2, T3, T4 all correlated with change in neuroticism), with the most proximal effects being the strongest (i.e., T3 and T4) and this effect was robust to sample variations (i.e., whether those who were bullied at T1 were included or omitted) and scoring variations (i.e., whether bullying was scored dichotomously or as a severity). Bullying was unrelated to change in the other personality traits investigated.

#### Limitations

Personality was measured at wave 1 and wave 4, limiting the insights we could glean regarding the trajectories of change and potential existence of reciprocal effects.

#### Conclusions

By examining whether bullying victimisation across waves 2-4 predicted subsequent changes in personality, we found that becoming a bullying victim at any point in the study was consistently linked to greater changes in neuroticism. This effect was robust, regardless of whether the individual consistently experienced bullying across all study waves, or only experienced it only at wave 2 or 3. These findings suggest that bullying has negative effects on personality by increasing neuroticism, which may have longer-term distal implications as elevated neuroticism is related to a range of health outcomes (Lahey, 2009) and reduced workplace performance (Barrick et al., 2008)

#### Relevance to the Congress Theme

Our findings, alongside existing research (e.g. Matthiesen & Einarsen, 2004), suggest that the impact of bullying goes beyond work by affecting the psyche of individuals long after the initial experience. This means that the way people are treated in work today may have lingering implications for the decisions they make about work, how they interact with others, and whether they can contribute to society.

#### Relevant UN SDGs

Workplace bullying is relevant to the SDGs of 'Good health and wellbeing' and 'Peace, justice, and strong institutions'.

*Keywords: workplace bullying, personality*

## Oral presentation OP655

### How does your workspace influence your personality?

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science

#### Background:

In modern society we spend most of our lives working. However, the COVID-19 pandemic has dramatically changed this, specifically where we work. Many employees are now required to work from home or in a hybrid way, working from both the office and home throughout the week. Secondly, as the role and purpose of the office has been re-considered, several employers have introduced new areas and types of workspaces to their offices, moving away from the traditional banks of desks to offer spaces such as collaborative zones. The aim of these spaces is to promote specific behaviours and attitudes when working in them, such as communication, giving a 'focus' for working from the office.

Given the new range and variation between workspaces, it is proposed that personality expressions will show variability as a consequence of exposure to different environments. According to Trait Activation Theory (TAT), personality traits interact with the demands of the environment, for example rules about how to behave, to produce behaviours (Tett et al., 2021). However, we argue that since behaviour is only a facet of personality, a more direct method to examine personality expressions is through the study of personality states, defined as the momentary or short-term expressions of personality traits, inclusive of all attitudes, behaviours and cognitions which are aligned to the underlying trait (Zillig et al., 2002). A growing literature is supportive of personality state variability within the workplace, however most of the findings center around predicting performance (e.g., Minbashian et al., 2010). In contrast, the the present study operationalises personality states as the outcome to explore two questions:

Do home and office work environments promote different personality states?

Do personality expressions vary across different workspaces within the office?

#### Design:

An experience sampling study was conducted across employees of eight UK based organisations, consisting of two half-day responses (11am, 4pm) across a 10-day period. Over 5500 surveys were submitted, 1956 from an office workspace and 3627 from a home workspace. The total sample consisted of 471 employees, 60% female with a mean age of 39 years ( $SD = 11.1$ , range 20-80), 45% of whom were managers with an average tenure of 7.3 years.

#### Results:

Significant correlations were identified between work location (office or home) and personality states of extraversion ( $r = .15$ ,  $p < .001$ ), conscientiousness ( $r = .06$ ,  $p < .001$ ) and agreeableness ( $r = .03$ ,  $p = .03$ ). Using MLM to nest scores within individuals to examine within-person variation, we found a positive effect of work location on state extraversion (Est = .32,  $t = 13.53$ ,  $p < .001$ ) and conscientiousness (Est = .11,  $t = 6.16$ ,  $p < .001$ ), indicating that working in the office promoted higher levels of these states compared to when these individuals worked from home. No significant

relationship was found for state agreeableness. The reported results are controlling for both demographic variables and baseline measures of personality traits.

Within the diary entries logged from the office workspace, 1166 were reported from an open plan desk and 134 were reported from a closed office. No significant correlations were identified between office workspace and the personality states measured, suggesting that employees did not vary in how they worked across these spaces.

The analysis of this data is ongoing and further results will be presented at the conference.

#### Conclusions:

This study presents early insights into how the workplace may shape personality expressions. The significant differences between home and office-based working will have considerable contributions for practice, particularly relating to performance if state conscientiousness is lowered when working from home. Moreover, the lack of support for personality states variation across different workspaces may raise questions over the effectiveness of these workspace designs. Theoretically, by operationalising states as the outcome of an environment-trait interaction, in contrast to the previously identified behaviours, we provide a direct test of TAT. The results ultimately contribute to furthering our understanding of the new workplace, integrating the personality dynamics literature to present a novel assessment of employee behaviour within the workplace.

#### Relevance:

This study directly contributes to the Congress' Theme by exploring the experiences of employees' as they develop new ways of working, highlighting the impact on their personality expressions. Originating from a broader multi-disciplinary project, the study was designed in collaboration with industry partners and colleagues from Information Systems and Engineering. The work links into the UN SGD of 'industry, innovation, and infrastructure' and 'decent work and economic growth'.

*Keywords: personality states, physical workplace, home working*

## Oral presentation OP756

### How Leaderboards and Goals Improve Task Performance and Its Self-assessment

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science&practice

#### Research goals

The aim of this study was to (1) to replicate a previous experiment on leaderboard and goal-setting effect on participants' task performance in an idea generation task (Landers et al., 2017), (2) to extend it by examining how participants assessed their performance, and (3) to evaluate such self-assessment by comparing task performance with a standard found in previous studies (Landers et al., 2017; White et al., 1995). Such a study allows us not only to evaluate whether gamification via leaderboards is a valid way of goal-setting to increase performance, but also to see whether goal setting in general and via leaderboards helps workers to assess their performance more accurately.

#### Theoretical background

Gamification is an intentional or emergent transformation of nongame environments (e.g., work, education, hobbies) to a more game-like state (Hamari & Koivisto, 2019) by implementing various game elements and designs (e.g., points, badges, and leaderboards). Its purpose is to increase motivation and task engagement (e.g., time-on-task), alter attitudes and behaviour, and to enhance goal achievement and performance (Deterding, 2011; Treiblmaier et al., 2018).

An example of this is a study by Landers et al. (2017) which demonstrates the gamification effect on performance in an idea generation task where a group with a leaderboard performed similarly to groups with a difficult or an impossible quantitative goal while also largely outperforming easy and "do-your-best" (DYB) goal groups. However, research also shows leaderboards may hinder performance when their users face large differences between themselves and higher-ranking competitors (Azmi et al., 2017). Meaning, if the environment becomes too aggressive and insecure due to strong competitiveness, users may perform less. Therefore, we should carefully design the leaderboard so that the competitive pressure is not too high. One suitable way is to develop the leaderboard in accordance with goal-setting theory.

Nonetheless, a question arises how the workers perceive themselves in such (possibly strenuous) situations. More specifically, whether the possibility to compare oneself with a standard (be it a goal or a leaderboard) helps the workers to assess their performance.

Hypothesis 1. Participants with leaderboards have similar task performance to the difficult and impossible goal group and better performance than easy or DYB group.

Hypothesis 2. Participants with leaderboards and difficult goals assess their performance more accurately based on the performance standard than easy or DYB goal group.

#### Methodology

We obtained a sample of 271 participants. The mean age was  $M = 25.16$  ( $SD = 5.96$ ) with 73 % women, 27 % men, and 0.4 % others; 1.5 % of primarily, 47.6 % high-school, and 51 % university educated.

Participants were given a 12-minute task to list uses of a knife in four goal conditions: DYB, easy (15; 1 SD below mean), difficult (39; 1 SD above), and impossible goal (53; 2 SD above). In the gamified condition, we presented a leaderboard consisting of fictional previous player scores based on the goals (15, 39, 53 points) and several scores in-between them. We measured task performance (number of uses) and self-reported performance (1-item on a 1–7 Likert scale). Finally, we divided the sample into low- and high-performing groups based on a performance standard (i.e., task-performance mean in previous studies).

## Results

With an ANOVA, we found an effect on task performance,  $F(4,266) = 11.05$ ,  $p < .001$ , partial  $\eta^2 = .14$ , where those with leaderboards outperformed those in DYB and easy condition while performing similarly to the other conditions, supporting H1.

Inconsistently, we have found higher self-reported performance for leaderboard vs. impossible and lower vs. easy and DYB conditions. Further, we found that low-performing participants in DYB and easy condition overestimated their performance in comparison to low-performing participants with a leaderboard or a difficult goal,  $F(4,260) = 5.91$ ,  $p < .001$ , partial  $\eta^2 = .08$ , supporting H2.

## Limitations

Our gamification design is quite simple and less externally valid due to fictitious scores and a rather superficial task. It also considers only the quantity, not the quality of performance. We therefore suggest using a more complex design, a task closer to actual work, and assessing performance quality.

## Conclusions

This study shows leaderboards utilize goal-setting theory to increase task performance to the level of difficult and impossible goals as well as mitigate any negative effects on self-reported performance. Moreover, both difficult goals and leaderboards improve self-assessment which in turn attributes to higher achievement and improved behaviour (Ross, 2006).

Relevance to the Congress Topics: 5. Performance Management, 8. Job crafting and work design, 16. Human-machine-systems

UN SDG: 8.2 Decent work and economic growth – Gamified design answers the call for technological innovation.

*Keywords: gamification, goal-setting theory, performance*

## Oral presentation OP542

### How organisational and leader support can have dual, opposing influences on absenteeism. A longitudinal, organisational-level field study

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science

#### Research goals

Despite its relevance to employee health and well-being (Kurtessis et al., 2017), workplace support has shown inconsistent results in relation to absenteeism. Weak meta-analytic correlations are reported for both collegial and organisational support with absence behaviour (Chiaburu & Harrison, 2008; Kurtessis et al., 2017), and there are contradictory findings regarding the relationships between collegial, supervisor, and senior leader support, and absenteeism (Dello Russo et al., 2013; Luetzen & Sonnentag, 2017). Responding to calls to uncover opposite effects (Johns, 2021), we focus on senior leader and supervisor support and investigate their role in both increasing and decreasing absenteeism. In so doing, we propose a double mechanism to explain such an opposite effect; namely, work pressure and feeling valued at work.

#### Theoretical background

We build on the job demands-resources model (Bakker & Demerouti, 2007; 2017) and conservation of resources theory (Hobfoll, 1989) and propose that senior leaders who engage in participative decision-making set supportive organisational-level norms (Sharma & Pearsall, 2016). Supervisors serve as the interpretive filters through which these norms are operationalised and engage in supportive leadership behaviours themselves, constituting a resource for employees to deal with increasing demands (Inceoglu et al., 2018). The high-pressure environment of healthcare coupled with the responsibility employees feel towards patients (and consequently, colleagues) (West, 2021) can lead to increased attendance pressure. Accordingly, improving workplace support should reduce work pressure and encourage employees to take sick leave when required. Simultaneously, supportive organisational norms foster a work environment where employees feel valued. This climate is likely to promote psychological well-being, thus reducing the likelihood of work and stress related absence.

#### Design/Methodology

Using longitudinal data from the annual English National Health Service National Staff Survey (NSS), we tested for indirect effects in Mplus Version 8.4 using path analysis and 10,000 bootstrapping samples with 95% confidence intervals (CI) across 380 organisations, aggregated to the organisational level (senior leadership ( $\alpha=.90$ ) from 2008, supervisor support ( $\alpha=.92$ ), work pressure ( $\alpha=.78$ ), feeling valued at work ( $\alpha=.90$ ) from 2009, and objective absenteeism data from 2009-2010). We controlled for organisational size, location, and teaching status.

#### Results

Results of the parallel mediation model show a positive effect between senior leader participative decision-making and supervisor support ( $B = .69$ ,  $SE = .03$ ,  $p < .01$ ). Supervisor support has a negative effect on employee perception of work pressure ( $B = -.21$ ,  $SE = .07$ ,  $p < .01$ ) and a positive effect on feeling valued at work ( $B = .71$ ,  $SE = .04$ ,  $p < .01$ ). Employee perception of work pressure was negatively related to absenteeism ( $B = -.23$ ,  $SE = .05$ ,  $p < .01$ ) as was feeling valued at work ( $B = -.18$ ,  $SE = .07$ ,  $p < .05$ ). The mediation path from senior leadership to absenteeism via supervisor support

and work pressure was positive ( indirect effect = .15, SE = .06, 95%CI [.06;.02]) and the path via supervisor support and feeling valued at work was negative ( indirect effect = -.39, SE = .15, 95%CI [-.66;-.13]).

#### Limitations:

As the NSS constitutes secondary data, we recognise this as a limitation. However, the scales used were adapted for a healthcare context from validated constructs and have all appeared in peer-reviewed research (e.g. West, et al, 2022; Bilotta et. al, 2022). Our absenteeism data is reported at the organisational level, but multilevel analysis could provide more insight, particularly on the paths to individual absenteeism. We also highlight generalisability issues due to the nature of the healthcare context.

#### Conclusion

The value and originality of the study lie in uncovering opposite effects in the relationship between workplace support and absenteeism, contributing to solve possible contradictions in the relationship between the social context of work and absence behaviour. In fact, the study addresses calls to unravel and empirically investigate the multiple mechanisms that account for the influence of the social context on absenteeism (Miraglia & Johns, 2021).

#### Practical implications

The nature of healthcare work requires compassion whilst operating under increasingly high-pressure. By recognising the mechanisms by which leaders can influence these complex and paradoxical work mechanisms, we provide timely and relevant recommendations.

#### Relevance to the Congress Theme:

The global COVID-19 pandemic highlighted the centrality of healthcare to our world. The healthcare industry, and increasingly the modern world more generally faces work intensification. Our work addresses the importance of support and reducing work pressure in complex and paradoxical work environments, helping to shed light on some of these inconsistencies.

*Keywords: leadership, absenteeism, organisational support*

## Oral presentation OP282

### **How responsible leadership fosters individual performance: affective commitment and individual creativity's sequential mediation.**

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science

**Research goals and why the work was worth doing :** This study sought to answer the question “How employees’ perception of responsible leadership fosters their individual performance?”. It contributes to the literature on responsible leadership (RL), by identifying two mechanisms through which leaders’ behavior fosters employees performance at work, namely affective commitment (AC) and individual creativity (IC).

**Theoretical background :** RL is described as a way of building and maintaining positive relationships with internal and external stakeholders, as well as coordinating actions responsibly to achieve a shared and meaningful business vision that contributes to sustainable value creation and positive change (Maak & Pless, 2006). Few studies explored RL consequences at the individual level of analysis (Haque et al., 2021). Based on this gap, this research adopted an employee-centered approach to analyze how RL is related to individual performance (IP) in the work context, within the scope of a model that proposes AC and IC as potential mediating mechanisms.

Regarding the relationship between RL and IP, Lin et al. (2020) found a positive relationship between the constructs and asked for more investment in the identification of mechanisms that help explain how leaders’ responsible behavior positively impacts followers’ IP.

The relationship between RL and AC has been established as positive and significant (Haque et al. 2018, 2021; Mousa, 2017), as well as the relationship between RL and individual creativity (Castro-González et al., 2019; Zulfiqar et al., 2022). Responsible leaders are open to dialogue and present themselves as role models regarding the behaviors and attitudes expected by organizations. This allows employees and leaders to create a psychological bond that is transferred to the organization in terms of AC. This subsequently would lead employees to feel comfortable and safe to share their thoughts, feelings, and opinions, which is important to stimulate employees’ creativity at work (Buil et al., 2019; Maak & Pless, 2011).

**Design/Methodology/Approach/Intervention :** A quantitative correlational, survey-based study was developed with 260 workers. The survey included instruments selected from the relevant literature to measure the variables of interest and socio-professional characteristics.

**Results obtained or expected :** The results indicated a significant relationship between RL and IP. Furthermore, the indirect effect of AC on the relationship between RL and IP is significant, indicating that RL indirectly influences IP through the promotion of AC. However, the indirect effect of IC on the relationship between RL and IP is not significant, indicating that in this sample RL does not indirectly influence IP by increasing IC at work. As for the third indirect effect, referring to the sequential effect of AC and IC in the relationship between RL and IP, it was significant. This indicates that RL contributes to strengthening the subordinates’ AC to the organization, which increases their IC at work, which, in turn, reinforces their IP. The direct effect of RL on IP is no longer significant when the mediators are present, so there is a full mediation effect.

Limitations : The main limitations are: the risk of single source bias; the non-probabilistic sample that limits the results' generalizability; and, the correlational design that assesses correlations rather than causal relationships.

Conclusions : Literature had previously confirmed the relationship between the different constructs under analysis, but by combining them into a single sequential mediation model the current study offered a more comprehensive understanding of the relationships between them. It is important to note, that the sequential mediating effect emerges as the stronger indirect effect. This means AC and creativity combined are important variables that need to be considered by a responsible leader in order to influence positive outcomes on their employees such as IP.

Relevance to the Congress Theme : Corporate social responsibility has been gaining increasing prominence in the business world. Socially responsible organizations work towards their business goals in harmony with ethical values, respect for different stakeholders, protection of the environment, and the general well-being of society. This form of action is undoubtedly necessary to maximize the creation of value and achieve the SDGs. RL recognizes the importance of sustainability and CSR. This type of leadership calls attention to the need for leaders to be attentive to both organizations' inside and outside, and try to provide answers to the challenges that the world currently faces.

*Keywords: Responsible leadership, Individual work behaviors, Individual work attitudes*

## Oral presentation OP276

### How supportive behaviour and psychological safety coevolve through time and their joint impact on innovative behaviour and thriving at work

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science

#### Research goals

In today's dynamic and complex work environments, employees who demonstrate learning and innovative behaviour benefit themselves as well as their employers. Psychological safety is considered an important condition for promoting learning, innovation and development in organizations (Edmondson, 2018). While lots of research on psychological safety focuses on the role of the leader, peer support also appears important in psychological safety (Frazier et al., 2017). Few studies examined how exactly psychological safety unfolds over time in relation to the supportive behaviour of key parties at work. Relying on a longitudinal research design, this study focuses on (1) how the instrumental and affective supportive behaviours of team members as well as the team leader evolve through time in relation to the experienced psychological safety and (2) how this impacts the innovative work behaviour and thriving of employees. We will specifically look at the differential role of four types of supportive behaviour, based on type of stakeholder (leader versus peer) on the one hand and type of support (instrumental versus affective) on the other hand.

#### Theoretical background

Psychological safety refers to the feeling that you are safe to take interpersonal risks within a team (Edmondson, 1999). For studying the development of psychological safety, we rely on the overall supportive organizational context as framework (Edmondson, 2004; Schepers et al., 2008), distinguishing peer support and leader support. In their meta-analysis, Chiaburu and Harrison (2008) revealed how peer support impacts diverse outcomes beyond leader influences, and how the content of support (instrumental versus affective) makes a difference. We will take on a dynamic process approach, building on insights from Schulte and colleagues (2012) who found that network ties within teams and psychological safety coevolve, arguing how it is important to not merely rely on unidirectional models for studying these phenomena. We therefore investigate how (peer and leader) support coevolve with psychological safety.

For addressing the beneficial outcomes of psychological safety and a supportive work environment, we focus on innovative work behaviour (i.e. the development of new ideas in order to promote performance, the group, or the organization; Janssen, 2000) and on thriving at work (i.e. a psychological state characterized by the experience of vitality combined with growth/learning (Spreitzer et al., 2005; Kleine et al., 2019), as both appear to play a relevant role in helping employees adapt in dynamic environments.

#### Research design

A longitudinal three-wave quantitative design is set up to address our research questions. We chose a full-panel design, in which all variables are assessed at each wave. All hypotheses will be examined via a random-intercept cross-lagged panel model (RI-CLPM), which makes it possible to distinguish within-person from between-person effects. This technique allows to assess whether changes within-persons (e.g. an increase in psychological safety) relate to subsequent changes within-persons (e.g.

an increase in support). Furthermore, the model allows to detect feedback loops, which is at the core of our research interest.

#### Expected results

Data is collected in three waves with one-month intervals between January and April 2023 within a large corporation. Analyses will take place from March 2023 onward.

#### Limitations

Due to the homogeneity of the data collected within one corporation, a first limitation entails the generalizability of the findings. Second, we rely on self-report data, which may raise concerns for common method bias. Yet, personal perceptions of the key variables under study can give relevant insight into the processes that assist individual employees at work, especially as we study them longitudinally.

#### Originality and value

This study adds to the understanding of how supportive behaviour of team members and leaders can actually be helpful in stimulating innovation and thriving at work, enhancing our insight into workplace dynamics and the role of psychological safety herein. Future research can build on these insights for further investigating contextual and individual differences and underlying processes, or for developing interventions. Practitioners can build on these insights by actively pursuing and fostering relevant supportive behaviour at work.

#### Relevance conference theme “The future is now”

The study is aligned with the conference theme as it investigates important processes that assist employees in their innovativeness and learning potential, two factors highly relevant to become future-proof in the current highly dynamic work environments.

#### Relevance UN SDGs: Decent work and economic growth

We investigate how a supportive work environment that fosters safety, vitality, learning and renewal at work develops. This adds to our understanding of building decent work as well as sustainable economic growth.

*Keywords: psychological safety, supportive organizational context, learning and innovation*

## Oral presentation OP211

### How Technology Invasion Is Affecting Our Wellbeing: A Moderated Mediation Model

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science&practice

One UN sustainable development goal of particular relevance to the field of IO psychology is decent work. Decent work is not only an important contributor to wellbeing at work but also to the attainment of meaningful and fulfilling life for individuals. Unfortunately, high job demands and inadequate job resources prevailing in today's jobs lead to emotional exhaustion and diminished wellbeing. There is a significant body of research investigating a variety of job demands and resources. However, changes in the way of working coupled with the trend towards remote working triggered by Covid-19 pandemic increased technology use leading to the emergence of new job demands. Techno-invasion, referring to constant connectivity through ICTs for work and losing boundaries between private and work lives, is such a predominant demand and an important stress creator in contemporary jobs. Drawing upon Job Demands-Resources (JD-R) model the current study examines the impact of techno-invasion on psychological wellbeing through emotional exhaustion. JD-R model and Conservation of Resources (COR) theory suggest weakening negative effects of job demands, job resources may be used. Social support is one such job resource. This study investigates the indirect effect of social support in the form of supervisor and co-worker support on employee's psychological wellbeing as being relevant to the work context. Finally, the present study proposes that individual coping strategies such as yoga might help manage emotional exhaustion. Hence, this study tries to provide an integrated understanding of burnout by combining work and nonwork domains to enhance employee wellbeing.

Data were collected via an online survey. 353 employees from various sectors (including both yoga practitioners and non-practitioners) participated. The hypotheses were tested using path analysis. Results presented significant evidence substantiating the health impairment process of the JD-R model and extend the limited research on understanding of techno-invasion as a job demand with the presence of important job resources in the same model (i.e., supervisor and co-worker support). Results were in line with the JD-R model and COR theory: techno-invasion was significantly and positively related to emotional exhaustion and negatively related to psychological wellbeing. Supervisor support was significantly and negatively related to emotional exhaustion. Both supervisor and co-worker support were significantly and negatively related to psychological wellbeing. This study is also one of the earlier studies to assess the indirect effect of techno-invasion and social support on psychological wellbeing through emotional exhaustion. Results presented important contributions to the technostress and burnout literature indicating that emotional exhaustion was a significant mediator between techno-invasion, supervisor support and psychological wellbeing, whereas the indirect effect of co-worker support on psychological wellbeing was insignificant. Accordingly, this study also provides evidence for understanding the effectiveness of different types of support in relation to exhaustion. The overall moderated mediation model testing the conditional indirect effect of techno-invasion on wellbeing was significant, however in the opposite direction of the proposed hypothesis. Yoga was found to strengthen the positive effect of techno-invasion on emotional exhaustion. Still, up to a certain level of techno-invasion, yoga practitioners' exhaustion levels were lower than those of non-practitioners as expected. Assessing the effectiveness of yoga with a questionnaire and mediation effect through cross-sectional data might be limitations for the current study. Altogether, the findings have several implications for managers. First, managers can

take preventive actions to balance job demands and resources such as increasing their support to the employees by continuously communicating their goals, providing clear directions, and organizing mentoring programs to prevent burnout. Second, managers or organizations can take some measures to prevent technology invading employees' private lives by increasing awareness or setting some limits. Additionally, effective physical activity programs can be offered to enhance personal resources. Thus, this research aimed to contribute to extant literature by investigating a newly emerged and increasingly prevalent job demand (i.e., techno-invasion) and social support (i.e., supervisor and co-worker support) as a job resource on employee's psychological wellbeing through emotional exhaustion and assessing a personal resource (i.e., practicing yoga) as a moderator. Thereby, it was an attempt to add to the understanding of how to improve employee's wellbeing and how to build future workplaces respecting employee's physical and mental integrity.

*Keywords: Well-being, Burnout, Technology*

## Oral presentation OP96

### How to Capture The Rage? Development and Validation of a State-Trait Anger Affect Scale

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science&practice

Research goals and why the work was worth doing: While anger is the most commonly felt emotion at work, no scales are openly available to measure anger affect in the work context. For implementing measures against anger's destructive effects or to use it constructively, it has to be measured validly and reliably. But is it even possible to develop a scale that correctly measures the complexity of anger while also not overburdening time-pressured workers? To answer this question, we aim to develop and validate a new bilingual scale measuring state and trait anger. We set out to make the scale as parsimonious and adaptable as possible, while ensuring high reliability and validity. A psychometrically valid anger scale, which also alleviates the burdens of scale complexity and length, will allow researchers to conduct effective and efficient research on the subject of anger and practitioners to quickly spot and treat discontent in their companies.

Theoretical background: Based on a thorough literature review, we aligned the scale with appraisal theory, conceptualizing anger as an emotion perceived as strongly arousing and negative, resulting from an action enacted against oneself or confidants which is perceived as arbitrary, reckless, or malicious. We further refined the scale with prior knowledge from the anger literature.

Research Methodology: We pre-registered our hypotheses at the Open Science Framework ([https://osf.io/bnwfd/?view\\_only=5c4c0aff60a74d1d80e284f8da2b43b2](https://osf.io/bnwfd/?view_only=5c4c0aff60a74d1d80e284f8da2b43b2)). We followed a systematic research methodology, first generating items, continuing with content validity assessments, and finishing with an initial item reduction and construct validity assessments. We generated items by consulting validated emotion theories to make sure that our items are framed in accordance with established scientific knowledge. We used back-to-back translation with the help of a native U.S.-English speaker for item translation. We subsequently conducted a content validity study with 109 German-speaking psychologists, instructing them to rate the items in terms of their theoretical fit and clarity. We further conducted a construct validity study with 302 German and 301 U.S.-American full-time workers, comparing our scale with other validated emotion scales.

Results obtained: Theoretical examinations as well as Q- and R-methodology principal component analyses support content validity. Robust confirmatory factor analyses support construct validity. We compared our scale with scales measuring anger and hostility. The first-order latent constructs sufficiently and significantly correlate with each other and tap a common second-order latent construct, supporting convergent validity. We also compared our scale with scales measuring surprise, joviality, serenity, shyness, and sadness. Most latent constructs do not sufficiently correlate with each other and present with significantly worse model fit when constrained, supporting discriminant validity. Our preliminary 4-item state-trait anger scale presents with excellent internal reliability and model fit (state:  $\alpha = .90$ ,  $X^2(2) = .72$ , CFI = 1.00, RMSEA < 0.001, SRMR < 0.01; trait:  $\alpha = .89$ ,  $X^2(2) = .95$ , CFI = 1.00, RMSEA < 0.001, SRMR < 0.01).

Limitations: Current limitations include the cross-sectional design of the construct validity study. We aim to ameliorate this limitation by testing our scale in a diary-study. The use of self-report measures raises concerns of common-method-bias.

Conclusions: Researchers can readily use our anger scale for data collection in the work context. Because of its parsimony, the scale saves precious space and time in study designs, especially in diary

studies. This will reduce method-biases resulting from overburdening scales, such as participant resistance, boredom, and fatigue. Due to its simple design, researchers can translate the scale into other European languages without creating semantic issues. This increases the possibility of cooperation between culturally and linguistically differing European researchers who aim to measure anger as part of their international studies. We deliver an easy-to-understand and readily applicable scale to practitioners, which allows them to anonymously inquire their workers' anger levels. By anonymously voicing their anger, workers will perceive that their troubles are being taken seriously. This will increase their work moral, loyalty, and productivity.

Relevance to congress theme: Workers' well-being has to be measured appropriately, urgent problems have to be identified and solved quickly, and solutions have to be properly implemented and reliably controlled for. Our measure can readily solve these issues by directly measuring workers' well-being, by identifying urgent problems brooding in the minds of workers, and by validly assessing and reliably controlling for the proper implementation of solutions.

*Keywords: Anger, Scale, State-Trait*

## Oral presentation OP252

### How to help migrants integrate into the workplace: Corporate responsibility and the adjustment process of migrant apprentices in German companies

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practice

#### Research goals

After the 2015 migrant crisis, the German government called on the private sector to help integrate migrants via the vocational education and training (VET) program. Indeed, many firms recruited migrant apprentices due to a sense of moral responsibility. However, the dropout rate of migrants is 10% higher than that of natives. One-third of all dropouts occur within the first 4 months of the apprenticeship (BIBB, 2019), indicating a newcomer adjustment problem. While most research blames individual challenges (e.g. language), we aim to shift the focus on the companies, evaluating organizational measures to support migrant apprentices. We ask two questions: 1) Do socially responsible companies offer more support? 2) Which specific support measures help migrants adjust better?

#### Theoretical background

We approach the firms' role from a Corporate Social Responsibility perspective. We draw from stakeholder theory (Freeman, 1984) and the categorization of CSR orientations into six domains (El Akremi et al., 2018), specifically the community and employee orientations. Moreover, we address the apprentices' adjustment in the workplace through the lens of organizational socialization (Van Maanen & Schein, 1977), i.e. the process by which newcomers become from organizational outsiders to insiders (Bauer et al., 2007). Newcomer adjustment is attained when the newcomers achieve role clarity, task mastery, and social integration, with other indicators being job satisfaction and intention to stay.

#### Design/Methodology

Individual-level data were collected from apprentices during the first week of their apprenticeship in the fall of 2021 (demographics, German language skills), as well as 3 months into the apprenticeship (dropout intention, job satisfaction, task mastery, social integration). Organizational-level data were acquired via surveys of representatives from the training companies (CSR attitudes, support toward migrant apprentices, such as mentoring and German language courses). We conducted binary logistic regression at the organizational level, and two-level hierarchical linear modeling to test the cross-level interactions between migrant status and various support measures. The final sample consisted of 265 apprentices (25% migrants) nested in 92 companies.

#### Results obtained/expected

Preliminary results show that firms with high community-oriented CSR offer more support measures such as tutoring, German courses, and introduction to professional clubs. The multilevel model demonstrates that there is a positive direct effect of mentoring on social integration, as well as a negative effect of help with authorities on dropout intention. Significant cross-level interactions point out that even secondary support measures, such as help with accommodation, may increase their social integration, while tutoring facilitates their task mastery. Surprisingly, the offer of German language courses seems to aggravate the migrant apprentices' dropout intentions.

Currently, we are collecting data from a new wave of companies and apprentices, who start their VET in the fall of 2022. We plan to run further explorative analyses in February 2023, when we will have surveyed them 3 months into the apprenticeship.

#### Limitations

Our sample consists of only 66 migrant apprentices, but it will be enhanced with the addition of the 2022 apprentices. Our sample is unfortunately not random, as the participating companies are already motivated in integrating their migrant employees. Additionally, the CSR scales elicit social desirability bias.

#### Conclusions

Our research suggests that socially responsible companies facilitate the adjustment of migrants in the workplace through specific support measures. The study examines a rather neglected object of CSR (migrants) and explores the practical side of corporate responsibility. The implications of the research are mostly practical, as the findings may influence how to allocate resources for the integration of apprentices. Information on the effectiveness of support measures is also valuable for decision-makers in governments with regard to funding private initiatives.

#### Relevance to Congress Theme

The study is relevant to the theme “The future is now: the changing world of work” in that it acknowledges the difficulties of migrant employees, who comprise one-fifth of the workforce in Europe (ILO, 2021), in adjusting to their workplaces and negotiates how to improve the world of work for them.

#### Relevant UN SDGs

Since it revolves around migrant employees, our study is associated with goal #10 (Reduced inequalities). Furthermore, it is relevant to goals #4 (Quality education) and #8 (Decent work), as it proposes measures for inclusive vocational education and productive employment for apprentices, particularly those with a migrant background.

*Keywords: Migrants, Newcomer adjustment, Corporate social responsibility*

## Oral presentation OP645

### How to Stay Focused in Stressful Times: The Effect of Strain Recovery on Concentration

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science

Research goals and why the work was worth doing

Due to the COVID-19-pandemic and the intensified demands associated with working at home, knowledge workers were exposed to increased stress. In this study, we want to draw attention to individuals' cognitive functioning during stressful times.

Theoretical background

Drawing on the load theory of selective attention (Lavie et al., 2004), we argue that strain and its associated strain-induced cognitions produce perceptual load which, in turn, puts the feelings and thoughts associated with the stressor in the focus of workers' attention. And when workers are focused on stressors, they cannot concentrate on other important activities, such as their work tasks. Also, when strain decreases concentration, we assume that the recovery from strain may increase concentration.

Design/Methodology/Approach/Intervention

In order to investigate the effects between strain, recovery, and concentration, we designed a recovery intervention program in which workers were required to perform exercises over the course of four weeks. The self-training exercises aimed at knowledge workers who worked at least partially from home and were provided via a smartphone app that was specifically developed for the purpose of this study. The intervention was accompanied by a longitudinal questionnaire study. To show the reliability of recovery interventions and the robustness of its beneficial effects, intervention 1 targeted the experiences psychological detachment and control, while intervention 2 aimed at strengthening relaxation and competence.

Results obtained

After two and four weeks of exercising, the strain and concentration scores of intervention group 1 (36 workers) and intervention group 2 (34 workers) were significantly better than those of the waitlist-control group (32 workers). Moreover, a longitudinal analysis showed that the beneficial intervention effect on concentration was mediated via a reduction of strain supporting the theorized causal effect of strain on concentration. Limitations Despite the usage of the objective manipulation, the results are still based on self-reports. Thus, an external validation of concentration or more details about the performed exercises would be beneficial.

Conclusions – research and or practical implications/Originality/Value

Our study contributes to the literature in three ways. First, we introduce the idea to conquer concentration issues by means of strain recovery and thus point out a potential novel purpose of such interventions. Recovery interventions are important because, particularly in stressful times, individuals need support to recover from strain as recovery experiences suffer when individuals face a high level of stressors (Sonnentag, 2018; Sonnentag et al., 2017). This may be the case because of strain-induced cognitions (Brosschot et al., 2005; Sonnentag & Fritz, 2015) and negative emotions that keep the organism aroused and impede the motivation to engage in relaxing activities (Sonnentag, 2018). Second, we theoretically and empirically underpin the mechanism by which a

recovery intervention affects concentration via lowering strain levels. By drawing on the load theory of attention (Lavie et al., 2004), we argue that strain induces thoughts about the stressor which occupy scarce attentional resources and, in turn, lower workers' concentration on other activities such as the performance of their work tasks during work hours. We aim to test the hypothesized link between strain and concentration by means of a longitudinal questionnaire study that accompanied the intervention. Although previous experiments indicate the effects of strain-related cognitions on mind wandering (Banks & Boals, 2017; Sliwinski et al., 2006; Sneddon et al., 2013), to our knowledge, empirical field evidence is still missing that links strain and recovery with concentration. Finally, by using a smartphone app to administer the intervention program, we tested a contemporary tool to administer intervention programs that holds many benefits as compared to traditional methods. In the past, recovery interventions were conducted in group settings with a trainer (e.g., Almén et al., 2019; Coffeng et al., 2014; Hahn et al., 2011; Poulsen et al., 2015; Siu et al., 2014). We believe that conducting an intervention via an app-based self-training is not only an appropriate reaction to the pandemic-induced change towards more e-learning, it also allows high levels of flexibility for participants and researchers and potentially strengthens participants' motivation to participate in an intervention program as well as the external validity of these programs.

#### Relevance to the Congress Theme

Our study investigates how workers can foster their wellbeing in the changing world of work.

*Keywords: recovery experiences, cognitive functioning, intervention*

## Oral presentation OP358

### How to Stimulate Researchers' Motivation? Leaders' Perspective on the Pursuit of Scientific Excellence

Magdalena Szuflińska-Zurawska, Krzysztof Leja & Beata A. Basińska | Gdańsk University of Technology  
science

#### Research goals:

This study identifies the strategy of motivation management followed by academic leaders to build a solid university position at international level. Specifically, it examines how academic leaders compose the components of the motivational strategy and how they generate researchers' motivation in order to reach organizational goals by providing incentives and reducing obstacles to achieve scientific excellence.

#### Theoretical background:

Stimulating scientific excellence is a foundational element of strategic plans for all higher education institutions to consistently meet goals and achieve long-term success in a highly competitive landscape. Drawing on the New Public Management approach (focus on incentives, competition and leadership principles) and performance management (based on quantitative and qualitative key performance indicators), we take a closer look at the managerial function of motivation. In line with Vroom's expectancy theory, there are connections between motivation, performance and effort. We also introduce self-determination theory (SDT), in which a self-determined continuum ranging from intrinsic to external motivation, including amotivation, may drive researchers to their valuable work.

#### Methodology:

The study applied a qualitative approach method. We conducted 12 semi-structured interviews with top managers (rectors and vice-rectors) of Polish technical universities. We carried out data analysis using NVivo software. After collecting materials, interviews were transcribed and forwarded to the coding stages. Following the thematic analysis consistent with Braun and Clarke (2006), common patterns were identified to investigate how study participants understand and manage the motivation of researchers to achieve scientific excellence.

#### Results:

The findings revealed three main themes. The first theme concentrated on components of strategy, namely the brand building of higher education institutions, identification of intellectual capital and career path planning. The second theme focused on incentives implemented by rectors to reach organization-scientific performance goals (publishing papers in valuable outlets, accessing grants and economic partners). Moreover, we identified the inventory of incentives. For example, most facilitators focused on financial gratitude, less often on non-financial benefits (appreciation and recognition). The third and final theme described how leaders perceive different types of researchers' motivation. Rectors most often mentioned intrinsic motives (e.g., passion) and external motives (e.g., money and prestige). Furthermore, among all themes, we noticed dark sides reflecting shortcomings. They include, for instance, feeding on the passion of researchers instead of motivation management (first theme), omitting incentives that were essential to keeping up the efforts to obtain scientific performance (second theme) and ignoring the combination of various motives that may hold researchers back (third theme).

Limitations: Our study was conducted in one country (Poland) at universities of technology, omitting, e.g., medical or more humanities-oriented higher education institutions. Future research should include more types of higher education institutions and could be expanded to cover other countries.

#### Conclusions:

Our study highlights the importance of work motivation as one of the essential requirements to attain effective performance in higher education institutions. Establishing a well-defined, engaging and employee-oriented motivational strategy could affect the achievement of scientific excellence. In line with self-determination theory and Vroom's expectancy theory, researchers need adequate resources to obtain the expected results and need to be stimulated by incentives representing the whole spectrum of the auto-determination continuum.

Until now, the management of motivation using the lens of top managers has been rarely described in the literature; thus, our contribution will be of significance to a broad spectrum of stakeholders interested in higher education, management and psychological issues. In addition, the integration of managerial and psychological theories of motivation applied in this study is a novelty. Finally, our study shows that reaching organizational goals is impossible without appreciated and properly motivated employees. Consequently, leaders in higher education institutions must identify appropriate incentive instruments and adapt them to the strategy of achieving goals and researchers individually.

*Keywords: motivation, leadership, scientific excellence*

## Oral presentation OP57

### **HR IN TURBULENT TIMES: How are HR priorities and mastery levels adjusting to new realities in Belgium?**

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science&practice

In unpredictable times, many face the challenge of setting the right priorities. This is certainly true for Human Resource (HR) professionals sailing through turbulent waters, characterised by economic uncertainty and extremely tight labour markets.

But what is the impact of this turbulence on the functioning of HR? The HR Barometer study elaborates on the trends and challenges in Human Resource Management in the largest for-profit organisations in Belgium (Bel 20, + 200 largest for-profit organisations in terms of number of employees). As annual initiative launched each year in January, the HR Barometer survey comprises two parts. The first part focuses on the strategic importance of different HR practices and policies, so that changes in these priorities can be investigated from a longitudinal perspective. One metric used here is 'priority' of HR services, not only indicating the importance of a certain HR domain, but also its urgency. Another metric is 'mastery', explaining how well HR professionals have certain services under control. The second part of the study is a variable set of items, investigating a particular HR domain which gained importance over the past year.

The next wave of the HR Barometer study will be launched in January 2023, shedding light on priorities that prevailed in 2022 and examining how those changed in comparison to previous year(s), affected by the many challenges we encountered this year. For our data collection, which will run from January until March 2023, we will target HR Directors and Managers from a broad spectrum of industries in Belgium. Based on previous waves of our longitudinal survey, we expect to collect between 100 and 125 responses.

In the first part of our survey (focussing on the strategic importance of different HR practices and policies), respondents will indicate the priority of HR practices and the mastery of these practices on a scale from 0% (no priority/low mastery) to 100% (top priority/role model). We will combine the insights from the metrics 'priority' and 'mastery', and hence divide all responses into four quadrants: 1) high-priority domains that HR departments master well are what we call in this analysis 'strengths', 2) domains with high priority, but low mastery are 'improvements', 3) mastering a domain which is not considered a priority is 'under control', and 4) everything else is labelled 'low priority'. Findings that result from this will be compared to last year's results and strategic shifts will be revealed.

The second part of the survey will have a closer look on the topic of diversity, equity, and inclusion (DE&I) and will investigate how HR professionals are approaching the 'DE&I challenge'. Looking at our HR Barometer results from the last few years, diversity is traditionally one of the HR domains situated in the 'low priority' quadrant. Nevertheless, the topic was indicated in our most recent survey (launched in January 2022) as an important factor that will drive organisations' HR strategy in the coming years. To better understand this paradox, we will deep dive into prevailing ideas, attitudes and expectations related to the topic of DE&I. Also, we will investigate how HR is trying to diversify their talent pools and which concrete actions they are taking to build more inclusive workplaces. We will elaborate on the challenges HR professionals face, and the opportunities they see to overcome those.

Data analysis will take place from March until April 2023, and in our insights will be gathered in a research report. During the EAWOP conference, we will present our insights to inspire both academics and practitioners in the audience. On the one hand, we invite (human resource management) practitioners to inform them on recent trends and challenges in HRM in leading organisations operating in Belgium. On the other hand, we would like to invite academics to pursue similar research designs, which could be a first step towards international collaboration that allows for cross-country comparison of our Belgian data.

With our research, we hope to contribute to both the 'Decent work and economic growth' (first part of our HR Barometer study) and the 'Reduced inequalities' (second part of our HR Barometer study) Sustainable Development Goal, as described by the United Nations.

*Keywords: HR strategic priorities, longitudinal research, DE&I*

## Oral presentation OP246

### Humans as creativity gatekeepers: Why and when are human evaluators biased against AI creativity?

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science

**Research goals:** In the near future of organizational creativity, AI will generate ideas, products and solutions, and humans will largely act as creativity gatekeepers, evaluating the creativity of these artifacts, rather than idea generators. Thus, we need to assess how apt humans are at evaluating AI creativity. Specifically, as creativity evaluation is affected by a plethora of cognitive biases, many linked to identity of the creator, we aim to study whether the producer identity as AI (vs. human) is also a source of bias. We also look at what drives this effect, as well as at potential boundary conditions.

**Theoretical background:** The first auctioning of an AI-made artwork at Christie's in 2018 closed with the piece selling for a staggering US\$ 432,500, insinuating that the creativity of AI-made artifacts is held in high esteem. Yet, the fear and anxiety of being replaced by AI because of its increasing ability to perform generative tasks and the limits of AI regarding autonomy, motivation, intention, consciousness, and emotions often engender a negative assessment of AI-made creative artifacts. So, it is unclear how human evaluators rate the creativity of artifacts created by AI differently than that of comparable human-made artifacts. This is problematic, because the appraisal of AI creativity has become a pressing issue, given that AI is now able to perform inherently creative tasks, leading human involvement in the creative process to switch away from idea generation and toward creativity evaluation.

**Design/methodology:** With seven experimental studies (cumulative N = 2,986 individuals, N = 13,773 observations) using a combination of within- and between-subjects designs, we examine whether the identity of the producer (as human vs. AI) impacts human evaluators' creativity evaluation, as well as nuances (i.e., mechanisms and a boundary condition) of this relationship. To enhance generalizability, we recruited both American (working adults) and Hong Kong Chinese (undergraduate students) as respondents and used different evaluation targets (visual, audio, written ideas) and experimental designs (within-person, between-person).

**Results obtained:** People generally—but not always—assign lower creativity to a given production when they are told that it was made by AI rather than a human. The existence of a producer identity bias was consistent in the evaluation of aesthetic content (e.g., Australian Aboriginal paintings), but did not appear as a direct effect in the evaluation of commercial content (e.g., advertisement posters, startup business ideas). It appears that the nature of the evaluation target matters in determining the strength of the producer identity bias.

Some specific mechanisms drive this effect, namely perceptions of effort and competence, and feelings of wonderment. The effect through effort was most consistent, and in four out of six studies it was also moderated by the evaluator's creativity mindset, such that the more the evaluator believes that creativity is fixed, the weaker the indirect effect of producer identity on creativity through effort.

**Limitations:** The evaluation targets we have chosen might not be representative of the wide variety of creative production that AI is and will be employed for in organizations. Specifically, several of our

targets are markedly aesthetic (e.g., paintings, music) and might not be part of the daily processes of many organizations. Also, our research was purely experimental, and thus is limited in terms of external validity.

**Conclusions:** Humans are not fully adequate gatekeepers of AI creativity, but this effect is situational. Specifically, humans are better gatekeepers of AI creativity regarding creative production that is framed more as commercial, whereas they are more heavily affected by biases when the production is framed more as artistic. The perception of the effort exerted in the production process is the most consistent mechanism driving the effect of producer identity as AI on creativity evaluation.

**Relevance to the Congress Theme:** In the near future, the role of humans in creativity processes in organizations will shift from idea generation—which will be increasingly outsourced to AI—to creativity evaluation. Thus, given the importance of creativity and innovation for organizational survival and thriving, how humans evaluate AI creativity is a critical theme to address when studying the future of work.

**Relevant UN SDGs:** #8 Decent Work and Economic Growth, #9 Industry, Innovation and Infrastructure

*Keywords: creativity evaluation, artificial intelligence, effort*

## Oral presentation OP550

### HUMANS OR MACHINES? A SYSTEMATIC REVIEW OF OBJECTIFICATION AT WORK

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science&practic

Objectification – treating human beings as instrumental tools that are deprived of agency and experience – is inherent in many organizational practices, as some employers attempt to maximize profits by objectifying employees. However, objectification undermines target employees' interests and well-being. This review seeks to address this dilemma by looking into relevant theories and empirical evidence with regard to workplace objectification. Specifically, this review summarizes and integrates what is known about antecedents and consequences of objectification from three different perspectives: Objectifying others, self-objectification, and experiencing objectification. We show that objectification originates in a market-pricing mode, such that people think of others and themselves in a calculative utilitarian way. This review sheds light on the dilemma of objectification by showing that people often objectify others in order to achieve their extrinsic goals, such as money and power, or to reduce subjectivity uncertainty, while thwarting the objectified targets' fundamental control, belonging, and self-esteem needs. We provide a comprehensive framework that integrates the extant literature on objectification and identifies both theoretical and methodological recommendations. We conclude by discussing the practical implications on how to promote both employee wellness and performance (hence profitability).

*Keywords: extrinsic goals, objectification, psychological needs*

## Oral presentation OP46

### **Humour as a Resource in Healthcare – Comic Styles and work-related Well-Being of German Medical Assistants**

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Research goals and why the work was worth doing

Medical Assistants (MAs) are the “link” between patient and physician and play a core role in the healthcare system in many countries. However – especially due to the COVID-19 pandemic – MAs’ job strain is high while resources are typically low. Humour might be a helpful personal resource, however, studies on health care professionals’ (HCPs) humour rarely consider different humour styles (e.g., fun vs. sarcasm), which is surprising, as some styles can be maladaptive (e.g., dehumanising healthcare). Therefore, this study investigates the relations between MAs’ humour styles and their work-related well-being.

Theoretical background

The literature on humour in healthcare shows that HCPs’ humour serves different functions (e.g., cope with stress, foster relationships). However, humour can show in different styles – mostly divided into light vs. dark styles. While light styles correlate positively with mental health, dark styles correlate negatively. However, regarding HCPs, literature on the adaptivity of humour styles is scarce and shows ambivalent results regarding the adaptivity of dark humour. Moreover, those studies do not consider different kinds of light and dark humour that vary in adaptivity. The Comic Style Markers (CSM; Ruch et al., 2018) include eight distinct humour styles that are used in this study.

Methodology

Applying a quantitative, cross-sectional design we assess the relevant variables by means of an online-survey that aims at German MAs (including apprentices). Humour styles are assessed using Ruch et al.’s (2018) CSM, whereas work-related well-being is operationalized with work-engagement, professional self-efficacy and job-satisfaction. Data will be analysed by means of bivariate and multivariate correlations/regressions, including control variables (e.g., age, job experience). Depending on sample size, either single CSM or combinations of CSM (i.e., humour clusters) will be analysed. Further, we also assessed some objective indicators of professional success (e.g., holding a leadership role) to control for common-method bias to some extent.

Results expected

Data collection runs from September until October 2022. We expect robust relationships between humour styles and work-related well-being, differing in a) direction (e.g., benevolent humour correlates positively with outcomes, while sarcasm correlates negatively) and b) magnitude (e.g., benevolent humour shows stronger relationships than does nonsense humour).

Limitations

Due to the cross-sectional-design, causality cannot be inferred (e.g., COVID-19-pandemic may have increased dark humour). However, as experimental and longitudinal research shows, humour and well-being probably influence each other reciprocally, ending up in a positive gain spiral. Further, as a person’s humour styles might differ depending on context (i.e., private vs. work), results might be

biased. However, we included a variable asking for the congruence of one's humour to control for this bias. Moreover, although we integrated some objective indicators of professional success, there still might be a common-method bias, as all variables are assessed by means of self-ratings.

#### Conclusions

As most former studies on HCPs' humour are qualitative or even non-empirical, to our knowledge, this is the first study to investigate HCPs' fine-grained humour styles in a quantitative design. Regarding practice, this study sheds light on which certain humour styles should be developed in MAs and what styles should be cautioned against in order to maintain and improve MAs well-being and thus productivity. Regarding research, this study adds essential knowledge on the growing nomological network of the CSM (i.e., work-related variables).

#### Relevance to the Congress Theme

MAs' role in our healthcare system is essential – not only due to the current COVID-19 pandemic but also due to population ageing and growth (i.e., new diseases, wider spreading of diseases). In primary care the number of patients is increasing rapidly and thus physicians need MAs as an essential support in their practices. In the sense of “the future is now”, we need to provide them with helpful resources NOW to foster their health and well-being which in turn maintains a functioning healthcare system and thus a healthy society.

*Keywords: Humour, Well-Being, Medical Assistants*

## Oral presentation OP53

### I Choo-Choo-Choose You: A Hands-On Introduction to Automated Item-Selection in Scale Construction

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science

Research goals and why the work was worth doing

The use of automated item-selection procedures has become a regular part in contemporary scale construction and shortening. This is due to the rise in the complexity of research questions demanding shorter questionnaires which must simultaneously meet a wide variety of quality criteria beyond traditional reliability. However, while technical developments have been steady and applications of new approaches have become more frequent, an overview of current possibilities and general recommendations are lacking.

Theoretical background

Substantive research in organizations is often accompanied by time constraints or the need for diverse scales for more complex research questions. This goes along with a need for economic versions of the assessment with short scales and thus often with the question how to convert the long version of a scale into a short one. In the creation of short questionnaires, there are often problems, e.g. the change of the internal structure of the questionnaire or a low reliability. A key question in this conversion from long to short version is, which items should stay and which should go - the procedure of the actual item selection. Here too, depending on the method used, there are various subjective decisions made by the researcher.

Item selection is the heart of a scale, as the items serve as manifest anchors of the latent construct. Thus, item-selection is the foundation of every measurement and therefore it can be said that if the selection is problematic, the measurement instrument is problematic and consequently our results are problematic as well. So how can the item-selection be improved? A contemporary approach to constructing scales or short scales is to use meta-heuristics for item-selection.

Design/Methodology/Approach/Intervention

To demonstrate the possibilities of contemporary approaches to automated item-selection on the example of a German scale for the assessment of Meaning of Work. The original item pool consists of a total of 34 questions, unevenly distributed to assess the facets "self-realization" (17 items), "belonging" (9 items), and "justification" (8 items). The focus is the discussion of possibilities and requirements in automated item-selection in general, not the construction and evaluation of this specific scale.

Results obtained or expected (if not available, it must be made clear when they will be)

The goal is to explain the three core decisions that are critical when applying automated item-selection procedures and present recommendations on how to choose the right selection strategy, generate custom optimization functions, decide on possible schemes for quality control, and how to report the results.

Limitations

This section is not applicable.

## Conclusions – research and or practical implications/Originality/Value

You should not see the use of machine-learning algorithms as a "magic pill" that solves all problems in measurement, but as a tool. It is a tool to produce an important measurement tool in organizational psychology, namely a new or a short scale. It is important to understand here that it is one tool among many in a toolbox. It can be helpful in certain situations, but may not be appropriate in others.

## Relevance to the Congress Theme

A contemporary approach to constructing scales or short scales is to use meta-heuristics for item-selection. Although these approaches have been available for several years, their way into the field of substantive research has been slow and fraught with some questions and prejudices from colleagues, reviewers, and editors. The future is now – let us use contemporary tools for creating a better assessment.

*Keywords: scale development, Confirmatory factor analysis (CFA), automated item-selection*

## Oral presentation OP198

### **I do not like it, but I do not say it: Social processes affecting work-related technology-use outside work hours in dual-earner couples**

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science&practice

**Research goal.** This study tries to better understand why dual-earner partners continue to engage in work-related ICT (information and communications technology)-use outside work hours (WICT) despite the tensions and irritations that this behavior triggers in the home context (Carlson et al., 2018). To this end, we examine how social interactions among partners contribute to or, conversely, interfere with partners' WICT behaviors.

**Theoretical background.** Work-related ICT-use outside work hours or WICT has become an increasingly prominent behavior in many households (Bourdeaud'hui & Delagrangé, 2017). Yet, this behavior is not without risks. Earlier research has shown that employees who engage in WICT tend to experience more stress, more work-home conflict and lowered sleep quality (Ďuranová & Ohly, 2016). In addition, since WICT happens in employees' private time, also other family members, such as their partner, may be affected by their WICT (Carlson et al., 2018; Zhang et al., 2021). This is particularly likely in dual-earner couples, which are the dominant household type in many western countries (Roehling & Moen, 2003), since in these couples both partners may engage in this behavior. Prior research has indeed found that when one partner engages more in WICT, the other partner experiences, on average, more relationship tension, more family-to-work conflict, more emotional exhaustion and lower well-being (Carlson et al., 2018; Ma et al., 2016; Zhang et al., 2021).

Given these risks of WICT for both employees and their partners, it is intriguing that people continue to engage so intensely in this behavior. This is particularly striking since this behavior is a voluntary, non-obliged behavior that takes place in the home context outside regular working hours. Although it is known that employees' WICT is influenced by organizational availability norms and expectations (Ďuranová & Ohly, 2016; Gadeyne et al., 2018), we do not understand yet how social processes at home, i.e., between partners, interfere with or contribute to people's continued engagement in WICT. Therefore, we explore in this study how dual-earner couples interact and negotiate about their WICT and how they justify their own and their partner's WICT.

**Method.** We interviewed 44 dual-earners from 22 dual-earner couples. All interviewees had participated to a prior large-scale survey study, in which they had indicated to be willing to engage in a follow-up interview. We selected couples in which at least one partner engaged in WICT regularly. Interviews were done with each partner separately and lasted on average one hour. Next, the interviews were transcribed verbatim and currently, we are analyzing them through thematic analysis.

**Results.** Preliminary insights suggest that employees' WICT conduct is affected and regulated by the social processes at home, between them and their partner. Employees bring the values and expectations from their workplace to their homes, which stimulate them to engage in WICT (e.g., 'it is just part of my job, my function'). This behavior often clashes with their own and their partner's personal values and preferences, triggering irritations and tensions. Nevertheless, partners generally show understanding for each other's WICT ('if I need him, he is there for us') and because of this, they engage in practices like 'keeping silent' and 'chameleoning' (i.e., engaging in WICT when one's partner does it). Through these practices, partners implicitly signal acceptance and approval of each other's WICT, in that way reinforcing this behavior even more.

Limitations. Interviews were conducted online due to the covid-19 pandemic.

Implications. Our study sheds light on how dual-earner employees implicitly reinforce and reproduce WICT at home through the social processes of keeping silent and chameleoning. Talking about WICT and explicitly planning deconnection moments could potentially help dual-earner couples to avoid unwilling reinforcement of each other's WICT.

Originality. While earlier studies focused on the role of organizational norms to understand engagement in WICT, our study reveals that also social processes at home can contribute to the reinforcement and reproduction of WICT.

Relevance to the Congress Theme:

WICT and an 'always on culture' are increasingly normalized in today's world of work, despite the known drawbacks of this behavior for employees' health and well-being. Understanding processes that contribute to this normalization processes is a first step to alter this situation.

Relevant UN SDGs:

Ensure healthy lives and promote well-being for all at all ages

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

*Keywords: Workrelated ICT-use outside work hours, dual-earners, social processes*

## Oral presentation OP296

### **I need a break! Gender differences on emotional exhaustion and recovery experiences in a weekly diary study**

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science

Work stress literature and research are vast, but most theoretical models have ignored a key variable in the work-related stress process: the time of exposure to stressful conditions and the possibility of recovery (e.g., Roe, 2008; Scholz, 2019). However, despite the extensive longitudinal studies conducted over the past few years (Sonnentag et al., 2022), little is known about the optimal time lags to incorporate into such studies to better understand the stress-recovery process (e.g., Dormann & Griffin, 2015; Ford et al., 2014; Griep et al., 2021). Following the stressor–strain models proposed by Frese and Zapf (1988), being exposed to a stressor during a certain period can lead to psychological and psychosomatic dysfunctions. However, such dysfunctions can develop in different ways over time depending mainly on the time of exposition to the stressor and the ability to cope with it. In that sense, the situation (stressor) that produces the stress response is not the problem per se, but may become problematic if it produces prolonged activation over time and drains the workers' resources. Therefore, it is important to explore what the worker does (usually during non-working hours) to reduce activation and prevent potential adverse effects (i.e., recovery experiences: Sonnentag et al., 2022).

In addition, although some meta-analyses have shown that women seem to experience higher levels of emotional exhaustion than men (García-Arroyo et al., 2019; Purvanova & Muros, 2010), there is a lack of studies focusing on how sex/gender differences may affect the stress-recovery process. Consequently, this study aims at exploring how workers' biological sex influences their experiences of both emotional exhaustion and recovery (i.e., psychological detachment and relaxation) over time.

We conducted two intensive longitudinal survey studies. The first one is a five-wave weekly diary study with a one-week time lag between measures. Interestingly, during the third data collection time there were in-week days off, making it possible that participants disconnect from work for more days (four instead of two days). Participants were recruited by non-random sampling using a snowball technique through social networks and instant messaging services. Participants fulfilled a general online questionnaire measuring trait-like variables and working conditions ( $n = 170$ ; 50.6% women; Mage = 39.46 years; SD = 11.52; min. = 20; max. = 67). Then, participation in the weekly questionnaires for five consecutive weeks was incentivized by a raffle of two €50 gift vouchers ( $n = 51$ ). The weekly survey included the following variables: work-home conflict (3 items from Geurts et al., 2005), rumination (4 items from Sukhodolsky et al., 2001), emotional exhaustion (4 items from Shirom & Melamed, 2006), psychological detachment (3 items from Sonnentag & Fritz, 2007), and relaxation (3 items from Sonnentag & Fritz, 2005). Participants' age and the number of dependent children/elderly people under their responsibility were controlled. The second study follows a daily diary design with data collection during eight consecutive days (with the weekend in the middle) to explore even shorten effects of the recovery process.

We conducted a repeated measures General Linear Model with time as a within-subject factor, biological sex as a between-subject factor, and well-being measures as dependent variables. Overall, there were no significant differences between women and men in their weekly levels of emotional exhaustion than men. Regarding time, results showed that only at time three ( $t_3$ ), there was a

significant difference in emotional exhaustion depending on the participants' biological sex: women decreased their level of emotional exhaustion (all  $p < .01$ ), whereas men maintained the same level of emotional exhaustion over time. Indeed, overall, men reported higher levels of weekly relaxation than women ( $F(1,48) = 4.76, p < .05$ ); but in such a week, female participants self-reported higher levels of relaxation (but not psychological detachment), whereas men maintained their levels of relaxation over time. Furthermore, in such a week, women perceived a decrease in their work-home conflict levels (but not men). Therefore, it seems that there is a decrease in their demands that allows recovery experiences during the days off.

These results may be interpreted with caution because this study is not exempt from limitations. For example, the sample is quite small and is not representative of the general working population. Also, this study relies solely on self-reported data and future studies should include multisource measures (e.g., salivary cortisol to assess stress levels).

In conclusion, these results suggest that women benefit more from in-week days off (holidays) than men. Therefore, this research may have relevant implications for work-life balance policies and practices, including work design, flexible arrangements, and i-deals.

*Keywords: stress, psychological detachment, relaxation*

## Oral presentation OP751

### I want it all: Hoarding knowledge for creative idea

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science&practice

Research goals and why the work was worth doing

The aim of this paper is to extend the current discussion on the drivers of social exchange in idea generation by exploring whether and how knowledge hoarding and the use of tacit knowledge stimulate the generation of creative ideas. First, our research contributes to the creativity literature by examining how knowledge (hoarding and tacit) stimulates creativity, answering Anderson et al.'s (2014) call for more in-depth research on knowledge and creativity. Second, we provide evidence that the key knowledge utilization for idea generation is the use of tacit knowledge. Third, we contribute to the literature on knowledge hoarding by providing empirical evidence that knowledge hoarding can be valuable for idea generation.

Theoretical background

The social knowledge exchange between colleagues is a valuable source of creativity, while knowledge sharing enhances creative problem-solving capacity (Carmeli, Gelbard, Reiter-Palmon, 2013) and, in turn, supports an employee's own idea generation (Paulus, Larey, & Dzindolet, 2001). Hence, employees may be trapped in a "knowledge-is-power syndrome" (Du Plessis, 2005), which arises from the individual mentality that knowledge means power (Morgan, 1994) and owning knowledge is the only way outperform your colleagues (Webster et al., 2008). Knowledge hoarding refers to the accumulation of knowledge (Hislop, 2003) and has usually been viewed as a negative act in organizations (Bilginoğlu, 2019), while knowledge hoarding behavior results from a human predisposition to prioritize self-interest over organizational interest. However, we posit that knowledge hoarders actively make decisions about what knowledge to share, with whom, and when, based on their self-interest, and that thus they do not limit themselves to only sharing some knowledge, but actually seek to gain and use tacit knowledge from their peers. The use of tacit knowledge (e.g., insight, intuition, problems, concerns, issues, experiences, undocumented processes, "gut feelings," etc.) gained from colleagues can channel knowledge hoarders into the production of new ideas, whereas creative ideas do not spontaneously emerge from thin air but are born from a social process (Perry-Smith Shalley, 2003) in which individuals share knowledge with others (Perry-Smith, 2006; Unsworth). Therefore, we hypothesize that knowledge hoarding can actually stimulate individuals in gaining tacit know is positively related to idea generation and that this relationship is mediated by the use of tacit knowledge.

Design/Methodology

We conducted a field study on working professionals in public administration (n=383) and followed standard procedures to examine mediation model using a bootstrap approach (Preacher and Hayes, 2004). To test our hypotheses, we first examined the relationship between knowledge hiding and creativity (H1) mediated by the use of tacit knowledge (H2) by conducting mediation in PROCESS. Results The result revealed that knowledge hoarding was positively related to individual creativity. Moreover, mediation model 4 in PROCESS macro showed that the use of tacit knowledge indeed mediates the positive relationship between knowledge hoarding and creativity, thus supporting hypothesis 2.

## Limitations

Our dataset is based on cross-sectional, self-reported data gathering, and although all variables can only be assessed through self-perceptions, causal relationships could be reversed. Future laboratory or field experiments or three-wave longitudinal studies could address these concerns and establish a more definite take on the proposed causal relationships. Another limitation of our research is that we examined the effects of knowledge on idea generation rather than on the different stages of innovation. Although sharing knowledge and information might be more important for idea generation than championing and implementing ideas (Bogilović, Bortoluzzi, Černe, Ghasemzadeh & Žnidaršič, 2020), it would be beneficial to provide empirical evidence on how knowledge hoarding and the use of tacit knowledge are related to the different stages of the innovation process.

## Research/Practical Implications

From a managerial perspective, we provide evidence that knowledge is essential for generation creative ideas. Thus, managers should have in mind that not all knowledge hoarding leads to a negative employee behavior (e.g., knowledge hiding) and that more knowledgeable individuals are more creative and thus should focus on increasing the social exchange quality among all colleagues.

## Originality/Value

This study is the first of its kind that is based on social exchange theory, empirically examining how knowledge hoarding stimulates idea generation. Furthermore, this paper provides insights that willingness to use of tacit knowledge stimulates is crucial for individual creativity.

*Keywords: Creativity, Knowledge hoarding, Tacit knowledge*

## Oral presentation OP330

### **I'm frustrated, and you only make it worse: Employees frustration in the face of external disruptions and associated leadership actions**

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science&practice

Research goals: Crises have increased threefold in the last 40 years (Wordsworth & Nilakant, 2021). We have witnessed several major crises, such as the 2008 Global Economic Crisis and recently, the COVID-19 pandemic, the war in Ukraine, and the cost-of-living crisis (Wu et al., 2021). These crises fundamentally impact people's well-being, not only in life in general but also in the work domain. For example, following the COVID-19 pandemic, many work procedures were subject to change because many people were obliged to work from home (van Zoonen & Ter Hoeven, 2022). Thus, the pandemic uniquely contributed to need frustration as it created challenges for employees to meet their autonomy (a sense of volition), competence (a sense of mastery), and relatedness (feeling connected to others) needs through work. Need frustration occurs when the social context actively thwarts needs (Vansteenkiste & Ryan, 2013) and can affect the psychological foundations that facilitate well-being and functioning (Moynat et al., 2022). We examined leader actions during crises because they play an important role in influencing employee well-being, yet often fail at attempts to improve it. In addition, crises create a unique set of workplace conditions, and research has not sufficiently examined how leaders effectively manage such situations. Accordingly, the question that guides this research is: How do well-intended leader actions contribute to employee need frustration?

Theoretical background: Self-Determination Theory (SDT; Ryan & Deci, 2017) outlines the fundamental factors that are important for employees' well-being and functioning. SDT highlights the satisfaction of three basic psychological needs (autonomy, competence, and relatedness) as basic nutrients essential for a person to grow, experience well-being, and thrive (Van den Broeck et al., 2016). Research so far has focused on what contributes to the satisfaction of these needs and how this facilitates optimal well-being and functioning. Yet less is known about the role, and consequences of need frustration and how need frustration can be overcome (Van den Broeck et al., 2016). One crucial way for organizations to manage crises is through leadership. Previous research suggests that one of the essential purposes of leadership is to support people in navigating through and managing situations characterised by high uncertainty (i.e., crises; Wu et al., 2021).

Methodology: We collected data from 50 employees during June and October 2020. All participants were in a period of lockdown during the interview. Thematic analysis was employed to analyse the data (Braun & Clarke, 2006). Following Braun and Clarke's six-stage process, data were first familiarised, and then we generated initial codes to categorise the data into meaningful groups. Once coded, codes were combined to create candidate themes (Braun; Clarke, 2006). Finally, the entire data set was re-read, and data within candidate themes were reviewed to ensure that all data had been coded appropriately.

Results: Besides the obvious relatedness need frustration, the other needs were frustrated during the crises. For example, restrictions on daily behaviour (autonomy frustration), increased loneliness (relatedness frustration), and difficulties completing work from home (competence frustration). However, we found that leaders focused on relatedness frustration at the expense of other needs. Through our analysis, we identified three factors of how leaders reacted to employee-relatedness

frustration, which resulted in surface-level actions. The three factors included: the adaptation of practices to support employee relatedness, quick decision-making, and lack of guidance. In addition, we found that leaders used additive rather than subtractive transformations in the face of employee needs frustration. Finally, over time, not much changed regarding employees' situations, and they learned to adjust to this way of life. Yet, leaders did not update the activities to reflect the comfort employees began to feel at home.

Limitations: We only interviewed employees during the crisis. It would have been helpful to interview leaders to understand their actions during the crisis.

Conclusions. Little attention has been given to leader actions in alleviating employee needs frustration (Bundy et al., 2017). Up to now, leader actions are seen as a resource for employees. However, we discovered that leaders' actions were not always effective and frustrated employees' needs. Thus, this study contributes to leadership during crises and need frustration.

Relevance to the Congress: Disruptions continue to shape the future of work because they highlight the shifting role of employees and leaders. We highlight how they understand and react to the changing world of work. We guide managers and employees in the face of crises.

Relevant UN SDGs: This study is relevant to the UN SDGs as need frustration hampers individual growth, development, and well-being.

*Keywords: leadership, self-determination theory, well-being*

## Oral presentation OP679

### Imbalanced Sex Ratio and the Preference for a Strong Leader: An Evolutionary Threat Management Perspective

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science

An evolutionary threat management perspective to leadership assumes that humans have adaptive followership psychology that responds to specific socio-ecological threats by selecting appropriate leaders to mitigate these risks. Previous research has found that people's support for strong, dominant leaders is upregulated during major crises such as wars, acts of terrorism, economic recessions, economic inequalities, and epidemics. The underlying assumption is that in such major disruptions people prefer a strong leader able to take swift action, resolve conflicts, and monitor, control, and punish individuals who deviate from group norms and act to undermine the nation's interests (De Waal-Andrews; Van Vugt, 2020).

Based on an evolutionary threat management approach to leadership, we hypothesize that an imbalanced sex ratio (either male-biased or female-biased) will be perceived as a threat to society and thus will upregulate the preference for a strong leader ( Hypothesis 1 ). Our second hypothesis is that an imbalanced sex ratio will increase the intensity of competition ( Hypothesis 2 ). In addition, we propose that a male-biased sex ratio primarily increases people's perceptions of threat to safety ( Hypothesis 3a ), whereas a female-biased sex ratio primarily increases people's perceptions of threat to traditional norms ( Hypothesis 3b ).

#### Methods

We created vignette descriptions to accurately and concretely manipulate the sex ratio at the society level, as this is not feasible with any other methodologies (Evans et al., 2015). The general design of the studies is as follows. Participants read information about a country that is described as having a male-biased sex ratio, a female-biased sex ratio, or neither (e.g., a balanced sex ratio or an unrelated threat; for a similar procedure, see Giskevicius et al., 2012). We then ask participants about their preferences for a national leader in a mock election. We operationalize strong leader preference in an explicit (Sprong et al., 2019) and implicit way (Laustsen & Petersen, 2020; Van Vugt; Grabo, 2015).

We investigate the effect of imbalanced sex ratios on the preference for a strong leader ( Hypothesis 1 ) in four online scenario studies (Studies 1-4) and one archival study (Study 5). Study 2 examines whether people perceive an increased competition ( Hypothesis 2 ) and threat to their safety when sex ratios are imbalanced ( Hypothesis 3a ). In Studies 3 and 4, we investigate respectively whether a male-biased sex ratio increases the preference for a strong leader by increasing a perceived threat to safety ( Hypothesis 3a ), whereas a female-biased sex ratio increases the preference for a strong leader via a perceived threat to traditional norms ( Hypothesis 3b ). Notably, we conduct a mini meta-analysis across the four studies to test the robustness of the effects in the individual studies. Finally, in Study 5, we investigate the effect of imbalanced sex ratios by combining cross-national data on sex ratios and leadership perceptions.

#### Results

We find that an imbalanced sex ratio – especially if it is male-biased – upregulates people's preference for a strong leader because they perceive it as a threatening situation. In accordance with

our theoretical model, derived from evolutionary psychology, we find that an imbalanced sex ratio increases the perceived competition in society, which is seen as both a threat to traditional norms and in the case of a male-biased sex ratio to one's safety. According to the mini meta-analysis, the effects of a male-biased sex ratio are robust across the explicit and implicit preferences for a strong leader, whereas the impact of a female-biased sex ratio is smaller and only significant for the explicit measure.

#### Limitation

A limitation is the reliance on scenarios in our studies. Like many other studies that rely on scenarios (Blaker et al., 2020; Griskevicius et al., 2012; Spisak et al., 2012), we carefully tailored their contents to provide controlled but realistic information about sex ratios while keeping other factors constant. In the real-world, operational sex ratios may not differ so dramatically between societies, and the effects these differences may be clouded by many other factors on which these societies vary (e.g., GDP, climate, cultural norms). Thus, our research makes use of the strength of scenario methodologies, which allowed us to isolate the effect of differing sex ratios at a society-level at which straightforward comparisons are not always feasible (Evans et al., 2015).

#### Conclusion

Our results suggest that an imbalance in sex ratios causes variation in leadership preferences. Notably, when societies are male-biased, people's support for a strong leader increases, because sexual competition intensifies and people perceive the situation as more threatening. It would be interesting to study the relationship between leadership preferences and other kinds of demographic transitions, such as in aging societies.

*Keywords: sex ratios, leadership preference, perceived threats*

## Oral presentation OP257

### Impact of differing working arrangements on employee inclusion and wellbeing

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science&practice

#### Research goals

The research aims to fill the empirical gap around the understanding of the impact of new home working policies on employees within organisations. Working arrangements that allow employees to work both from the office as well as from home or remotely are increasingly common. As organisations consider how to structure flexible working arrangements it is important to understand how this affects employees. This research is grounded on a secondary dataset with over 90,000 responses collected across 2020, 2021 and 2022 from several organisations in the financial sector. Focusing on variables relating to inclusion and wellbeing offers insights into the impact of different working arrangements on the employees.

#### Theoretical background

There is somewhat limited and at times conflicting evidence around the relationship between wellbeing and working arrangements. Work by Donati et al. (2021) finds that employees who already had the capacity to work remotely prior to Covid-19 restrictions were likely to experience higher job satisfaction during the pandemic (Donati et al., 2021). In terms of wellbeing employees who were still working outside the home during Covid-19 restrictions were more likely to experience negative feelings, such as being very nervous or depressed than those working from home (Central Statistics Office Ireland, 2020). The study by Rose; Brown (2021) finds a statistically significant effect of own job satisfaction on potential uptake of WFH policies beyond the pandemic. Zürcher et al. (2021) find that although the work-life balance of vocational counsellors did not improve during Covid-related WFH, they do report increased work satisfaction. Strong arguments in favour of improved work-life balance are made by Dousin et al. (2021) who find that flexible working has a positive relationship with job satisfaction, potentially reducing employees' emotional labour and burnout.

One of the prominent WFH concerns for employees is maintaining social ties (Central Statistics Office Ireland, 2020). Krug et al. (2021) find that social interaction at work translates to greater job satisfaction. Results of Juchnowicz and Kinowska (2021) similarly show that working exclusively remotely has a negative effect on employee well-being as work-life balance and workplace relationships suffer.

#### Research Approach

The research spans 3 datasets collected by a finance membership organisation in the years 2020, 2021 and 2022. Regression analysis is conducted to analyse relationships between different working arrangements and the relevant dependent variables. To address inclusion a bespoke index is created combining survey answers relating to questions on inclusion in each respective year. Supplementary differences-in-differences analysis is also used to eliminate time-related effects of changes in variables across the datasets.

#### Provisional Results

Provisional results point at the differing effect of working arrangements on inclusion and employee wellbeing. For inclusion, results with a range of controls show a negative effect as employees work

remotely as opposed to from the office. Sub-categories such as seniority provide an interesting insight, where senior male employees tend to feel the most included whilst senior female employees stand out as the least included category. Employee wellbeing however tends to increase, albeit to a different extent when looking at sub-categories of employees in particular by gender. The results to date are based on data from the 2020 and 2021 datasets. Further work will be done on these, and results from the 2022 will be incorporated. Full analysis is expected to be completed by February 2023.

#### Limitations

One limitation of the research is the finance-specific domain of the dataset. We suggest that the findings of the research will be externally valid in WEIRD countries in high-intensity industries such as finance, consulting or law. Another limitation stems from using secondary data for analysis which does not allow for bespoke creation of survey questions. However, the scale of the dataset supports the rigour of analysis and its outcomes.

#### Conclusions

Initial analysis conclusions point to the positive relationship between working remotely and employee wellbeing, suggesting that increased availability of flexible working options can improve overall employee outcomes. However, inclusion is negatively affected by working remotely from home. This calls for a balanced approach in introducing hybrid working arrangements. We believe that increased attention should be paid by organisations when introducing hybrid working policies to balance the wellbeing and inclusion outcomes.

#### Relevance to the Congress Theme

Hybrid and flexible working are now an integral part of the changing world of work. Understanding the effects of these new working arrangements are integral to building the future of work across different industries and geographies.

*Keywords: working arrangements, inclusion, wellbeing*

## Oral presentation OP160

### Implementing digital tools for shift scheduling and sleep coaching in shift work organizations

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science&practice

**Research goals:** Our goal was to study implementation (acceptability, appropriateness, and feasibility) of two digital tools developed to support good sleep and alertness among shift workers. We were especially interested in identifying factors which enhance or hinder the implementation process in shift work organizations.

**Background:** Shift work is associated with sleep problems and impaired alertness which may decrease work ability and safety at work. Good sleep and alertness at work can be supported both by developing healthy shift scheduling and by offering sleep coaching to shift workers. Nowadays there are digital tools developed for these purposes. However, it is not known how well organizations can implement these tools and which factors affect the implementation.

**Design and methods:** The purpose of our implementation study was to: (1) examine implementation outcomes of acceptability, appropriateness, and feasibility of the new digital tools; (2) identify implementation barriers and facilitators.

Participating organizations were two bus companies which implemented two digital tools. One was VIRE (<http://vire.arturcloud.com/>) which predicts sleepiness in different shifts based on biomathematical fatigue modeling. VIRE was offered to the shift planners of the organizations to evaluate its suitability as a tool to enhance healthy and safe shift scheduling. The other tool was a digital sleep coaching tool which voluntary bus drivers from the studied organizations started to use to support their healthy sleeping habits. We collected data on implementation through questionnaires targeted at the shift planners and bus drivers and through Teams workshops with key personnel from the organizations.

**Results:** Six shift planners and 15 bus drivers answered the questionnaires. The shift planners evaluated the acceptability, appropriateness, and feasibility [1(completely disagree)–5(completely agree)] of the VIRE tool to be on average moderate (mean 2.7–3.4; SD 0.5–0.9). The shift planners appraised that VIRE was easy to use, and the results were easy to interpret but there were difficulties in converting their shift schedules to be analyzed in VIRE. They also assessed that the VIRE should take into account personal preferences and the suitability of shifts for a bus driver in interpreting the sleepiness level of a particular shift. The bus drivers rated the acceptability, appropriateness, and feasibility of the sleep coaching tool as good on average (mean 3.8–4.0; SD 0.7). The most common benefits reported by the bus drivers were ability to use it at their own discretion and comprehensive and practical content of the tool. However, some bus drivers experienced technical challenges in using the tool. The qualitative results from the workshops (n= 27–30) are not yet analyzed but the results will be presented in the congress.

**Limitations:** A relatively small number of participants responded to the questionnaires, which limits the generalizability and reliability of the results.

Conclusions: Based on the questionnaire results the acceptability, appropriateness, and feasibility of the digital tools varied from moderate to good in two bus companies. Easy and self-selected timetable for usage, easy interpretation of the results and comprehensive and practical content enhanced the implementation. Technical challenges and limits of the tool, which did not allow personal factors to be taken into account in the interpretations, hindered the implementation. The qualitative data from the workshops will likely give us more information to evaluate implementation more specifically and reliably.

The research was supported by grant from the Finnish Work Environment Fund (200403).

*Keywords: implementation, sleep, working time*

## Oral presentation OP42

### **Impose or facilitate? A multi-study examination of an individual-environment model of positive thinking at work**

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science&practice

Research goals and why the work was worth doing

Positive Thinking (PT) is often promoted as vital for wellbeing and performance and can even be mandated in organisations. Our research sets to examine outcomes of imposing PT and its effectiveness in facilitating PT. Drawing on conservation of resources theory, we develop and test a model integrating imposing PT as an independent variable, psychological safety and self-efficacy as moderators and mediators, and surface acting and PT as outcomes. We suggest that, contrary to intentions, imposing PT can result in faking rather than enabling it.

Theoretical background

Since environmental conditions either hinder or foster resource creation and maintenance (Hobfoll, 1989), the organisational pressure to display PT can induce faking, whereas psychological safety should facilitate PT. As an attempt to dictate how to think/feel/act, imposing PT represents a threat to the sense of control, an important personal resource that one wants to protect. The endangered sense of personal control and the possibility of losing benefits associated with the “positive thinker” status reduce psychological safety contingent on access to resources (Newman et al., 2017). We suggest that coping with enforced PT and undermined psychological safety involves surface acting affective manifestations of PT, such as enthusiasm or cheeriness. As the risk of losing resources can encourage instrumental behaviours (Hobfoll et al., 2018) and displaying desired characteristics is rewarded in organisations (Hewlin, 2003), the individual succumbs to the pressure to display PT, especially, when their personal resources, such as self-efficacy, are low. Thus, to regain disrupted personal control employees do not internalise the imposed content. Yet, to avoid detrimental outcomes of not displaying the imposed quality, they create the appearance of adopting it. Further, as people must invest resources to gain new ones (Hobfoll et al., 2018), self-efficacy can activate PT through control over oneself and the environment. Finally, a psychologically safe environment enabling learning and growth facilitates PT both directly and through enhancing self-efficacy.

Design

We tested the model in two complimentary studies with individuals working in formal organisations worldwide: a between-subject random assignment online experiment with vignettes (241 participants) and a two-wave survey with a one-week time lag (199 participants) and a final response rate of 91%. For the first experimental study, we conducted a factorial analysis of variance to identify if imposing PT leads to surface acting. In the survey study, we used structural equation modelling to examine the relationship between imposing and surface acting and test the effect of imposing, psychological safety, and self-efficacy on PT.

Results

The experiment's results showed that imposing PT induces surface acting ( $F(1,233)=6.6, p=0.011$ ). The survey study replicated this result ( $\beta=.19, SE=.09, p=.003$ ) and identified that psychological

safety mediated the relationship between imposing PT and surface acting (indirect effect coefficient =.23, 95% CI [.13:35]; total effect coefficient =.50, 95% CI [.32:67]). In the survey study, imposing PT did not predict PT, whereas self-efficacy predicted it directly ( $\beta = .25$ ;  $SE = .06$ ,  $p < .001$ ) and psychological safety indirectly through self-efficacy (total effect coefficient =.15, 95% CI [.04:.26]).

#### Limitations

Our research in a broad organisational context with occupationally and geographically diverse samples set up a knowledge base about PT in organisations. Apart from the imposing PT-surface acting relationship tested in the experiment study, we do not claim causal links among the constructs. Future longitudinal or experimental research in specific contexts could re-test the imposing-PT link and add controls to nuance the current knowledge.

#### Conclusions

Our paper extends positive organisational scholarship primarily focused on benefits of positivity with the new knowledge about negative outcomes of imposing PT and its ineffectiveness in developing PT. The paper stresses the role of individual and environmental resources as antecedents of positive phenomena. By identifying imposing PT as a factor contributing to the modification of self-expression, we add to the literature on antecedents of surface acting in workplace interactions. Interventions can focus on addressing the conditions captured by the paper's conceptual model: fostering individual (self-efficacy) and organisational (psychological safety) pre-requisites of PT and minimising the pressure to display it.

#### Relevance to the Congress Theme

The paper highlights the detrimental impact of imposing thinking/feeling/acting norms on employees and the effectiveness of facilitating positive phenomena at work. Our research challenges the assumption that employee psychological wellbeing is solely an individual responsibility and adds to the knowledge of contextual factors influencing it.

*Keywords: imposing norms, positive thinking, individual/environmental resources, surface acting*

## Oral presentation OP157

### Improving supervisors' age management skills through a peer learning training - Who benefits the most?

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science&practice

#### Research goals:

The study tests the efficacy of a peer group-based training intervention focusing on improving supervisors' age management skills. In many industries supervisors are increasingly expected to support aging employees' work ability and working careers in order to prevent early retirement and to ensure an adequate amount of labor. However, there is a lack of evidence-based methods to improve leadership skills in age management.

#### Theoretical background:

The studied intervention aims to enhance supervisors' 1) self-efficacies regarding their skills and abilities to lead older workers and teams with varied age structure and 2) to improve supervisors' ability to deal with possible setbacks in age management. Theoretically the intervention applies Bandura's Social Learning Theory and Ajzen's Theory of Planned Behavior both emphasizing specific self-efficacies as important determinants of human behavior. The ability to deal with obstacles is based on Meichenbaum's view of cognitive stress inoculation training. Accordingly, the inoculation process, in which the participants recognize the possible setback, develop respective solutions, and rehearse these solutions, develops their learned resourcefulness. The training itself utilizes peer learning techniques: the participants and skilled trainers create together a supportive learning environment that enables the participants to learn from and support each other.

#### Design/Methodology/Intervention:

The data were collected in a randomly assigned field experimental study using a wait-list control group design (RCT) between 2021 and 2022 among 215 supervisors. The study was conducted in 10 Finnish work organizations. The supervisors responded to online questionnaires before (T1), immediately (T2) and six months (T3) after the intervention. The intervention group participated in a web-based training in their own work organization. The training lasted nine hours and included three group meetings. The control group received similar training after the last follow-up survey (T3). As the data collection is still going on, only the immediate and moderating effects of the intervention have been analysed.

#### Results:

GLM for repeated measures showed that the intervention improved supervisors' age management skills as expected. The participants in the intervention group assessed their abilities to lead older employees ( $F=55.2, p < .001$ ) and to solve the possible setbacks ( $F=19.3, p < .001$ ) significantly higher after the intervention (T2) than at baseline. No change was observed in the control group. Moreover, the supervisors' attitudes towards older employees improved in the intervention group and remained about the same level in the control group ( $F=4.9, p < .05$ ).

The results of the hierarchical regression analysis found three significant moderating effects. Younger supervisors benefitted from the training the most in terms of improved self-efficacies ( $\beta = .14, p < .01$ ) and less educated supervisors in terms of improved age attitudes ( $\beta = -.12, p < .05$ ).

Furthermore, supervisors who worked in organizations, where organizational practices included less age and career specific practices, took greater advantage from the training in terms of tools to deal with setbacks ( $\beta = .13$ ,  $p < .05$ ).

Limitations:

The training was voluntary, and thus it is possible that only the most motivated supervisors signed up for it. Second, the participation alone may have affected supervisors' evaluations (i.e., uncontrolled novelty effect).

Conclusions:

Based on our results, we recommend peer group techniques for strengthening age management skills among supervisors. Our study brings a new theme to leadership interventions and provides an effective and evidence-based tool to promote age management at work organizations.

Relevance to the congress theme:

Working population is aging in Europe and labor shortage is a current problem in many industries. Thus, measures to promote labor market participation of all vulnerable groups, including older workers, should be studied and executed now in all levels of societies. Evidence-based interventions are needed, for example, to develop new competences among supervisors and to reduce age-based stereotyping and discrimination.

Relevant UN SDGs :

Although the labor status of older employees has improved in many European countries, the negative attitudes and discrimination associated with aging still exist at workplaces. We have developed the training intervention to enhance supervisors' skills to understand, support and interact employees with older age and decrease possible negative attitudes related to older employees. This is one step in a wider aim to reduce inequality in employment among older workers.

*Keywords: age management, intervention, leadership*

## Oral presentation OP74

### In AI we Trust: Determinants of Continuous Trust in the User/System Interaction

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science

The main objective of this study is to examine which factors influence users' continuous trust in automated systems – and, more specifically, AI-based systems – and, subsequently, to develop an empirical model representing those factors.

Influenced by the fourth wave of industrialisation, society and business undergo significant changes (Hancock, 2017; Brynjolfsson & McAfee, 2017). This wave comes with a vast array of new digital technologies (Schwab, 2016a; Schwab, 2016b) – consider artificial intelligence (Hansen & Bogh, 2020) – that are positioned as assets to leverage digital transformation efforts (Besson & Rowe, 2012). People and digital technology (Kane, 2015) interact in this context (Christ-Brendemühl & Schaarschmidt, 2019; Glikson & Woolley, 2020), and automation frequently acts on behalf of humans (Russel & Norvig, 2009; Xu, Mak, and Brintrup, 2021). However, less-rational factors (such as fear) are more at play, even more so when higher levels of automation appear (Sarter, Woods, and Billings, 1997). Organisations risk employees developing technology perceptions that breed resistance (Venkatesh, 2006), reluctance (Kane et al., 2019), and disappointment. These, in turn, impact people's interactions with technology (Bardakei & Ünver, 2019) which leads to users neglecting beneficial decision aids (Davis & Kotteman, 1995) and discounting advice from algorithms (Prahl & Van Swol, 2017). Faulty interactions like these could cause a decrease in trust and subsequent disuse or sabotage of technology (Parasuraman & Riley, 1997). Various theories emerged in the technology and acceptance literature (e.g., Technology Acceptance Model (TAM3; Vankatesh & Bala, 2008)), where trust, considered the cornerstone of social interaction (Blau, 1964), was also found to mediate human-technology relationships (Taddeo, 2017) and is seen as the degree to which a user can rely on the technology to achieve their goals under conditions of uncertainty and vulnerability (Lee & See, 2004). Especially when the system becomes too complex to be understood completely, will trust navigate complexity and enable reliance (Gsenger & Strle, 2021).

Focusing on AI, we found that many concerns relating to AI usage link back to trust (e.g., the perception of AI as a black box; Logg et al., 2019; Lockey et al., 2021). The concept of trust, however, has received very little attention in AI literature thus far (Emaminejad et al., 2015). When trust is researched, the primary focus is on aspects of the technology itself rather than also including aspects of the individual and the environment (Toreini et al., 2019). We did not find any model in the literature that explains trust in systems deploying AI. Nor could we find any survey that allows for measuring trust (Böckle et al., 2021). As it stands, the majority of the current state of knowledge of human-machine interaction and the trust relationship draws on research in the context of automation. Further explorative research in the realm of AI is warranted.

Given that explorative research is required, we opt for qualitative research through Grounded Theory (Strauss & Corbin, 1994) and collect our data through semi-structured interviews with practitioners that use AI-based systems in their work context. We will use an interview guide with open-ended questions and transcribe the interviews verbatim. After every interview round, we incorporate our reflections into the interview guide before continuing a new round (Charmaz, 2006). This cycle (from recruiting data to coding and comparing excerpts in Nvivo12) will be repeated until theoretical saturation is reached. This will allow us to build the first empirical model of the antecedents of trust in AI-based systems.

Results have not yet been obtained, but we are confident to have a final empirical model before the EAWOP conference.

As this study is primarily explorative, the emerging antecedents and model will require testing to analyse their reliability and utility.

While conclusions cannot yet be drawn, we aim to increase the understanding of both academics and practitioners on users' continuous trust in AI-based systems. This research also lays the fundament for a follow-up study to build and validate a survey to measure trust in AI-based systems.

Studying continuous trust in AI systems connects to the changing world of work, especially given that the amount of human-technology interactions has increased over recent decades and is expected to continue increasing. This topic links to EAWOP's topic 16 (i.e., technology) and, specifically, subitems Artificial Intelligence and Human-Machine-Systems.

Decent work and economic growth.

*Keywords: trust, artificial intelligence*

## Oral presentation OP387

### In the Mood for Food: Monotony, Boredom and Snacking During Work

Dārta Vasiljeva, Ute Hülshager, Chantal Nederkoorn & Annika Nübold | Maastricht University

science&practice

Snacking is a common behavior that involves consumption of food or drinks besides main meals (Chaplin & Smith, 2011). Particularly unhealthy snacking may be regarded a serious problem as it may contribute to weight gain and obesity thus increasing the risk for cardiovascular diseases, diabetes and musculoskeletal disorders (World Health Organization, 2021). Considering the current obesity pandemic with nearly a third of the world's population being overweight or obese (World Health Organization, 2021), shedding light onto factors that may result in weight gain is crucial both from a theoretical and practical perspective.

Nevertheless, research on snacking has only recently emerged in organizational literature with recent reviews stressing the paucity of existing work (e.g., Clohessy et al., 2019). Although preliminary research has provided important first insights into predictors of work-related snacking behaviors, it has focused on a limited range of factors that represent conditions of high work stress (e.g., work hours and self-control demands; Jones et al., 2007; Sonnentag et al., 2017). Yet, prior work on arousal suggests that not only over-stimulating work demands (i.e., high arousal) but especially under-stimulating work demands (i.e., low arousal) may negatively affect employee behavior during work (i.e., the Yerkes-Dodson law; Yerkes & Dodson, 1908).

Drawing from optimal arousal theory, which states that there is an optimal level of arousal for desirable work outcomes (Hebb, 1955), we build on first laboratory studies with students that show increased snacking on certain foods when completing a repetitive task (Abramson & Stinson, 1977; Havermans et al., 2015). Applying this theory and initial empirical findings to employees' daily work life, we develop and test a conceptual model explaining how job monotony leads to unhealthy snacking during work through boredom. Furthermore, we propose two moderators for the relationship between job monotony and its outcomes. First, we propose that because task significance makes the task more interesting and relevant, it serves as an attentional pull factor that increases employees' arousal (Hackman; Oldham, 1980), thereby limiting the effect of daily job monotony on work-related boredom. Second, we consider trait mindfulness as a boundary condition between daily work-related boredom and unhealthy snacking as mindfulness increases one's emotion regulation ability and decreases impulsive reactions, which may arise from boredom as a state of dissatisfaction (Brown et al., 2007).

To test our hypotheses, we collected diary data from 105 employees across 10 working days. Results confirmed the positive effect of daily job monotony on unhealthy snacking through work-related boredom. Furthermore, although daily task significance did not moderate the hypothesized effect between daily job monotony and work-related boredom, additional analysis showed that it did act as a buffer in the relationship between daily job monotony and unhealthy snacking. Surprisingly, the protective nature of trait mindfulness was not confirmed by our results.

Despite the strengths of our study, we used self-report measures raising the issue of common method bias. Future studies could employ multi-source measurements by, for instance, asking supervisors or peers to evaluate the monotony of one's work. Furthermore, our sample was homogenous in terms of high education level and normal weight. While individuals with a university degree are generally much less likely to engage in unhealthy snacking (Liu et al., 2015), individuals with overweight and obesity consume snacks more frequently and are less able to resist eating

unhealthy snacks in response to negative mood (Bertéus Forslund et al., 2005; Udo et al., 2013). Future research should therefore test our results in various sampling populations.

Overall, our findings advance the work-related snacking literature by confirming the detrimental effect of daily monotony on work-related boredom and unhealthy snacking through boredom. Supplementary analyses revealed that these results persisted above and beyond over-stimulating work stressors (daily workload) and alternative mediators (daily negative affect). Surprisingly, neither the protective nature of daily task significance nor trait mindfulness was confirmed by our results. Overall, our findings evidence the dynamic nature of daily job monotony and work-related boredom, challenging the common conceptualization of jobs as either monotonous or non-monotonous.

Our submission contributes to the conference theme of well-being. Particularly, it concerns the topic of (un)healthy eating, which has implications for employee health (e.g., weight gain) but also functioning at work (e.g., decreased performance; Cho; Kim, 2022). Our study thus also directly aligns with the UN Sustainable Development Goal of good health and well-being.

*Keywords: Job monotony, Boredom, Unhealthy snacking*

## Oral presentation OP18

### **Inclusive Leadership in for-profit organisations, a literature perspective.**

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science

How is inclusive leadership conceptualised and measured concerning for-profit organisations?

Understanding inclusive leadership from the literature perspective offers an essential scientific background to further developing inclusive leadership in practice and theory in for-profit organisations. The current upsurge of interest in inclusive leadership in practice and theory means that this research is more relevant now than ever.

The aims of this oral presentation

Briefly introduce why for-profit differs from other organisational motivations

Discuss how inclusive leadership is conceptualised in the literature related to for-profit organisations, including how it is defined, measured, and researched.

Discuss common research themes and the gaps in the literature related to inclusive leadership in commercial, for-profit organisations.

Discuss the theoretical and practice-based implications for future research and application of inclusive leadership for commercial for-profit organisations.

While Inclusive Leadership is gaining popularity, it still lacks a clear theoretical basis (Chung et al., 2020). Reviewing inclusive leadership in this conceptual review aims to support the exploration of the current conceptualisation and influences of inclusive leadership in the literature relevant to for-profit organisations. It also explores and considers areas for future opportunity, development and implications in terms of inclusive leadership practice and future research.

The aims of this literature review are to

Explore how inclusive leadership is conceptualised in the literature related to commercial, for-profit organisations, including how it is defined, measured and researched.

Explore common research themes and the gaps in the literature related to inclusive leadership in commercial, for-profit organisations.

Explore theoretical and practice-based implications for future research and application of inclusive leadership for commercial for-profit organisations.

Results

A general overview of papers resulted in a discussion about inclusive leadership measures, theories applied to inclusive leadership discussions, publications years, research locations and publication journals.

Common research themes and gaps in the literature related to inclusive leadership regarding commercial, for-profit organisations: Discussing mediating and moderating factors, papers with a focus on expanding theory included in this review, positive associations, a focus on innovation and creativity, a lack of a focus on leader's experience of inclusive leadership, inclusive leadership and employees and developing inclusive leadership.

Critiques in the literature include Inclusive leadership measures, limitations within the research, inconsistency in the literature, theories surrounding inclusive leadership, training as a solution to inclusive leadership and future research & implications for practice summary.

Conclusions – Research and/or Practical Implications/Originality/Value

The current measurements used for inclusive leadership are inconsistent across the research to ensure that the conversation and dialogue on inclusive leadership in commercial, for-profit organisations are reliable enough to create results that can be generalised across geographic, industry, and organisation contexts.

While a diverse remit of theories can add to the richness of conversations around inclusive leadership, it also poses a challenge in the application, understanding and appropriate use of the evidence provided. If the results cannot be generalised and the interpretations of inclusive leadership vary, it will be challenging to ensure robust application in commercial, for-profit organisational settings. This also challenges how the current and future research will be utilised.

The use of inclusive language may be part of the theory being applied; however, the perspective in which it is utilised in the research may vary as a function of the definition of inclusion, the expectations of inclusion, the cultural implications, including geographical, industrial and organisational in both and the perspective utilised to decide what and who is an inclusive leader.

While training is assumed to result in better outcomes for inclusive leadership, there is no evidence of that in inclusive leadership in commercial, for-profit organisations. Therefore, for developing inclusive leaders and robust research into inclusive leadership in this area, future investigations into the best way to develop inclusive leadership would benefit the field of inclusive leadership in commercial, for-profit organisations.

The researcher concludes that while much has been explored, robust evidence remains limited in inclusive leadership within for-profit organisations.

*Keywords: Inclusive leadership, leadership, for-profit*

## Oral presentation OP762

### **Increasing Psychological Detachment from Work with Goal-setting and Gamification: A Research Proposal**

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science

#### Research goals

The aim of this study will be to develop and test an intervention promoting psychological detachment from work by (1) decreasing how much time workers spend working on their devices (e.g., smartphones) after office hours (i.e., off-job ICT use), (2) increasing the workers belief that they are able to take respite after work (i.e., recovery-related self-efficacy, RRSE).

#### Theoretical background

In the last few years, we have seen how ICT have allowed us to work despite the pandemic. However, such flexibility also means that it may be more difficult to keep the boundaries between work and leisure time (Derks & Bakker, 2012). This can lead to higher physical or mental investment into work after office hours which may increase risks to mental health and well-being (Dettmers, 2016). For these reasons, we strive to improve psychological detachment from work.

Psychological detachment from work is a state in which people do not deal with their work physically or mentally. Achieving such a state during breaks and after office hours helps people to recover from work as it helps them renew their energy and to feel well (Sonnentag & Fritz, 2015). There are multiple detachment interventions, yet none focus on the fact that people detach less if they use of ICT for work purposes after office hours.

Consequently, if people learn to work less from their ICT devices and take some respite instead, their detachment should increase. Moreover, such intervention should also help their RRSE which in turn leads to better recovery.

As previous studies show that goal-setting and playing videogames leads to higher psychological detachment from work (Collins&Cox, 2014, Hahn et al., 2011), we propose using gamified goal-setting for the intervention. Gamification is the transformation of nongame environments to a game-like state by implementing game design (e.g., points, badges, leaderboards). In this case, we plan to create a playful environment where workers will set their goals. This should lead to higher psychological detachment thanks to decreasing off-job ICT use and increasing RRSE.

RQ1: Do classical and gamified goal-setting improve detachment via off-job ICT use? Does gamified goal-setting lead to better results than the classical one?

RQ2: Do classical and gamified goal-setting improve detachment via RRSE? Does gamified goal-setting lead to better results than the classical one?

#### Methodology

A field experimental study of classical and gamified goal-setting on detachment in comparison to control condition. In the goal setting condition, participants will set how much time a day they are maximally going to spend using ICT for work purposes after hours. In the gamified condition, participants will see a leaderboard consisting of five time-goals of increasing difficulty. Reaching

these goals will provide the participants with a helpful hint on how they can prevent themselves from refraining to the ICT. Setting goals through the leaderboard will be more fitting and specific than one time-bound goal. Receiving hints will give more meaning to the given goals. The intervention will be piloted with qualitative interviews and user-tested.

The sample will be Czech full-time white-collar workers who take and use their portable ICT off-site (with equal gender representation). A power analysis based on Hahn et al.'s intervention effect size (partial  $\eta^2 = .211$ ), which is in line with the generally moderate to strong effect found in detachment interventions (Karabinski et al., 2021), showed we require at least 51 participants ( $\beta = .10$ ,  $\alpha = .05$ ). However, as gamification effect on psychological outcomes is smaller (partial  $\eta^2 = .04$ ; Kratochvil et al., 2022), we will also aim for a best possible sample of 350 participants if feasible.

We will measure participants' psychological detachment from work (4 items, 1-5 scale), objective off-job ICT use (i.e., time spent on work device after hours), self-reported off-job ICT use (4 items, 1-5 scale), RRSE (6 items, 1-5 scale) and several intervening factors (e.g., job involvement, perceived availability expectations).

The study plan is to measure the variables across 3 weeks: (1) one week before the intervention, (2) one week while intervening, (3) one week after the intervention. While the intervening factors will be measured only once at the beginning of the study, the others will be measured repeatedly through the whole study.

## Results

After cleansing the data based on the pre-set criteria and checking all assumptions, we will perform multilevel analyses to test both the within- and between-person variability caused by our intervention. Intervening factors will be addressed as covariates based on their correlation with the dependent variables.

## Practical Implications

Our intervention may help people keep boundaries between personal life and work and to take respite, supporting both their well-being and performance.

*Keywords: psychological detachment from work, off-job ICT use, gamified intervention*

## Oral presentation OP572

### Individual and Collective Effects of Flexible Work Arrangements - A Multilevel Review and Synthesis

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science&practice

**Research goals.** Flexible work arrangements (FWAs) are more and more emerging as a crucial tool for organizations to attract, motivate and retain their workforce. Researchers, practitioners, and policymakers are increasingly interested in workplace flexibility as an instrument to serve employees to balance their work and family roles, to increase health and well-being and work-related effectiveness. Previous research provided valuable insights on how flexible work arrangements (FWAs) influence important outcomes (e.g., job satisfaction, in-role performance). However, an up-to-date integration and synthesis of the vast and dispersed literature on FWAs is currently largely missing. Moreover, current research largely lacks an integrative understanding of crucial mechanisms and contextual factors of FWAs. The present research addresses this gap and provides an integrative synthesis of the current landscape on the impact of FWAs on individual and collective-level outcomes. Our review draws on self-determination theory and integrates findings on mechanisms and boundary conditions of FWAs by organizing the results in three major dimensions of flexible work arrangements: (a) flexibility in the employment relationship, (b) flexibility in the scheduling of work, and (c) flexibility related to where the work gets done. We contribute to the advancement of FWAs theory by offering an up-to-date systematic literature review on FWAs. Our results aim to fuel the practical debate on integrating FWA in organizational settings and help guide and inform decision-makers.

**Theoretical background .** We draw on self-determination theory as a macro-theory of human motivation to be better able to disentangle the potential effects of flexible work on important performance and health outcomes related to job design. The theory differentiates three major types of motivation workers might experience: intrinsic motivation , extrinsic motivation , and amotivation (i.e., lack of reasons to perform a certain activity). and highlights three universal psychological needs that are crucial in work-related contexts: relatedness, competence, and autonomy.

**Design/Methodology/Approach/Intervention.** A systematic literature review builds the foundation of our work. We followed best practice guidelines for creating impactful systematic and integrative literature reviews. We ran a computerized literature search on Scopus and PsycArticles to determine articles that examined FWAs or related terms (e.g., flexibility, alternative work arrangements) by investigating their titles and abstracts. Based on the previously identified articles, we also used forward and backward citation to find additional relevant literature. Our literature review focused on peer-reviewed articles that were published in English language since 2004. We did not consider grey literature or practitioner reports to ensure methodological rigor and quality and used the following exclusion criteria: (a) articles that were not empirical, b) articles that did not focus on the organizational context or workplace.

**Results.** Based on the identified previous research, our review provides several insights on boundary conditions (e.g., frequency of workplace-related rumination, openness to experience, perception of job similarity between temporary and permanent employees, family-friendly organization cultures) and mechanisms of FWAs (e.g., perception of the social context and job autonomy) and their relationship to important individual and collective level outcomes (e.g., health and mental well-being, job satisfaction, organizational commitment, team performance). Hence, we advise

organizations and policymakers to consider that the benefits of flexibility in the workplace are also subject to specific job characteristics and personality aspects that are described in more detail in our present work. To reap the benefits of FCAs organization need to also pay specific attention to employees` personal, educational, technological, and ergonomic resources.

Limitations . As in other studies, our research also has limitations. First, we only integrated English-speaking articles that are published in peer-reviewed journals. While this approach seems warranted, it may be the case that an elaboration on FWAs based on grey literature and practitioner reports would prove valuable in generating beneficial insights. Extracting additional data from other large-scale databases may generate additional valuable insights. Our review focused primarily on findings on FWAs that are empirical in nature. It would be beneficial for future studies to also take a closer look at theoretical and conceptual work on FWAs.

Conclusion. The present work generates up-to-date insights on FWAs and important individual and collective outcomes. We thereby contribute to the recent theoretical and practical debate on flexibility in the workplace. We hope to stimulate additional research and practical insights on this vital topic.

*Keywords: flexible work arrangements, employment, literature review,*

## Oral presentation OP732

### **Integrating Shared and Vertical Leadership Perspectives as Drivers of Ambidexterity and Firm Performance**

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science

#### Research goals

This study shows how the increasing complexity of leadership in the new world of work can be reduced by combining horizontal and vertical leadership. Today, leadership skills from all team members are needed to react dynamically and solve complex challenges. Research has shown that horizontally sharing leadership roles and tasks among team members leads to positive organizational effects, predominantly on innovation. However, ambidexterity research indicates that organizations must focus on both innovation and efficiency to succeed in the long run. Therefore, the research goal of this study is to explore under which conditions shared leadership can foster not only innovation but ambidexterity to increase sustained performance. By integrating insights from ambidexterity and shared leadership research, the study aims to shed light on the under-theorized shared leadership–performance link.

#### Theoretical background

Building on paradox theory, it is hypothesized that the imbalance towards innovation (exploration) promoted by a shared leadership (SL) climate can be counterweighted by combining it with leadership conducive to efficiency (exploitation): vertical closing leadership behavior (CLB). The reasoning for the hypotheses ensues from two paradoxes discussed in organizational research. First, the performing paradox states that embracing competing strategies and goals, namely innovation and efficiency, simultaneously requires exploration and exploitation. Supporting this notion, ambidextrous leadership research shows that the combination of opening leadership behavior (e.g., giving room for new ideas) and CLB (e.g., monitoring goal attainment) fosters ambidexterity. Second, the organizing paradox refers to competing designs and processes that lead to tension between empowerment and direction. This closely aligns with the paradox between empowering SL and directive vertical leadership. According to paradox theory, paradoxes should be viewed and embraced as complementary and enriching, not as contradictory. Based on prior research suggesting that SL promotes exploration, it is thus argued that CLB moderates the relationship between SL and ambidextrous behavior by fostering exploitation. According to recent scholars, the resulting ambidexterity positively influences firm performance.

#### Methodology

The hypotheses were tested in a sample of over 26,000 employees in 180 German companies from four industries, collected from 2019 to 2020. To address concerns of common source bias, data were collected from three different sources in each organization: two unique sub-groups of employees evaluated leadership and ambidexterity measures, whereas top management teams assessed firm performance. To test the hypotheses, multiple regression analyses were conducted using the PROCESS macro for SPSS.

#### Results

The findings support the proposed indirect positive effect of a horizontal (i.e., shared) leadership climate on firm performance, which is amplified when moderated by a guiding vertical leadership

style (i.e., CLB). SL is positively associated with ambidextrous behavior, an effect that increases when vertical CLB is included as a moderator. By introducing ambidextrous behavior as a mediator in the SL–performance link, this study uncovers and proposes a novel underlying mechanism.

#### Limitations

The sample consisting of German-speaking companies may limit the generalizability to other cultural contexts. Moreover, the cross-sectional nature of the data precludes causal inference.

#### Conclusions

The study unveils CLB as an important lever for the positive effect of a SL climate on firm performance through fostering ambidextrous behavior. Drawing on paradox theory, this study provides a new theoretical perspective to the SL–performance discussion, thereby connecting two research streams that were priorly independent. Based on the findings of this study, it can be concluded that, on the one hand, the autonomy inherent in SL enables teams to realize the full potential present in a team's variety of leadership skills, hence fostering innovation. However, on the other hand, it must be complemented by CLB to guide teams' efficiency. This breakdown of innovation promotion through SL and efficiency promotion through vertical CLB leadership reduces the complexity and ultimately leads to increased ambidexterity and, consequently, in higher firm performance. These findings hold important implications for companies suggesting that the paradox of SL and vertical CLB must be embraced to strive in demanding environments.

#### Relevance to the Congress Theme

The complexity prevalent in contemporary organizations has increased beyond the scope of single leaders, pointing to the limits of traditional leadership theories focused on vertical influence. By suggesting a fruitful combination of shared and vertical leadership as a driver of organizational ambidexterity, this study offers a new leadership approach to tackle challenges in the changing world of work.

*Keywords: Shared Leadership, Vertical Leadership, Ambidexterity*

## Oral presentation OP16

### **Intentions to practice self-care, actual self-care practices, and relationships of self-care with wellbeing and health in self-employed workers**

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science

#### Research goals

Self-care refers to individuals' self-directed engagement in behaviors that promote their functioning and health and includes physical, mental, social, and spiritual practices (Lee; Miller, 2013). The first aim of the study was to add to our understanding of the use of self-care practices among self-employed workers and examine how such practices predict their wellbeing and health. We also sought to explore what specific self-care practices self-employed workers report and how predictive these particular practices are for wellbeing outcomes. Second, we examined relationships between individuals' intentions to practice self-care and their actual self-care behaviors. While we argued for a strong general positive link, we considered that under certain circumstances, intentions do not translate into actual behaviors. Specifically, as self-employed workers face various stressful demands (Grant; Ferris, 2012), we argued that work stress may act as a barrier that prevents a strong intention to practice self-care from translating into actual behaviors and, as a consequence, reduces their vitality and positively predict health complaints.

#### Theoretical background

We draw on the conservation of resources (COR) theory (Hobfoll, 1989), which states that individuals aim to establish resources and prevent resource loss. Self-care may act as a personal resource that helps individuals to maintain their vitality and prevent the occurrence of mental and somatic health complaints (Kaluza; Junker, 2022). Moreover, we integrate Ajzen's (1991) theory of planned behavior (TPB), which has been used to predict and explain various health-related behaviors, such as smoking and exercising, by arguing that the stronger individuals' intentions to perform self-care behaviors are, the more likely it is that such behaviors are shown (Armitage; Conner, 2001). However, we consider the perspective of an intention-behavior gap (Sheeran; Webb, 2016) and explain this by studying perceived work stress as boundary condition that may explain when it can be difficult for self-employed workers to follow their intentions.

#### Study design

Self-employed workers from the United Kingdom (N = 290, 55% female, 47% solo entrepreneurs) participated in a two-wave study with a time lag of four weeks. We measured participants' intentions to practice self-care at time 1. Actual self-care practices, perceived work stress, vitality, and mental and somatic health complaints were assessed at time 2.

#### Results

The hypotheses were tested using structural equation modeling with maximum likelihood estimation in Mplus 8. Individuals reported, on average, having performed 2.4 self-care practices in the past four weeks. Practices such as relaxation and physical exercise were most frequently reported. The practice of physical exercise was most strongly related to wellbeing and health outcomes. As expected, individuals' intentions to practice self-care at time 1 positively predicted actual self-care practices at time 2, which, in turn, were positively related to vitality and negatively related to mental health complaints at time 2. The effect on somatic health complaints was non-

significant. We found no evidence for an intention–behavior gap. Perceived work stress did not moderate the relationship between behavioral intentions and actual self-care practices.

#### Limitations

The results may have been influenced by common-method bias because actual self-care practices (mediator) and individuals' wellbeing and health complaints as outcome variables were not temporally separated. As another limitation, we did not measure the outcome variables at time 1 and therefore cannot draw conclusions about changes in wellbeing and health complaints across the study period.

#### Conclusions

The study adds to our knowledge on the role of self-care practices for wellbeing and health in self-employed workers. Supporting the COR theory (Hobfoll, 1989) and the TBP (Ajzen, 1991), the study highlights that self-employed workers with strong intentions to practice self-care are likely to do so, independently of their level of work stress, and that practicing self-care positively predicts their wellbeing and relates to lower mental health constraints. The findings have practical implications to support self-employed workers in their healthy functioning.

#### Relevance to the Congress theme

Self-employment is an increasingly important form of labor. European governments have recognized the importance of self-employment for economic growth and societal development and have implemented policies to stimulate self-employment. Entrepreneurs' wellbeing and health are important and increasingly researched factors that determine their long-term development and success. Because human society is greatly dependent on flourishing businesses, our research, which helps explain how self-employed workers can maintain their wellbeing and health through self-care practices, is thus also of societal relevance.

*Keywords: Self-care practices, wellbeing, self-employed workers*

## Oral presentation OP287

### Interaction effects between work-stressors and job crafting on employee wellbeing?

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science

It has previously been shown that hindrance and challenge work stressors have different consequences for the worker. The actual research goal was to explore if the employees job crafting efforts could modify the emotional reactivity to the different types stressors.

#### Theoretical background

Several previous studies on occupational stress have shown that a distinction can be made in what workers perceive as hindrance stressors (e.g. bullying, harmful leadership, bureaucracy), which are associated exclusively with increased workload and distress – and challenge stressors (e.g. meeting deadlines, complicated work tasks). While challenges also add to workload, successfully accomplishing them has been shown to increase e.g., self-efficacy and wellbeing.

Job crafting, the employee's self-initiated informal initiatives and strategies to adjust their working conditions to their personal preferences mainly aiming to increase challenges and to reduce hindrances in their work content, has been found to be related to increased motivation and wellbeing.

Besides the main effects from exposure to the different types of stressors it also seems reasonable to assume that the wellbeing of workers maybe interactively affected by perceived challenges and hindrances in the work content as well their job crafting efforts. The purpose of this exploratory study was to investigate these interactions – with the tentative expectations that high job crafting and a high degree of job challenges related to increased wellbeing, whereas the combination low crafting and a high degree of hindrances interactively related to reduced wellbeing.

#### Method

The sample consisted of 107 British fulltime (m=39,5 H) office-workers, whereof 61% women and 39% men, in the age range 19-62 (m=36) years, who volunteered to participate in a diary study on the relations between daily stress exposure and post-work reactivity.

As independent variables, job crafting, as well as challenge and hindrance stressors were dichotomized at median. For this study, aggregated daily Positive and Negative Affect (PANAS), measured in the evening, was used as a proxy for wellbeing. The data was analyzed by factorial ANOVA.

#### Results

Perceived challenge was strongly related to PA ( $p < .001$ ), while the main effect from crafting failed to reach significance. On the other hand, challenges and crafting interacted significantly ( $p = .022$ ) in the expected direction. In relation to NA none of the IVs nor the interaction was significant. For the factorial analyses between hindrances and job crafting, no interactions reached significance, while significant main effects from job crafting were shown in relation to PA ( $p = .036$ ), and from hindrance stressors and NA ( $p = .01$ ).

#### Discussion

The only significant interactive relation found was by challenges and job crafting in relation to PA, where participants with higher scores on both IVs, also reported high PA in the evenings. Thus, the initial expectations were only partially confirmed. On the other hand, several significant main effects in expected directions were found, suggesting that challenge stress and job crafting related to PA, whereas hindrance stressors related to NA.

#### Limitations

Since the sample consisted exclusively of British participants leaves the generalizability an open issue. Furthermore, the alpha coefficient of the job crafting measure was fairly weak (0.59).

#### Conclusion

In conclusion, organizational policies, should aim, where possible, to reduce hindrances and promote challenges, and encourage employee's to craft their work, thus promoting the UN 2030 Agenda goal of: Good Health and wellbeing: Decent work and economic growth.

*Keywords: workstress, crafting, interactions*

## Oral presentation OP467

### Interpersonal justice as Heuristic of Service Performance in Centers for People with Intellectual Disability

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science&practice

Research goals and why the work was worth doing

First, we try to identify professionals' interpersonal justice treatment as heuristic that helps families to judge the degree to which organizational performance is oriented to improve the quality of life (QoL) improvements of their relatives with intellectual disability.

Second, by considering QoL oriented to performance we are introducing a novel alternative to current indicators of organizational performance. QoL oriented to performance will serve as a contextualized definition that considers the specific social objectives of the sector.

Last, the majority of justice research focuses on individual differences in average levels of fair treatment. With our research we aim to investigate intra-individual fluctuations of the construct, which will allow us to make better causal conclusions and in-depth analysis of how justice treatment is evaluated over time and how changes in justice are associated with fluctuations in organizational performance oriented to improve aspects of QoL.

Theoretical background

In centers for people with intellectual disability, we usually see two relevant parties that co-create in order to reach the goal to improve the QoL of the person who is experiencing the disability: families and professionals. Due to limited chances for exchange and status differences between families and professionals, families often lack the important information to evaluate whether the center and its professionals will reach the goal to improve QoL of their relatives. We argue that families' interpersonal justice treatment – the degree that the person is treated with dignity and respect– can serve as such indicator as heuristic to reduce uncertainty and conclude whether the care-unit and their professionals will perform adequately to improve the QoL of their relative.

Design/Methodology/Approach/Intervention

We examine fluctuations in interpersonal justice treatment as dynamic heuristic that is reassessed and thus producing fluctuations in how families perceive organizational performance. Using hierarchic linear modeling, we analyzed the impact of change in the predictor variable to change in the respective outcome variables. Specifically, we examined whether changes in interpersonal justice over time were related to changes in organizational performance oriented to QoL.

Results obtained

The justice professionals' treatment of families serves as a heuristic suggesting whether the organizations' performance may be considered as adequate to enhance QoL. Members of the family review and re-evaluate the effectiveness of justice and organizations, describing changes over time. Significant variation was discovered, indicating that interpersonal justice is a powerful concept that can influence the family-professional connection through time.

Limitations

Heuristics are cognitive short-cuts. As the function of cognitive short-cuts is to purposefully have automated cognitive responses available that free cognitive space, this way of thinking may be faulty at times. Another aspect to mention is our research has done a first very important step to investigate justice variability, however, we did not manipulate the justice treatment, which could be another possible limitation in the generalization of findings.

#### Research/Practical Implications

Future studies could investigate the aspect of justice variability further by manipulating the justice treatment and hence controlling for continuous and discontinuous treatment. As many service environments underly external factors that can lead to a variation of justice treatment at times, this would be relevant to study.

Practitioners on the other hand can also benefit from the research. If families are treated well, they also evaluate the performance in terms of the QoL of their relative accordingly. Awareness and information are a step into the right direction and expanding the target of service towards families will help facilitate good relationships that are necessary for achieving a good organizational performance from the perspective of family members. It is further important to keep in mind that perceptions and evaluations of families can change over time. Achieving consistency over time is therefore very meaningful.

#### Originality/Value

We identify professionals' interpersonal justice treatment as heuristic and contextualized indicator that helps families to judge whether organizational performance is oriented to improve the QoL of their relatives. We are further studying within-person variability to widen the perspective by considering that families reevaluate the interpersonal justice treatment dynamically over time, impacting changes in the evaluation of organizational performance.

#### Intended audience

The intended audience can be found in academics who have a keen interest in within-person variability in organizational justice research, as well as in scientific practitioners of health organizations for people with intellectual disability.

*Keywords: Interpersonal Justice, Heuristics, Service Performance*

## Oral presentation OP233

### Interrelationships of Leader-Member Exchange and Work Engagement among Newcomers: An examination of intra- and interindividual effects

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science

**Introduction & research goals:** The future is now. In the changing world of work, people tend to change jobs more frequently and seek motivating and meaningful work. Although much is already known about how socialization resources may reduce uncertainty (e.g. Bauer & Erdogan, 2011), research has provided only scarce evidence on the antecedents, effects and outcomes of motivational constructs such as work engagement (WE) during the process of organizational socialization (Saks & Gruman, 2018). Also, several scholars found leader-member exchange (LMX) to predict WE, however only suggesting that WE may also in turn impact LMX (e.g. Agarwal et al., 2012; Breevaart et al., 2015). In line with this, potential problems regarding LMX as an endogenous vs. exogenous construct, questioning the position of LMX in causal relationships, have been pointed out (Antonakis, 2017; Gottfredson et al. 2020). In sum, the reciprocal effects of LMX and WE as well as the course of WE among newcomers during organizational socialization are yet to be determined. Therefore, our goal is to examine the longitudinal growth of WE and reciprocal effects of WE and LMX among newcomers from two complementary perspectives: intra- and inter-individually. We seek to test whether LMX influences WE among newcomers and vice versa and to shed more light on how newcomers differ in trajectories of WE over time.

**Theoretical background :** Based on social exchange theory (Cropanzano et al., 2005) and the Job-Demands Resources Model (Bakker & Demerouti, 2017) we predict reciprocal effects of LMX and WE on an intra-individual level. Inter-individually, we expect newcomers to systematically vary in their WE trajectories and person-average level of LMX to co-vary with WE trajectories.

**Design & method :** The sample of our study consists of 203 newcomers from different German companies. All participants were asked to fill out four consecutive surveys at an interval of four weeks each, starting 2-4 weeks after organizational entry. To test our hypotheses and uncover temporal trajectories we apply two analytical procedures. First, to investigate the intra-individual interaction between LMX and WE, we use the General Cross-Lagged Panel Model (GCLM, Zyphur et al., 2020). This allows us to consider short-term effects in terms of Granger-Sims causality (Granger, 1969) and longer-term impulse responses. Second, we perform exploratory group-based trajectory analysis (GBT, Nagin et al., 2010) to explore inter-individually consistent clusters of development in newcomer WE and to analyze whether these trajectories co-vary with LMX.

**Results :** From the intra-individual perspective, the GCLM results indicate that WE influences LMX via short-term impulse effects, but not vice versa. In long term, there are substantial effects within constructs but not cross-lagged. On the inter-individual level, GBT suggests a three-class solution to best fit the data, with person-average level LMX to predict trajectory-class membership.

**Limitations :** Despite our heterogeneous sample, a slight over-representation of younger ( $M= 28.20$  years,  $SD=6.6$ ) people with rather less work experience ( $M= 4.70$  years,  $SD=6.4$ ) limits the generalizability. Furthermore, potential moderators and mediators were not included in our analysis that may grant further insight into the mechanisms of LMX-WE relationships among newcomers.

**Conclusions :** We conclude that although WE influences LMX on an intra-individual level, LMX does not influence WE. The absence of LMX affecting WE, contrary to past research, adds to the discussion

on LMX by implying the endogenous nature of LMX (Gottfredson et al., 2020). Impulses in WE seem to affect LMX, providing support for the supposition that higher engagement may lead to better LMX relationships (e.g. Breevaart et al., 2015) and suggests that the relationship should be investigated more fine grained. Furthermore, we were able to demonstrate systematical variation in WE trajectories by classes, hence confirming the presence of WE maintenance curves (Saks & Gruman, 2018). The relationship between WE trajectories and person-average level LMX implies a systematic link between overall LMX quality and the way of how WE decreases, persists or develops among newcomers. Therefore, practitioners should focus and foster newcomer WE, as it may positively impact newcomer-leader relationships by short-term impulses, and strongly consider the impact of inter-individual differences in LMX during organizational socialization.

To our knowledge, this is the first longitudinal study to investigate reciprocal effects of WE and LMX and trajectories of WE in association with LMX in the context of organizational socialization.

Relevance to the Congress Theme: As the future is now, practices in organizational socialization need to be reevaluated. Our research highlights the need of a joint focus on WE and LMX for a better socialization and a stronger focus on newcomer motivation and wellbeing.

*Keywords: organizational socialization, work engagement, leader-member exchange*

## Oral presentation OP524

### Intervening against sexual harassment in the police: Efforts and results

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science&practice

#### Background

“Speak Up!” A practice-oriented research project on the prevention of Sexual Harassment (SUSH, Nielsen et al., 2022) responds to the call for prevention efforts becoming more aware of “intersecting stigmatized identities” which increases some employees vulnerability to SH than others (Danna et al., 2020, p. 208). SUSH is positioned in the ethical infrastructure tradition (Tenbrunsel et al., 2003, p. 285), and targets by-standers, whose actions may affect SH situations positively or negatively.

Studies have documented that young women, women from ethnic minorities, migrant workers and HBTQ+ persons are more exposed to SH at work than other employees (Berdahl & Moore, 2006; Latcheva, 2017; Shaw et al., 2018). The interdependence between power relations, organizational culture and SH is well documented (Quick & McFadyen, 2017; Willness et al., 2007).

SUSH is conducted in partnership with working life actors across three Nordic settings (Denmark, Sweden and Norway), and the SUSH interventions are developed on the basis of an already compiled literature review on SH prevention (Hedin & Lane, forthcoming) as well as theory- and research-based intervention programs.

#### Research objectives

The main aim of SUSH is to develop and test the effect of two theory- and research-based bystander SH interventions (SUSH). Research questions are; 1 What are the vital components and risks associated with a bystander program for SH aimed at increasing bystanders’ prosocial behaviours in SH situations at work? 2 What are the results and effects of SUSH interventions (knowledge, attitudes, and actions)?

The Norwegian pilot is conducted in close collaboration with key persons involved in the ongoing work (Bjørkelo, 2020; Ellingsen & Lilleaas, 2020) by the National Police Directorate, and the Norwegian Police University College (NPUC), of preventing and intervening to impact the occurrence of SH in the Norwegian Police Service (NPS). The pilot (1) compiles documentation on existing efforts on prevention and intervention of SH in the NPS and at the NPUC, and (2) starts to culturally adapt the Danish bystander intervention “Intervene-SH” with a focus on the characteristics of the involved persons (e.g., intersectionality) and the organisation (police).

#### Methods

In part 1 of the Norwegian pilot, existing NPS data giving evidence on existing SH prevention and intervention efforts and their effects are evaluated. Then, a process of adapting and elaborating existing SH interventions will start based on (a) input from the “Intervene-SH” program to ensure a focus on bystanders, and (b) input from with the Swedish pilot to ensure focus on intersectionality. The latter includes discussions about cultural adaptability. Key persons from the working life partner are involved.

#### Results

The presentation will contain preliminary results. The results from part 1 shows that there has been a number of initiatives taken from the Norwegian Police Service over time. The initiatives vary from verbal and written (action plans, posters etc.) information (raising awareness) to dilemma training (exercise). It also seems as the attention drawn towards SH work over time is linked to research efforts and cases becoming known to the public. Based on the data we have been able to obtain, it is difficult to draw conclusions about potential effects. It does however seem as there overall is more focus devoted to awareness and training than effects.

In part 2, a professional translation of the Danish “Intervene-SH” into Norwegian is in progress. The work of culturally adapting the Danish bystander intervention «Intervene-SH» with a focus on the characteristics of the involved persons (e.g., intersectionality) and the organization (police) is also in progress. Input is gathered based on meetings with our working life partner, the diversity committee at the Norwegian Police University College, HR in the National Police Directorate, as well as others (e.g., previous students).

#### Implications

Direct results of the SUSH interventions are to increase awareness of the negative consequences of passive or colluding bystander behaviour and of risk situations for SH. The long-term aim of SUSH is provide free SH interventions to be used by workplaces in Nordic countries.

*Keywords: Sexual harassment, police, whistleblowing, efforts, effects*

## Oral presentation OP603

### Intervention against workplace bullying: the organization's perspective

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science&practice

#### Research goals

Workplace bullying (WB) are documented to have devastating effects on the target's health and well-being (Nielsen and Einarsen, 2018). While individual targets may risk mental and somatic health problems (e.g. Nielsen et al., 2014; Verkuil et al., 2015), organizations risk productivity, reputation financial losses (Hassard et al., 2017; Hoel et al., 2020). Studies of organizations implementing intervention strategies are therefore important. This abstract represents the organization's perspective on implementing a bystander intervention to reduce WB. The main goal is to describe key factors of the implementation of the intervention that aims at decreasing WB prevalence in an industrial organization.

#### Theoretical background

The theoretical assumption behind the intervention is that the actions of bystanders in situations where coworkers are exposed to bullying acts can either escalate or reduce WB. A bystander is any person or group who witnesses the bullying event (Mason, 2014). How bystanders do react have an impact – also on the bystander (Nielsen, et al, 2020). Hence, stimulating early, active, and constructive intervention by bystanders should prevent further escalation and possibly create an anti-bullying climate.

#### Intervention

Meeting reports from the project group are used for documentation of the implementation process. Also, qualitative interviews with department managers, supervisors, local labor union representatives (LUR) and health and safety representatives (HSR) were conducted to evaluate the implementation of the intervention.

#### Background for the organization's participation in the intervention:

The intervention in focus was implemented in a Norwegian industrial organization (hereafter: organization) as they had disclosed relatively high WB prevalence rate (10%) over several years through work environment surveys. In 2016, the organization worked systematically to establish formal ethical systems for preventing and handling WB, such as formal policies, procedures and routines, surveillance systems and sanctioning systems. As formal policies and sanctions are associated with ethical decision making (Trevino et al., 1999), the organization developed formal routines for detecting and investigating WB, and formal sanctioning measures. Despite the effort, the work environment survey in 2018 showed no decrease in WB prevalence rate (10%). In 2019, the organization and the University of Bergen (UiB) started a collaboration on a bystander intervention aiming at training employees' ability to intervene if they observe bullying behavior.

#### Results

The meeting reports showed several key factors for developing and implementing the intervention:

First, a fundamental approach in developing the intervention has been participant involvement. Participant involvement aims at increasing ownership to the program, thereby ensuring key stakeholders contributing to successful implementation and follow-up of the intervention (Birzer 2002). Initially, a project group was established with representatives from UiB and the company. From the company's side, executive vice-president, department managers, supervisors, LURs and HSRs had active roles in the intervention implementation.

Second, meetings were held upfront with 300 line-managers and 70 LURs/HSRs, providing information about the organization's formal policies and procedures for handling WB as well as practical information about the intervention.

Finally, the implementation of the intervention program contained these elements: A planning meeting, and a three-hour group session. About 900 employees participated over a six-month period, in which supervisors, LURs and HSRs were given some central roles.

The qualitative interviews:

The preliminary result indicates that the intervention implementation was positively evaluated by the participants. Supervisors, LARs, and HSRs showed commitment and ownership to the intervention and were concerned with how the company would ensure further development of preventive measures related to the intervention.

Practical Implications

A systematic inclusion of key stakeholders in the organizations seems to be important for successful implementation of the intervention. The qualitative interviews showed that top management support, and active involvement and ownership among department managers, LARs and HSRs are crucial for the successful implementation of the intervention.

Limitations

The findings reported in this abstract are based on 18 interviews with key stakeholder employees, and thus, generalizing their perspective as representative for the whole organization should be done with precaution.

Value

Given the scarcity of evidence on effective interventions combating workplace bullying, this intervention is important and may help enhance our knowledge on how organizations may focus their efforts and resources in against workplace bullying. The abstract thereby inform practitioners about important key factors for implementing interventions.

*Keywords: intervention, workplace bullying, bystander*

## Oral presentation OP403

### **Intraindividual variation in felt job insecurity: exploration of the reciprocal relationship between quantitative and qualitative job insecurity.**

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science

Theoretical background: Jahoda's deprivation theory holds that employment is the core resource, thus when threatened (quantitative job insecurity), other work features become less secure (qualitative job insecurity). On the other hand, it has been shown that changes to work features (qualitative job insecurity) occur more frequently and independently from threats to job loss. Conservation of resources theory (COR) demonstrates how these threats (lower salary, career opportunity, social status etc.) beget employees' vulnerability – deepening their threats concerning the stability of their employment (Hobfoll et al., 2018). COR theory also suggests reciprocal influences (i.e., loss spirals; Hobfoll, 2001) as due to experiencing initial threats to work resources (e.g., lower salary) employees develop higher threats to work-related resources, including job loss (quantitative job insecurity), which lead to further enhance threats to work resources. Although the defining feature of job insecurity is the subjectively perceived experience, individual differences have been largely neglected and a variable-centred approach is dominantly used. However, decomposing the variance and controlling for between-person differences when exploring processes at the person-level, improves theory, gives more precise predictions, and controls for biases in conclusions regarding the causal patterns (Hamaker et al., 2015; Hoffman & Stawski, 2009).

Method: We conducted a three-wave study and surveyed 3694 Belgian employees. Using a random-intercept cross-lagged panel model (RI-CLPM) we investigated the causal associations between quantitative and qualitative job insecurity at the within-person level.

Results: Our results confirmed large heterogeneity in the experience of job insecurity; above 60% of the variance in both quantitative and qualitative job insecurity is due to stable between-person differences. When controlled for these differences, we observed consistent within-person associations at each measurement wave. Stability effects were found for quantitative job insecurity; employees who experienced higher than their average threats to job loss at one point in time also experienced higher threats to job loss later in time. In contrast, we found no carry-over effects for qualitative job insecurity. However, the individual's deviation from the expected qualitative job insecurity score was predicted by deviations from their expected score in quantitative job insecurity. Therefore, in line with Jahoda's deprivation theory, we found that quantitative job insecurity leads over time to qualitative job insecurity, not reverse.

Limitations: Although our study controlled for the between-person differences in how persons usually perceive job insecurity (quantitative and qualitative), we assumed that the within-person processes are identical for all individuals (higher than a usual threat to job loss leads to higher than a usual threat to job insecurity, six months later, and vice versa). However, the relationship between quantitative and qualitative job insecurity may be different between groups of individuals who differ according to certain characteristics. This renders further studies to implement profile analysis in the analysis of the relationship between both job insecurity dimensions.

Conclusions: Overall, the results at the person level suggest that the experience of quantitative job insecurity is largely dependent on the individual's experience of these threats earlier on, whereas the

individual's experience of qualitative job insecurity is linked with other time-varying factors, such as individual's higher experience of overall threat of job loss.

Relevance to the conference theme: In post-pandemic life, continuous rearrangements in the work environment uncovered that not only quantitative but also qualitative job insecurity cause substantial strain to employees and organizations. Although both dimensions are independent work stressors, they are closely related. Our contribution highlights the importance of a holistic approach when exploring job insecurities, which empowers work towards more efficient solutions to promote employees' health and well-being.

Relevant UN SDGs: This research aligned with SGD#3: Good health and well-being and SGD#8: decent work and economic growth.

*Keywords: quantitative job insecurity, qualitative job insecurity, random-intercept cross-lagged panel model*

## Oral presentation OP525

### Intrinsic job quality over time: does it depend on personal employability?

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science&practice

Research goals and why the work was worth doing

The increasing flexibility and de-regularization of the job market, along with economic globalization and greater competitive pressure, have been threatening job quality in many countries (e.g., Lucifora & Salverda, 2005; ILO, 2005). Thus, promoting job quality is critical for policy makers, especially nowadays, after the COVID-19 pandemic strike. In this regard it is important to understand which factors foster job quality over time, especially in difficult job market situations. We focus on an indicator of intrinsic job quality: the motivating potential of a job (MPJ) (Hackman & Oldham, 1980). The goal of this paper is twofold: 1) to analyze the trajectories of intrinsic job quality (i.e., MPJ) over time to understand how they have been affected by COVID-19; and 2) to investigate whether the potential differences in trajectories depend on personal employability, particularly the dimensions of career identity, personal adaptability, and social and human capital (Fugate et al., 2004).

Theoretical background

People seek to obtain and keep jobs they enjoy performing, in other words that are intrinsically motivating. However, in some situations, especially in uncertain market conditions, people are forced to accept jobs that are not ideal in terms of their motivating potential. Thus, it is important to understand whether accepting these jobs may be steppingstones to obtain better jobs or if they are traps that condemn people to work in a job they do not enjoy (Scherer, 2004). The particular trend may depend on a personal resource: employability. Fugate et al. (2004) conceptualize employability as “a form of work specific active adaptability that enables workers to identify and realize career opportunities” (p. 16). Thus, individuals with this personal resource should have more chances to identify and obtain jobs with stronger motivating potential or improve faster if the initial jobs were not ideal.

Methodology

We collected data from a sample of heterogeneous employees. The data on MPJ was collected over 8 time points separated by three months (from January 2021 (N=484) to October 2021 (N=258)). Specifically, the five intrinsic job characteristics proposed by Hackman and Oldham (1980): autonomy, task identity, feedback, variety, and task significance, were combined in an additive compound as recommended by Fried and Ferris (1987). We also measured the different dimensions of employability at Time 1. Analyses were carried out by means of Mplus. Specifically, we fitted a discontinuous growth model (see Rioux et al., 2021), where Time 2 referred to the event (COVID stroke) that marked the discontinuity. We controlled for age, gender, and the number of job changes over time.

Results

The discontinuous growth model showed a good fit to data (RMSEA = .03; CFI = .99; SRMR = .05). Even if there was not a significant average decrease of MTJ at T2, there was a significant variability across individuals ( $p < .01$ ) around the event mean. In addition, after COVID strike, MPJ significantly improved over time. Individual variances around the average slope and intercept were also statistically significant. After introducing employability and control variables as predictors of the

three latent variables (intercept, event, and slope), the model fit was excellent (RMSEA = .02; CFI =1.00; SRMR = .04). Two of the dimensions of employability significantly predicted the initial levels of MPJ: career identity (B=.31,  $p<.001$ ) and social capital (B=.11,  $p< .01$ ). None of the dimensions of employability were related with the event or the slopes of MPJ over time. However, the number of job changes over time was positively and significantly related with the slope of MPJ (B=.03,  $p<.01$ ), suggesting that employees that change jobs improve faster.

#### Limitations

The main limitation of our study is that all the data were collected through self-reported questionnaires and from the same source (employees).

#### Conclusions

Our results support the theory that there is an improvement of intrinsic job quality over time and that less motivating jobs can be steppingstones to get better ones. In addition, two dimensions of personal employability, career identity and social capital, contribute to getting more intrinsically motivating jobs.

#### Relevance to the Congress Theme

COVID and uncertain job markets have contributed to changing the world of work. Understanding which personal factors contribute to improving intrinsically motivating jobs in these uncertain situations are essential to design interventions that help individuals to obtain (and keep) jobs they will enjoy performing.

#### Relevant UN SDGs

8 Decent work and economic growth. Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.

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*Keywords: trajectory; intrinsic job quality; employability*

## **Oral presentation OP556**

### **Investigating the psychometric properties of the 6-item Stanford Presenteeism Scale**

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The short version of the Stanford Presenteeism Scale (SPS-6) is a measure of presenteeism and has been translated into several languages including Italian, Brazilian Portuguese and Dutch. The current study examined the factor structure of the SPS-6 in Polish and sought to explore its psychometric properties. Using the responses of 204 employees working in an IT-based company, results confirmed the two-factor structure of the Polish version of the SPS-6 (PSPS-6). While a second order CFA on the PSPS-6 items with Presenteeism as a higher order factor produced loadings that were acceptable, these were not strong enough, suggesting that using the overall RSPS-6 scale is better than using a 2-dimension factor of presenteeism. To assess the concurrent validity of the scale, we adopted the JD-R model to define presenteeism as an outcome. Using work-family conflict as a job demand and peer/managerial support as a job resource, results indicated that both demands and resources have a direct effect on presenteeism while burnout (but not work engagement) mediated the relationship between job demand/resource and presenteeism. The findings highlighted above suggest that the PSPS-6 has good prospects as it is a reliable and valid measure of presenteeism. More specifically, the PSPS-6 is a useful tool in assessing presenteeism at the workplace and in workforce interventions related to health and employee well-being.

*Keywords: Presenteeism, psychometrics, SEM, health and productivity*

## Oral presentation OP667

### Investigating how shared SA is built based on communication in forestry crews

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science

The current project aims to explore how forestry crews build shared situation awareness (SA) based on verbal exchanges within their team and how breakdowns occur in this communication. Forestry represents a high-risk industry in the United Kingdom (HSE, 2022). Most fatal and major injuries in tree work are associated with chainsaw operations, being struck by a tree/tree branch or a fall. Members of the public are also affected by these hazards, being involved in both fatal and non-fatal accidents. A previous study has shown that SA or knowing what is going on is a safety-critical skill for individuals in forestry crews, communication being an important influencing factor (Irwin et al., under review). Another New Zealand study found that 70% of reported incidents could be linked to human error, particularly cognitive failures (Hinze et al., 2021). A study with US forestry workers emphasized the importance of accurate SA, which was especially useful for chainsaw operators (Newman et al., 2018). The current project was conducted in collaboration with the national Government agency responsible for managing forests and land in order to further investigate the importance of SA in forestry at a crew level.

SA is formally defined as 'the perception of the elements in the environment within a volume of time and space, the comprehension of their meaning and the projection of their status in the near future' (Endsley, 1995a, p. 36). In high-risk industries, which feature complex and dynamic environments, SA represents a safety-critical skill and forms the basis of decision making and action taking. Whilst SA can be considered at an individual level, many operators in high-risk industries work in teams or crews which have common goals and interdependent roles. Shared SA thus represents the extent to which team members have the same SA on shared requirements. Information pertaining to overlapping SA elements needs to be shared between team members, usually in the form of verbal communication (Endsley & Jones, 2001). Poor shared SA can lead to unsafe work conditions and accidents.

Participants (projected n=12) are grouped into typical forestry teams, each consisting of a chainsaw operator, a supervisor and two banks people, corresponding to their work experience. Recruitment and online session scheduling were done directly through an organisational contact. Materials consist of an unfolding scenario related to forestry comprising seven progressive short vignettes, developed based on SMEs input. Each vignette describes a critical, dynamic situation (e.g., member of the public walking on site). Depending on their assigned role, participants are presented with slightly different versions of each vignette in text format through the means of a PowerPoint presentation, each containing safety-critical information which needs to be communicated to other team members to build shared SA. Each vignette is read for one minute, followed by self-paced team communication in real time via Teams, which is recorded, transcribed, and subsequently analysed based on meaningful paragraphs, using the Conversation Analysis approach. A Goal Directed Cognitive Analysis (GDCA) was done beforehand for the task to determine SA requirements. The analysis will focus on both the speech act and the specific content (the requirements shared). In order to assess information loss in situation-related communications, the closed-loop communication construct will be used. One study session (n=4) has already been run, with key points on SA being shared.

Data collection will be completed by October 2022, transcription by November and analysis by December, respectively.

Due to limited access to the population of interest because of their competing work commitments, the study is projected to have a small sample size. Nevertheless, the qualitative nature of the project will allow for an in-depth conversation analysis. Whilst the scenarios used in this study have been validated with technical SMEs, these are nonetheless low-level and may not completely reflect actual behaviours. Similarly, while online communication via Teams is reflective of in-helmet verbal exchanges which forestry crews typically have, visual cues such as signals fall outside the scope of this project.

The project has direct implications for the implementation of in-helmet communication devices and communication and/or SA training within forestry, e.g. guidance for more effective communication.

To the author's best knowledge, this is the first project to explore shared SA in forestry crews.

Since this is an applied psychology project with implications for safety in a high-risk industry, the intended audience consists of both academics and practitioners.

Team SA, communication, forestry

*Keywords: Team SA, communication, forestry*

## Oral presentation OP154

### Investigating Language and Demographic Differences in the Conditional Reasoning Test for Workplace Psychopathy (CRT-WP) with Military Applicants

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science&practice

#### Research goals

The goals were to investigate two practical concerns about the Conditional Reasoning Test for Workplace Psychopathy (CRT-WP) critical to using the scale to screen for workplace-related psychopathy in diverse samples: 1) potential demographic differences contributing to adverse impact, and 2) language equivalence of the test (French vs English versions).

#### Theoretical background

Psychopathic leaders are linked to increased counterproductive work behaviors (CWBs) such as theft and abuse, white-collar crime, and unethical decision-making. Colleagues and subordinates of such leaders experience lower well-being and job satisfaction, and increased stress and turnover intent (see Lilienfeld et al., 2015). Unfortunately, organizations cannot screen for psychopathic personality in selection because all existing measures are either, 1) too clinical, 2) require third-party raters, or 3) are overt self-reports, which are easily fakeable. Conditional Reasoning Tests (CRTs) have been described as a promising direction for measuring personality in work contexts, due to their implicit nature (e.g., LeBreton et al., 2020). The CRT-WP was developed and validated in previous research (Cook & Roulin, under review), demonstrating reliability (internal consistency ranging .77 to .80, test-retest  $r = .72$ ), validity (positively correlated with other psychopathy measures, negatively correlated with integrity, and predictive of selfish decision-making, CWBs, and cyberloafing), and faking-prevention (no significant difference between honest and selection conditions). However, potential adverse impact has not yet been explored with a large sample, and test equivalence in other languages (e.g., French) needs to be demonstrated.

#### Methodology

Participants were Canadian residents interested in applying to the Canadian Armed Forces (CAF). The CRT-WP was included alongside the Practice Canadian Forces Aptitude Test (PCFAT) and demographic questions on an online portal, where participants completed it as part of practicing for their application. The PCFAT is a general cognitive ability test which contains elements of verbal, spatial, and problem-solving abilities. Complete data was obtained from 3023 English- and 524 French-speaking individuals.

Both traditional analyses (classical test theory) and Item Response Theory (IRT) were used to investigate potential Differential Item Functioning (DIF) between demographic groups, and also between the English and French versions. The Item Response Theory-Likelihood Ratio Test (IRT-LR) was used to test for DIF from the IRT standpoint, while traditional mean comparisons were used from the classical test perspective.

#### Results

Results from traditional tests for DIF for the English sample (  $M$  age = 27.6, 66.8% male, 47.2% college/university education, 57.7% White), showed a statistically significant difference between

men (  $M = -12.31$ ,  $SD = 5.75$ ) and women (  $M = -12.80$ ,  $SD = 5.25$ ),  $F(1, 2510) = 4.22$ ,  $p = .04$ , yet very small in effect size ( $\eta^2 = .002$ ). Additionally, a small difference exists for ethnicity comparing White applicants (  $M = -13.03$ ,  $SD = 5.51$ ) to visible minorities combined (  $M = -11.75$ ,  $SD = 5.51$ ) and Indigenous peoples (  $M = -11.79$ ,  $SD = 5.97$ ),  $F(2, 2299) = 12.08$ ,  $p < .01$ ,  $\eta^2 = .010$ . However, no difference exists for disability status,  $F(1, 3021) = 0.01$ ,  $p = .94$ .

IRT-LR analyses will be conducted in November 2022 for demographic comparisons with adequate sample sizes ( $>500$ ), and comparing the English and French versions. It is expected these analyses will show that, even if there are small demographic differences (1% of variance or less), there will be no meaningful DIF between comparison groups. For the English to French comparison, it is possible that there is significant DIF as this is the first evaluation of an alternative version, and previous research with other CRTs have shown significant DIF across languages and cultures (Galić et al., 2014).

#### Limitations

We used Canadian participants to evaluate differences between English and French versions. They could be larger cultural or practical differences when used in European countries, for example.

#### Conclusions

Organizations can benefit from the results of this study by knowing whether the CRT-WP, which has already been psychometrically validated, may contribute to adverse impact and if its French version is also valid. While statistically significant, demographic differences in CRT-WP scores account for 1% of variance or less. If these findings are confirmed, the CRT-WP could be used in hiring processes to screen out leaders with psychopathic tendencies.

#### Relevance to Congress Theme

The future is now! With the current global climate (especially political) there is a great need for ethical leaders, and to prevent people with deviant and abusive personality from reaching leadership positions. This is critical for positions such as politics, policing, and CEOs.

#### Relevant UN SDGs

Gender Equality & Reduced Inequalities: Exploring potential adverse impact and demographic differences for our measure intended for use in hiring.

Decent work and economic growth: Validating a novel measure for selection to screen out "dark" leaders, and hire more ethical ones.

*Keywords: Assessment, Psychopathy, Conditional Reasoning*

## Oral presentation OP752

### Is it still appropriate at this age? Perceived age norms and entrepreneurial intention in mature individuals

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science&practice

Research goals and why the work was worth doing

The aging of the population is currently one of the major challenges which many countries face. Governments have adopted different strategies to deal with these problems, such as, for example, raising the retirement age. People who are close to retirement may be interested in becoming entrepreneurs. In this line, senior entrepreneurship is attracting attention of policymakers and researchers. However, such activity is still not well studied in psychology. To fill this gap, a quantitative study was conducted among people who are around retirement age.

Theoretical background

If people perceive entrepreneurship as socially acceptable at any age, and in mature age in particular (so-called age norms in relation to entrepreneurship), such perceptions will exert a positive influence on their entrepreneurial intention. Within the theoretical framework of the theory of planned behavior, the most widespread theory in entrepreneurship research, these relationships will be mediated by the proximal antecedents of intention, i.e., attitude toward entrepreneurship, subjective norm, and entrepreneurial self-efficacy. Based on the theory of planned behavior, this study analyzes the effect of perceived age norms on the entrepreneurial intention among mature individuals.

Design/Methodology

For this purpose, a research questionnaire was administered to 793 late-career participants (54% female) aged 50 to 65 (  $M = 58.27$ ,  $SD = 3.75$ ) years residing in three countries: Poland, Spain and Chile. The questionnaire was composed of the perceived age norm scale in relation to entrepreneurship and the Entrepreneurial Intention Questionnaire (EIQ), which measures both entrepreneurial intention and its three antecedents (attitude toward entrepreneurship, subjective norm and entrepreneurial self-efficacy). Data were checked for common method variance, and the measurement invariance of the measures in the three countries was also analyzed. SmartPLS was used to examine the hypothesized relationships.

Results

The results show that perceived age norms predict entrepreneurial intention among mature individuals in three countries together and in each country separately. These relationships are mediated by attitudes toward entrepreneurship, subjective norm and entrepreneurial self-efficacy. Some cultural differences are identified between three country subsamples as well. Perceived age norms are presented as a variable on which to intervene to promote entrepreneurship in the last stage of the professional career.

Limitations

The use of self-report measures is a limitation of the study. Moreover, although intention is a good predictor of behavior, actual entrepreneurial behavior was not measured. Data were collected in three countries, which limits the generalizability of the results to other cultures. Future research would benefit from using data from more countries. The study was cross-sectional, so drawing causal conclusions is not possible.

#### Conclusions

The results show that the formation of positive social norms about starting a business at a mature age promotes entrepreneurial intention. The model of planned behavior was verified and confirmed in a new age-specific context on data from three countries. The findings contribute to work and organizational psychology, as well as to the entrepreneurship literature. It is also possible to formulate recommendations for practice. It is worth to promote business start-ups among people close to retirement age, for example by creating programs supporting older entrepreneurship and the formation of social attitudes conducive to starting a business at this age.

#### Relevance to the Congress Theme

When we want to better understand the changing world of work, we have to take into account the issue of aging populations, which has become a significant challenge. Senior entrepreneurship can be one of the important remedies to deal with these problems.

#### Relevant UN SDGs

The topic is related to UN sustainable development goals concerning poverty reduction, decent work and economic growth.

*Keywords: Senior entrepreneurship, entrepreneurial intention, age norms*

## Oral presentation OP336

### Is remote leadership a better fit for an introverted leader? An examination of leader and follower outcomes

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science&practice

#### Research goals and why the work was worth doing

Leading remotely is becoming increasingly relevant, not just because of Covid-19. Remote leaderships has comparatively less in-person and informal communication than leading at work. Working from home might not fit with all leaders. Extraverts, for example, may suffer from the lack of in-person communication. For introverts, in turn, this lack of in-person communication when leading remotely could be beneficial, as they often perceive office-communication as distracting. Based on Person-Environment-Fit and Self-Determination Theory (SDT; Deci & Ryan, 2000), the present study aims to investigate whether leading remotely has a positive effect on introverts' leadership style and well-being, as well as on employees' intrinsic motivation and work performance.

#### Theoretical background

Extraverts are more likely to show effective leadership performance. This is often explained by extraverts being more outgoing, while introverts tend to be relatively calm and reserved. Nevertheless, there are contexts in which introverts lead to a better team performance (e.g., in a proactive team). Yet, there is little research on contexts in which introverted leaders can demonstrate their strength. Working remotely is accompanied by social requirements, which may be suitable for introverted leaders. While extraverts draw energy from interactions with others, introverts draw energy from time for themselves. Thus, having less in-person communication in remote leadership should better meet introverted leaders' needs and we propose that this fit between person and context provides advantages. Fit is generally associated with lower emotional exhaustion and can enrich people's lives through personal growths and leading remotely should thus be better for the well-being (i.e., less emotional exhaustion, more thriving) of introverted leaders. In addition, fit is associated with performance as it increases Leader-Member-Exchange (LMX), and leads to commitment and contextual performance. Thus, it should be easier for introverts to develop high LMX and empowering leadership (e.g., caring for needs and concerns of employees). Further, we assume that introverts are more successful in meeting employees' needs through remote leadership, which should lead to higher employee intrinsic motivation and higher work performance based on SDT (i.e., need satisfaction promotes intrinsic motivation and performance). In sum, we propose a more positive relationship between the leaders' number of home office days and their leadership-styles and well-being, as well as employees' intrinsic motivation and work performance for introverted leaders compared to extraverts.

#### Methodology

We collected data from supervisors and their subordinates in a large German company. Leaders rated their number of home office days, their trait extraversion, their leadership styles LMX and empowering leadership, and their thriving and emotional exhaustion. The employees rated their intrinsic motivation and work performance. Only teams of which we got data of at least two direct reports were included in the evaluation. The final sample consisted of 39 leaders with follower data from on average 4.02 direct reports (number of direct reports = 157).

## Results obtained

The interrater reliability of employee study variables was sufficient (intrinsic motivation:  $rWG = 0.85$ ; work performance:  $rWG = 0.82$ ) so aggregation on team level was justified. Hierarchical linear regression analyses revealed that only for the most extraverted leaders a greater number of home office days was related to higher emotional exhaustion. For all other outcomes, we found no significant interaction between leaders' number of home office days and their trait extraversion.

## Limitations

Limitations of the study are that all data were collected cross-sectionally and by self-report.

## Conclusions – research and or practical implications/Originality/Value

Our study gives insight into the extent to which leaders' extraversion interacts with leading remotely. The data indicated that for leaders with very high extraversion, a high number of home office days is associated with higher emotional exhaustion. In contrast, less extraverted leaders do not seem to be impaired in their well-being when leading remotely. Considering the relevance of remote leadership for the future, this study directs attention to the importance of a fitting environment for one's well-being.

## Relevance to the Congress Theme

The future is now. The world of work is not and will not be happening without remote leadership.

## Relevant UN SDGs

Our study contributes to the SDG good health and wellbeing. One of the future's prominent working contexts (i.e., working remotely) may be disadvantageous for the well-being of the most prominent leader – the extraverted leader.

*Keywords: introversion, remote leadership, well-being*

## Oral presentation OP121

### Is team climate strength always a good thing? The benefits of variety in perceptions

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science

#### Research goals

Team climate is a well-known predictor of group outcomes (Mathieu et al., 2008). Literature often suggests that to achieve best outcomes, team climate should not only be high in level, but also strong – with a high level of agreement within the team (Schneider et al., 2002). However, studies are divided on whether team climate strength has a generally positive effect on outcomes, with some research suggesting curvilinear effects, or a moderating effect on the climate-performance link. This paper examines this further by considering climate strength as a diversity attribute, and argues that the effect depends on the type of outcome, as well as the operationalisation of climate strength.

#### Theoretical background

Climate strength research often relies on the theory of situational strength (Mischel, 1973), which posits that a uniform climate creates a situation with clear expectations about how team members should behave, leading to greater cohesion and stronger outcomes. While this is a persuasive argument for some outcomes, for others it is less so.

Consider climate strength as a measure of diversity. Diversity of opinion can be of benefit to teams; the information/decision-making perspective (van Knippenberg & Schippers, 2007) suggests that team diversity can lead to more information being taken into account in decision-making, leading to better outcomes, particularly if the outcome requires elaboration of ideas (e.g. innovation). I therefore hypothesise that climate strength moderates the relationship between climate and innovation such that the relationship is stronger when there is greater variety of climate perceptions within the team.

Harrison and Klein (2007) defined three types of diversity: separation, variety, and disparity. Of these, variety is the most relevant to this perspective, as it considers the extent to which team members are spread across possible values of a variable. However most climate strength research relies on measures such as the standard deviation (SD), which does not reflect the total spread. Therefore I also ask: do relationships appear stronger when climate strength is measured by range, rather than by SD?

#### Methodology

Data was collected from 113 Community Mental Health Teams (CMHTs) from the NHS in England as part of a larger study. 1443 completed questionnaires were received (a response rate of 75%). Measures included four dimensions of the Team Climate Inventory (Anderson & West, 1998), and climate for Reflexivity (Carter & West, 1998). These were aggregated to the team level in three ways: climate level (measured by the group mean), and climate strength measured by both the SD and the range.

Team innovation was rated by three experts from collated lists of changes mentioned by team members that had occurred in their teams in the previous 12 months (ICC2 = 0.84).

Analysis was conducted using moderated multiple regression, examining each of the five climate dimensions predicting team innovation, moderated alternately by climate range, and climate SD.

## Results

As expected, all five climate dimensions were significant predictors of team innovation. When moderated by climate strength as measured by range, two of the five interactions were significant (Support for Innovation:  $B = 0.390$ ;  $p = .045$ ; and Reflexivity:  $B = 0.205$ ;  $p = .041$ ). The effect is such that, whether climate strength is low or high, there is a positive relationship between climate and innovation; however, the effect is substantially stronger where the range of climate perceptions within the team is greater, i.e. when climate is weaker. This effect was found for two of the five climate dimensions tested, therefore partially supporting the hypothesis.

Interestingly, when tests were performed using SD rather than range as the measure of climate strength, none of the interactions was significant. This suggests range may be a more appropriate conceptualization of climate strength.

## Limitations

The findings are based on a single sample of work teams in the health care sector and may not be representative of all types of work team.

## Conclusions

The results suggest that having a greater variety of perceptions of climate can help the link between climate and innovation: that is, a weaker climate can be beneficial for enabling more innovative teams. However, the average climate is always a positive for the team; teams with more positive average perceptions are generally more innovative.

The fact that this was found when climate strength is measured by range rather than SD suggests that it may be beneficial to consider climate strength as a measure of variety, rather than separation.

## Relevance to the Congress Theme

Given that increased variety of work methods, geographical dispersion, and greater cultural diversity are part of the changing world of work, these results offer hope that such variety can be harnessed to be beneficial to outcomes.

*Keywords: Team climate, climate strength, measurement*

## Oral presentation OP763

### Job characteristic and students' output in basic education: Multilevel mediational analysis by well-being and presenteeism

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science

**Research goals and why the work was worth doing:** This study aims to test the job characteristic model in a multilevel mediation proposition. We hypothesise that the job characteristics dimensions predict students' output – measured in the second level – are mediated by well-being and productivity loss (i.e., presenteeism) – both measured at the individual level.

**Theoretical background:** The Job Characteristics Model (JCM) suggested that job characteristics will predict outputs mediated by psychological states (Hackman & Oldham, 1975, 1976). This model has been reviewed (Fried & Ferris, 1987; Grant & Parker, 2009) and the core elements of job characteristics were expanded (Morgeson & Humphrey, 2006). In addition, the critical psychological states were questioned and reconsidered (Renn & Vandenberg, 1995); and the whole model received (partial) support in the educational field (Guise, 1988; Pérez-Nebra et al., 2020). However, to date, no empirical evidence of the JCM multilevel approach has been provided, although, already suggested (Croon & van Veldhoven, 2007; van Veldhoven, 2012).

**Methodology:** A cross-sectional study was conducted among 171 schools and 1,281 public servants (80,4% of women, mean age 44.00, SD = 8.36; 93.4% in urban areas). We used an online and paper-and-pencil survey to measure job characteristics, well-being at work ( $w = .90$ ), avoiding distraction ( $w = .76$ ) and completing work ( $w = .78$ ). Students' output was measured using a Brazilian standard national IDEB score (Basic Education Development Index) for each school.

**Results:** The proposed model was examined by using Multilevel Structural Equation Modeling (MSEM), which assumes sampling at both individual and group levels. At the between level, IDEB was predicted by Completing Work ( $\beta = -.40$ ;  $p = .04$ ) and Avoiding Distraction ( $\beta = .42$ ;  $p = .04$ ), but not by well-being at work ( $p = 0.70$ ). At the within level, well-being at work was predicted by social job characteristics ( $\beta = .28$ ;  $p = .01$ ) and task characteristics ( $\beta = .35$ ;  $p = .01$ , ICC (1) = .052). Completing Work and Avoiding Distraction (ICC(1) .032 and .030 respectively) were predicted by well-being at work ( $\beta$  respectively  $-.30$  and  $-.37$ ), and well-being at work mediated the relation between job characteristics and productivity loss (measured by presenteeism – Completing work and Avoiding distraction), however, cannot predict IDEB.

**Limitations:** The study was cross-sectional, and data were collected in school via self-report questionnaire.

**Conclusions – research and or practical implications/Originality/Value:** To our knowledge, this study is the first to examine JCM in schools from a multilevel perspective. It provides clear evidence that improving job characteristics, protecting and increasing well-being and reducing presenteeism of school professionals will positively affect the quality of basic public education.

**Relevance to the Congress Theme :** The results support critical workplace changes that can contribute to more sustainable work activities, well-being and promote decent work. Sustainable and decent work are two crucial pillars for promoting the transformative education the world requires.

Relevant UN SDGs : Good health and well-being, Quality Education, Decent Work and Economic Growth.

*Keywords: Presenteeism, job characteristic model, work design*

## Oral presentation OP470

### **Job characteristics, engagement and affective commitment in a Spanish Non-Governmental Organization: A moderated mediation analysis**

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science&practice

#### Research goals

One of the main concerns of non-governmental organizations (NGOs) is how to retain their volunteers over time. In that sense, workers' affective commitment to the organization is considered a key antecedent of both volunteers' future performance and the quality of service they provide. Therefore, this study aims at exploring workers' psychological resources and work conditions that are related to their affective commitment to the NGO.

#### Theoretical background

In doing so, we follow the Job Demands-Resources theory (Bakker & Demerouti, 2017) to specific NGO (i.e. Red Cross Spain) and explore the motivational paths of this theory: job characteristics (i.e. opportunities to learn new professional skills) are related to engagement and commitment and if, in addition, volunteers have high psychological capital, they will have a high affective commitment to the organization. In this sense, a recent meta-analysis suggests that psychological capital is associated with positive outcomes for both workers and organizations (Loghman et al., 2022). Therefore, using a moderated mediation model we examine how job characteristics may be related to engagement (H1) and affective commitment (H2), as well as whether psychological capital is a moderator in the engagement-commitment relationship (H3).

#### Design

A correlational and cross-sectional study was carried out, using online questionnaires for data collection. The final sample consisted of 375 volunteers from an NGO 'Red Cross Spain' (Mage = 36.72, SD = 12.34, 64.8% women). Participation was voluntary and non-rewarded. Data collection was approved by an ethical committee and all datasets were anonymized. The following instruments were used in their Spanish versions: the Short version of the Psychological Capital Scale (Authors, 2017), the 3-item version scale of the Utrecht Work Engagement Scale (Schaufeli et al., 2019), and the Volunteer Satisfaction Scale (Vecina et al., 2009). Hypotheses were tested using multiple linear regressions calculated by maximum likelihood and bootstrapping methods (5,000 resamples, Percentile Confidence Intervals).

#### Results

Results showed that job characteristics were related to engagement (H1) and directly and indirectly, through engagement, related to affective commitment (H2). Psychological capital moderated the relationship between engagement and commitment (H3). That is, when psychological capital is high, the effect of job characteristics on organizational affective commitment through engagement is significant ( $p < .01$ ).

#### Limitations

As every study, our design has some limitations. This study is not exempt from potential common method biases because all measures were self-reported and collected at one point time. Future

studies should incorporate longitudinal designs with more representative samples that may help to infer causality in the relationships between variables.

### Conclusions

In conclusion, good working conditions and the motivational component of engagement, together with the positive psychological states of psychological capital, especially strengthen the bond of volunteers with their organizations, favoring their involvement in the activities and ensuring their permanence in the volunteer programs.

Besides these limitations, these results are interesting from a practical point of view because offer some insights into how to improve volunteer retention in NGOs. For example, it seems that NGOs should offer good working conditions and facilitate engagement at work. Also, training programs to improve volunteers' psychological capital may be a potential intervention (see Luthans et al., 2006). Indeed, these results are interesting for the United Nations' Sustainable Development Goals as NGOs participate actively in the consecution of all goals, particularly goals #1 (no poverty) and #10 (reduced inequalities).

### Relevance to the Congress Theme

The future of NGOs and their ability to respond to some of today's social challenges (i.e. immigration) necessarily involves determining why some individuals choose to volunteer, as well as the reasons why some continue to volunteer over time. Organizational commitment is a strong predictor of the intention to continue, so understanding the link between work conditions, motivational processes and psychological resources would be helpful for NGOs to manage volunteers' goodwill and initiative.

### Relevant UN SDGs

Our findings are relevant to the United Nations' Sustainable Development Goals as NGOs participate actively in the consecution of all goals, particularly goals #1 (no poverty) and #10 (reduced inequalities).

*Keywords: commitment, volunteers, NGOs*

## Oral presentation OP469

### **Job Crafting As a Predictor of Work Engagement Among Polish Nurses. The Mediating Role of Job Resources: A Two-Wave Study**

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science

#### Study goals

The relationship between job crafting and work engagement seems to be well documented, however, not in the occupational group of nurses, especially from Poland. Moreover, the mediating effect of job resources on job crafting-work engagement link among nurses was mainly tested in countries of Western Europe, but, to the best of the authors'

knowledge, not in Central and Eastern Europe. Based upon the Job Demands-Resources model, Conservation of Resources (COR) theory and Self-Determination theory, this longitudinal study examined whether job crafting behaviours predict directly work engagement among Polish nurses. The second aim of the study was to investigate whether job resources, i.e., perceived organizational support and support at work, mediated the relationship between job crafting and work engagement.

#### Theoretical background

According to Wrzesniewski and Dutton (2001), job crafting could be described as self-initiated forms of behaviour in which employees proactively shape the characteristics of their jobs in order to adjust them to their own needs and preferences. To date, studies demonstrated that job crafting leads to higher work engagement among employees (Harju et al., 2016; Vogt et al., 2015). Work engagement was defined as a positive, work-related state of mind characterized by vigour, dedication and absorption (Schaufeli et al., 2002). The analyzed job resources consisted of two dimensions – perceived organizational support and support at work. The former referred to support from supervisors, while the latter concerned support derived from coworkers.

#### Methodology

This longitudinal study employed two waves of measurement and three and a half-month time intervals between them. During the first measurement (T1), a sample of 270 nurses from the biggest hospital in Southern Poland filled out an online questionnaire from 3 January until 6 February 2022. 121 out of 270 nurses who took part in T1, filled out the same questionnaire during the second measurement (T2) which was conducted from 23 May until 8 June 2022. Job crafting was assessed by Job Crafting Questionnaire (JCQ; Slemp, Vella-Brodrick, 2013, Pol. adapt. Kasprzak et al., 2017) and work engagement was assessed by Utrecht Work Engagement Scale (UWES; Schaufeli, Bakker, 2003, Pol. adapt. Szabowska-Walaszczyk et al., 2011). Perceived organizational support and support at work were estimated using the Polish adaptation of three subscales from Areas of Worklife Survey (AWS) developed by Leiter and Maslach (2006; Pol. adapt. Terelak, Izwantowska, 2009).

#### Results

The obtained results indicated that job crafting predicted directly work engagement among Polish nurses in both measurements. Moreover, both perceived organizational support and support at work partially mediated the relationship between job crafting and work engagement in T1 and T2.

#### Limitations

There have been distinguished three main limitations. Firstly, the sample consisted of nurses from only one hospital and only females, therefore future studies may take into account a more representative sample of nurses to draw better conclusions. Secondly, only self-reported measures were used, therefore future studies could also employ the assessment of the supervisors in order to get a more objective perspective of the analyzed phenomenon. Thirdly, no personal traits were included in the research model, therefore in the future it may be worth exploring personal traits and their role with relation to work engagement in order to get a more comprehensive overview of the well-being of Polish nurses.

#### Conclusions

To the best of authors' knowledge, this is the first study which explored the direct and indirect (through job resources) impact of job crafting on work engagement among Polish nurses. This study indicates that when nurses proactively build a resourceful and challenging work environment for themselves, it can lead to diverse positive outcomes such as an increase in their job resources and increase in work engagement that are crucial for their well-being. Thus, nurses should be encouraged by hospital managers and supervisors to craft their job.

#### Relevance to the Congress Theme

The study is strongly related to the current phenomena observed in work environment, such as job crafting and its positive outcomes for employee's wellbeing. Thus, the study seems to fit very well to the main theme of the Congress.

#### Relevant UN SDGs

The study is closely relevant to 'Good health and wellbeing' topic promoted by UN SDGs. It could be stated that the general aim of the study was to show the predictors of work engagement considered as an indicator of occupational well-being among Polish nurses.

*Keywords: job crafting, work engagement, nurses*

## Oral presentation OP520

### Justice in Nascent Entrepreneurial Teams

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Research goals and why the work was worth doing

Nascent entrepreneurial teams confront high levels of group uncertainty that arise from external factors (customers, products, markets) but also from within the team itself, as the interactions between team members are bound to several social complexities (e.g., engaging in negotiations due to individual preferences). Since justice provides a sense of control and belongingness that helps individuals navigate complex social-exchange relationships, this study focuses on team justice climate—also labeled peer justice or intraunit justice—as a trigger of successful nascent entrepreneurial team dynamics. To that end, we examine the influence of team justice climate on team reflexivity, a group process that improves the understanding of how the team functions, while providing adaptive responses to emerging challenges.

Theoretical background

Evidence suggests that team justice climate (group-level perceptions of fairness that teammates display toward one another) promotes team reflexivity. This research, however, has typically focused on one or two justice dimensions at a time. Since justice dimensions tend to be correlated, previous findings may have misattributed the effects of justice dimensions. Moreover, research has focused on one or two climate properties, including climate level (amount of justice within the team) and climate strength (degree of agreement on the amount of justice that exists within the team). Despite its potential detrimental effects, research has disregarded the pattern of the within-team distribution of justice scores, referred to as climate uniformity. Since climate properties also tend to be correlated, previous findings may have also misattributed the effects climate level, strength, and uniformity. To contribute to the team justice-reflexivity link, this study addresses all three dimensions of team justice (distributive, procedural, and interactional) and their corresponding climate properties (level, strength, and uniformity). We examine the indirect effect of each of these variables on team entrepreneurial performance, through the mediating role of team reflexivity.

Methodology

The study was conducted in the context of a competition organized by a higher-education institution specialized on promoting nationwide innovation and entrepreneurship. The competition helped nascent entrepreneurial teams develop their business idea, while providing a structured but real scenario which includes strong incentives for the competing teams (training, feedback, funding, and other legal, administrative, and marketing resources). The final sample consisted of 219 individuals nested in 59 entrepreneurial teams, ranging from six to three members. The average age of participants was 24.26 years ( $SD = 3.93$ ) and 39.3% were women. Eighty three percent of teams had a longevity of 12 months or less and none of them had initiated commercialization. Team distributive, procedural, and interactional justice and team reflexivity were collected at Time 1 using self-reported scales. Team performance was assessed at Time 2 by a panel of specialized jurors who used previously defined guidelines designed to conduct multiple-rater assessments.

Results

A SEM model showed that all team justice climate (JC) dimensions were related to team reflexivity. The effects, however, depended on the climate property. Distributive and procedural JC level were positively related to team reflexivity; this was not the case for interpersonal JC level. Interpersonal JC strength was also positively related to team reflexivity; this was not the case for distributive nor procedural JC strength. Nonuniform distributive JC was negatively related to team reflexivity; this was not the case for procedural nor interpersonal nonuniform JC. All the significant effects on team reflexivity had an indirect effect on team entrepreneurial performance.

#### Limitations

Self-reported scales might have inflated the correlations among peer justice and team reflexivity.

#### Conclusions

Previous studies have highlighted the role of procedural justice in promoting team reflexivity. Our results support this evidence but also show that other team justice dimensions are key as well. Moreover, we show that promoting team reflexivity is not just a matter of increasing the level or amount of justice. Nor is it enough to focus on the degree of agreement on the amount of justice that exists within the team. Researchers and practitioners should also consider the pattern or shape of the within-team distribution of justice scores (climate uniformity), as this climate property had a direct independent effect on team reflexivity, that indirectly reduced team entrepreneurial performance.

#### Relevance to the Congress Theme

Intrapreneurial and entrepreneurial teams are key to providing innovative responses to the challenges ahead. This study will help design better training strategies to promote team reflexivity within this context.

*Keywords: justice climate, team reflexivity, entrepreneurial teams*

## Oral presentation OP672

### Keep your chin up: Investigating the benefits of Augmented Reality to support measurement-related tasks

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science&practice

Augmented Reality (AR) allows the user to access and interact in real time with digitally-generated contents displayed onto the physical environment. These features make AR technology a valuable tool for supporting complex tasks that depend on contextual information. Indeed AR has been exploited successfully in various contexts such as tourism (e.g., Han, Jung, & Gibson, 2013) and education (e.g., Hsieh, & Lee, 2018), and increasingly it is experimented also in smart factories. There it has the potential to support the training of inexperienced workers, by showing the sequence of actions (e.g., Gattullo et al., 2019), and more generally to assist the task execution, for instance in the case of complex assembly tasks, where AR can provide readily available information and facilitate the implementation (Wang et al. 2013).

In the present work, we aimed to investigate whether using AR technology could benefit the user in the execution of a measurement task. To this end, we ran a comparative within-participant experiment, in which users were asked to employ a digital oscilloscope to measure different wave shapes, by reading information displayed either on a monitor or on an AR Head-Mounted Display (HMD). More specifically, participants had to carry out the requested task in two different conditions. In one condition, the electric circuit to be measured was placed on a desk. While in the other condition, the electric circuit was attached on the back of a large object. Aspects related to the participants' experience of use (e.g., ease of use, information readability, perceived efficiency, hedonic aspects, visual discomfort) were collected using post-task questionnaires. Moreover, the entire experimental session was video-recorded using multiple video-cameras to allow off-line computer-supported analysis of participants' performance. A total of 32 participants took part in the experiment (5 females; average age 24.5 years old SD=2.4). They all reported to have previous experience with the oscilloscope, but none of them had tried AR before. At the beginning of the experimental session, participants were shown how the system worked and were allowed some time to familiarize with it. After that, the participant was invited to carry the measurement task by referring to the monitor or to the HMD with the electric circuit placed either on the desk or behind a large object (the presentation order of both the display and the circuit location were counterbalanced). After the conclusion of each experimental phase, participants were invited to fill in the questionnaires.

Data from the video-analysis revealed that, overall, when using the HMD participants were more accurate in the execution of the task, even if they were not faster. Concerning the self-reported data and with reference to the condition in which the circuit was placed on the back of the large object, participants reported higher levels of perceived efficiency when using the HMD as compared to the monitor.

Overall, our data support the idea that AR is a valuable tool to supplement information in situ, thereby facilitating the execution of tasks. We have to acknowledge that our experiment entailed the simulation of a measurement task and that it was conducted in the laboratory, thereby limiting the generalizability of the results. Future investigation should be set up in more ecological environments and with more realistic tasks, to assess the actual benefits that this technology can bring to the users.

*Keywords: Augmented Reality; Manufacturing; Industry 5.0*

## Oral presentation OP530

### **KNOWLEDGE MANAGEMENT TO CREATE, TO INNOVATE, AND TO MANAGE PEOPLE IN THE ORGANIZATION: a study of moderate mediation of Information technology**

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science

Research goals and why the work was worth doing

The main aim of this research is to stimulate, according to the people-based approach, a vision of work that considers human capital and develops effective performance management models to address the new technological challenges of Industry 4.0, and to transform the limits of the pandemic into advantages with long term positive impacts. The study of positive working behavior considers the perception of workers in respect to the knowledge management practices put in place by organizations, and how this can influence innovative performance behaviors. In this regard, the specific objective of the study is to explore the empirical relationship between the perception of knowledge management and innovative work behaviors, considering this relationship mediated by the technology, as perceived by the employees: in this study we assume that this mediated relationship is moderated by low/high Thriving at work values.

Theoretical background

In the age of technological innovation, Knowledge management Practices promote innovative working behaviours that are useful in responding to the demands of Industry 4.0 (Andreeva & Kianto, 2012). In accordance with the people-based approach (Pfeffer, 2010), workers who perceive - by the organization - the enhancement of knowledge and professional growth, develop innovative work behaviors, in line with business objectives (Rudolph et al., 2021). Studies on Positive Organizational Behavior show that in the I-O relationship a work characterized by learning possibilities and vitality (Thriving at work) develops commitment and engagement, and encouraging organisations to respond to Industry 4.0 and pandemic demands (Carmeli & Spreitzer, 2009; Wallace et al., 2013). Moreover, the presence of technological infrastructure aimed at the implementation of work processes stimulates the worker to implement innovative performance behaviours and the feeling of valorisation for their human capital (Lee, Leong, Hew, & Ooi, 2013).

Design/Methodology/Approach/Intervention

The study was attended by 461 employees with different types of contracts and belonging to different organizations in the process of innovation and technological change. Data collection included the administration of a self-report questionnaire containing the following scales: Knowledge Management Orientation Scale by Wang and Ahmed (2004); Innovative work Behavior Scale (Scott & Bruce, 1994); Information Technology Scale (Hussinki, Kianto, Vanhala & Ritala, 2017); Thriving at work Scale (Porath et al., 2002). The hypotheses have been tested through a model of moderate mediation with the macro PROCESS (SPSS 26.0; Model 14) and with the use of the bootstrap for the significance of the effects (Hayes & Preacher, 2013).

Results obtained or expected

The results of the moderate mediation model show that the direct relationship between Knowledge Management Orientation and Innovative work Behaviors is not significant in the presence of Information Technology. The results demonstrate a total mediation of IT. The total mediation

relationship in this study is moderate according to the levels of Thriving at work: workers implement innovative work behaviours if they perceive the presence of technology dedicated to knowledge management, this perception increases or decreases depending on the levels of learning and vitality.

#### Limitations

The limits are in the use of self-report responses and the cross-sectional nature of the study on an undifferentiated sample. In addition, the study captures a moment of organizational change that occurred between 2019 and 2020, and which consequently does not recall aspects of the current post-pandemic workers' perception. The type of sampling involves limits to the generalization of results.

#### Conclusions – research and or practical implications/Originality/Value

Results confirmed the role played by a people-based approach to HRM underlining its implications for organizational behaviour and individual adjustment. In the process of digitalization of production systems, this study is useful in understanding the mechanisms underlying innovative performance. A strength of the study was its contribution to the investigation of the effect of Information Technology and Thriving at work on the relationship between Knowledge management orientation and Innovative work Behaviors in the Italian public and private organizational context.

#### Relevance to the Congress Theme

In line with the theme of the Congress, the study emphasizes the importance for organizations and people to take action towards change, placing at the center of the theme people as the main actors and stakeholders of change itself.

#### Relevant UN SDGs

The overall objective of this study is to develop performance management models that primarily promote quality of working life and well-being. This aim is in line with some of the UN's Sustainable Development Goals (SDGs), such as Good Health and Wellbeing.

*Keywords: Knowledge Management, Innovation work Behavior, Information technology*

## Oral presentation OP241

### Leader character moderates the effect of leadership context hostility on eudaemonic wellbeing as mediated by hedonic wellbeing

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science

What is subjective wellbeing and why should organizational stakeholders care for the wellbeing of its leaders? Subjective wellbeing, as composed of hedonic and eudaemonic facets, is not only inherently important, but also has been linked to positive outcomes for leaders, followers, and their organizations. Following Job Demands-Resources theory, we predicted that the hostility of the context in which leadership occurs (taken as job demand) would reduce leaders' subjective wellbeing (H1a) and eventually erode their character (H1b). Conversely, we predicted that leader's strength of character (taken as a personal resource) would protect leaders eudaemonic wellbeing (H2). We argue that this effect would be partially mediated by hedonic wellbeing (taken as reverse proxy of job strain; H3). Finally, we contribute to this theory showing that leaders' character moderates the negative effect of leadership context hostility on leaders' eudaemonic wellbeing (H4).

We tested our hypotheses in two independent samples. In our first study, we sampled 60 leaders (21.7% female) operating in either hostile or extreme leadership contexts (active military theatre of operations). Our second sample consisted of 81 military leaders and 108 business leaders (17.9% female), again operating in either hostile or extreme leadership contexts. Three MANOVA and two Structural Equation Models confirmed our Hypotheses. Our results show that as the hostility of a leadership context increases, leaders' social wellbeing decreases. Further leader character increases leaders' hedonic and eudaemonic wellbeing but also protects leaders against the negative effect of a hostile leadership context on social facet of subjective wellbeing.

#### Study 1- Hypothesis

Hypothesis 1: As the hostility of a leadership context increases, leaders' subjective wellbeing will decrease.

Hypothesis 2: As leaders' strength of character increases, so will increase leaders' subjective wellbeing.

Hypothesis 3: Leader character will moderate the effect of leadership context hostility on leaders' subjective wellbeing. More precisely, as leaders' strength of character increases, an extreme leadership context's negative effect on leaders' subjective wellbeing will decrease.

#### Study 1- Methods

Our first study consisted of two samples comprised of 30 military leaders at different rank levels within the Ukrainian Military Forces and 30 business leaders of small to medium Ukrainian business firms (Sample A), and 37 military leaders and 32 business leaders (Sample B). 25.8% of our participants were female. The mean age was 38.24 (SD = 8.71), being 39.8% between 18 and 30 years old, 49.9% between 31 and 45 years old and 10.6% between 46 and 60 years old. Participants supervised 130.23 employees in average (SD = 257.29), with a mean tenure of 3.58 years (SD = 3.20) in their leadership positions. Nineteen participants declined to indicate their age, 454 their span of control, and 74 their tenure for confidentiality reasons.

After obtaining ethics approval, a co-author and his research assistants contacted Ukrainian leaders operating in major Ukrainian cities (Kyev, Lviv) or in the Crimean theatre of Operations (Donetsk Region) and invited them to participate in this pilot study. After providing their informed consent, each participant completed an online self-report questionnaire measuring the importance that attributed to leader character towards leader effectiveness, and one month later, participants self-reported their levels of hedonic and eudaemonic wellbeing (Sample A). 6 months later, we collected second, independent sample using the same procedure, with the difference that we also included a self-report measure of their leader character behaviors (Sample B). None of the participants of Sample A took part in the data collection of sample B. Participation in this study was anonymous and voluntary, meaning that confidentiality of responses was ensured, and no monetary compensation was provided for completing the survey.

#### Study 2- Hypothesis

Hypothesis 4: Leader character moderates the negative effect of leadership context hostility on leaders' eudaemonic wellbeing

#### Study 2 - Methods

For Study 2, we collected an additional sample of 132 leaders (Sample C) to increase the statistical power of our analyses involving leader character behaviors. Sample C consisted of 71 military leaders (0% female) operating within the Ukrainian Military and 61 Ukrainian private firms' leaders (13.7% female). At the time this paper was written, the average age of participants included in Sample C was  $M = 37.76$  ( $SD = 10.21$ ). Those participants who reported their tenure as leaders supervised 579.45 employees on average ( $SD = 5173.18$ ) and had a mean tenure of 4.79 years ( $SD = 4.28$ ) in their respective leadership positions. To test our hypotheses regarding leader character behaviors, we combined Samples B and C, being the final sample of this study  $N = 204$ .

#### Results

All our hypotheses were confirmed by our results.

*Keywords: Leadership Context hostility; Leader Character; Subjective Wellbeing;*

## Oral presentation OP204

### Leader commitment to digitalization change: The role of employees as change agents

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science

1) Research goals This study investigates opportunities and barriers for leader commitment to changes related to digitalization in healthcare. This is important as research suggests that leaders are key actors in advancing digital transformations [1]. Yet, they face challenges of paying divided attention to both development of employees and technical aspects of change [2]. How leaders balance their commitment to different areas of digitalization change is thus essential.

2) Theoretical background Commitment to change (henceforth C2C), as a mind-set binding an individual to a necessary course of action, has been found key to successful change [3]. Despite leaders' impact on change, their own C2C has been little investigated. Yet, research suggests that leader C2C moderates employee C2C [4]. Thus, it is relevant to investigate how such leader C2C is developed or hindered in a context of digitalization.

3) Methodology A two-year qualitative study of healthcare digitalization, including participant observations, interviews (n=23), and documents, was ideal to investigate how leaders balance commitment to different areas of digital transformations. The studied digital solutions (anonymized) concerned healthcare information and logistics. Data was analyzed through first and second order coding and generation of themes [cf. 5].

4) Results The leaders developed commitment to digital solutions, which were considered appropriate means of improving healthcare. However, leaders were challenged by having to prioritize their commitment to either daily healthcare 'core tasks' or the digital solutions. As mentioned by a leader:

I think the [digital solution] makes it easier to be a patient and gives a feeling of safety and quality. But it cannot take up too much of our time. I have to make sure that my employees do not feel too disturbed by having to implement this [...]. With projects like this you have to find the hours somewhere in the everyday running of the department.

Moreover, certain employees influenced the leaders' commitment. These employees actively ensured that the digital solutions would cause minimal disturbance to the daily core tasks, i.e., by collaborating with the providers to remove technical obstacles for their colleagues. They furthermore created a clear role description for needed digitalization leadership. As mentioned in a conversation:

Leader: I like it when you just say, well now I need you to attend to this obstacle and then we are good to go.

Employee: Yes, I really try to explain what is needed right now and sort out all that is less relevant. And, at the moment, it is simply that I need you to pitch the [digital solution] at the meeting so our colleagues and also [top management] understand that we think this is important for us to have.

Due to such employee change agency, the leaders could direct their commitment to aspects that were critical to facilitating digitalization.

5) Limitations First, being a qualitative study, the empirical findings cannot be generalized to similar contexts. Second, the study only concerns digital solutions that are strategically committed to by the hospital management.

6) Conclusion Employee support of balanced leader commitment to both healthcare core tasks and the digital solutions is essential for driving change. In accordance with prior research of employee C2C [6], the study concludes that role clarity and appropriateness of change are also important antecedents for leaders' C2C. The study provides new knowledge of employees' key role as change agents ensuring leader commitment. Finally, in terms of commitment foci, detrimental conflicts between areas of change and more stable core tasks need to be overcome.

7) Relevance to Congress theme The study is highly relevant for the Congress theme as the findings show how leaders' and employees' work tasks may evolve in interaction with digitalization changes.

*Keywords: Leader commitment to change, digitalization, change agent*

## Oral presentation OP94

### **Leaders' daily feedback-seeking: feedback occasions and error management climate as predictors of day-level feedback-seeking behaviour**

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science&practice

#### 1. Research goals and why the work was worth doing

Although leaders frequently lack essential information about their performance, they avoid active feedback-seeking to fill this gap. However, little is known about why leaders' feedback-seeking behaviour is seemingly rare. Moreover, while former research focused on feedback-seeking as a stable work behaviour, the dynamic nature of feedback-seeking has largely been neglected in earlier research. With this study, we seek to contribute to a better understanding of leaders' feedback-seeking and examine predictors of leaders' daily feedback-seeking behaviour.

#### 2. Theoretical background

Theory on leaders' feedback-seeking behaviour has suggested leaders avoid feedback because they fear being seen as weak or incompetent or fear image losses. However, situational feedback-seeking should be less of a risk to the leader's general self-esteem because negative feedback could be attributed more easily to situational constraints than personal insufficiencies. Based on this reasoning, we identified and examined three predictors for daily feedback-seeking a) day-level occasions for feedback-seeking (H1); b) day-level time pressure as a moderator for this relationship (H2); and c) the general error management climate (H3).

#### 3. Design/Methodology/Approach/Intervention

We collected data in a German police department. We invited 70 police leaders to complete a general online questionnaire (measuring the error management climate) and short online questionnaires on ten consecutive days after work (measuring feedback-seeking, feedback occasions, and time pressure). Leaders' daily feedback-seeking was measured with five items related to whether they asked their followers for feedback that day. Leaders who filled out the day-level questionnaire for less than three days were excluded from our study. The final sample comprised 226 daily entries from 36 leaders (  $M = 6.28$  daily entries per leader). Because nine leaders did not complete the general questionnaire, effects of error management climate on feedback-seeking were tested on a sample of 188 daily entries from 27 leaders (  $M = 6.96$  daily entries per leader).

#### 4. Results obtained

As expected, leaders report feedback-seeking rather seldom (in 43% of daily entries). Multilevel structural equation modelling showed a positive association between day-level feedback occasions and leaders' feedback-seeking. As hypothesised, this relationship was moderated by day-level time pressure, with higher time pressure leading to a weaker relationship. In addition, the general error management climate positively affected leaders' daily feedback-seeking behaviour.

#### 5. Limitations

The results are based on a small sample of police leaders. Thus, it is necessary to confirm these findings in a more diverse sample. Moreover, self-reports were used. Future studies should consider followers' perception of leaders' feedback-seeking as well as followers' reactions to it. Finally, we

used questionnaire data that may be subject to memory bias. Event sampling methods could be used in future research to reduce such biases.

#### 6. Conclusions – research and or practical implications/Originality/Value

Our study demonstrates that leaders' feedback-seeking can be enhanced when feedback occasions together with enough time for feedback-seeking exist. Moreover, a positive error management climate further enhances leaders' daily feedback-seeking. Thus, organisations can create a positive context where leaders and their followers meet on a daily basis with enough time to talk and reflect. Such a context should also promote a positive error management climate and further encourage leaders' feedback-seeking.

#### 7. Relevance to the Congress Theme

The “changing world of work” requires proactive workers. Since work processes – and sometimes even work goals – change rapidly, employees and leaders need to be agile and self-initiate actions to accomplish their work. Feedback-seeking behaviour is a proactive way to identify weaknesses and change the behaviour in a timely and easily accessible manner without relying on formal and outdated feedback processes. “The Future is Now”, and leaders must lead the way to a work environment where proactivity is embraced, and employees are encouraged to identify and learn from past mistakes.

#### 8. Relevant UN SDGs

Promoting “decent work” includes a work environment with information about one's performance, thus with performance feedback. Fostering leaders' proactive feedback-seeking behaviour is one way to enhance the importance of feedback as a part of “good work”.

*Keywords: feedback-seeking behaviour, leadership development*

## Oral presentation OP188

### Leaders' performance goals and employees' counterproductive work behavior

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**Research goals and why the work was worth doing:** While an appreciable body of research focused on the intra-personal effect of people's goal strivings (Vandewalle et al., 2019), there has been a lack of research considering its inter-personal effect across leader-employee dyads (Dragoni, 2005; Tuncdogan et al., 2019). In this study, we contribute to the literature by investigating how leaders' goal striving to perform better than other leaders – also referred to as leaders' performance goals – can undermine their team members' contributions to the organization, more specifically by instigating employee counterproductive work behavior.

**Theoretical background:** Leaders with high performance goals hold an interpersonal standard of performance, which means they define competence relative to how well they perform in comparison with others. Building on Dragoni's (2005) argument that leaders transmit their goal strivings by engaging in behaviors and practices that support, reinforce, and imply this goal striving, we posit that leaders with high performance goals are more likely to engage in practices in which normative comparison among employees prevail. More specifically, we suggest that leaders with high performance goals are more likely to provide their employees with comparative feedback, in which employees' performance is compared relative to the performance of other employees. Subsequently, building on the Job-Demands-Resources theory (Demerouti et al., 2001), we posit that receiving comparative feedback from a leader constitutes a stressful job demand for employees, which increases their feelings of being emotionally exhausted, and which, in turn, causes them to engage in counterproductive work behavior.

**Methodology :** Our hypotheses were tested among 634 recruitment consultants (i.e., employees) and their 220 corresponding managers (i.e., leaders), using a three-wave survey design.

**Results:** Multilevel structural equation modeling indicated that leaders' performance goals were positively related to their provision of comparative feedback at Time 1 (October 2020), which was positively related to employees' emotional exhaustion at Time 2 (December 2020), which in its turn was positively related to their counterproductive work behavior measured at Time 3 (November 2021).

**Limitations :** This study is based on a relatively homogenous sample of recruitment consultants. While this has the benefit of controlling for potential effects of work design on employees' wellbeing and performance, it remains unclear to what extent our results can be generalized to other samples, including other industries and countries.

**Conclusions - research/practical implications:** This study contributes to prior research that displayed a positive relationship between leaders' performance goals and employees' emotional exhaustion (Sijbom et al., 2019), by identifying comparative feedback as an underlying mechanism that explains this effect. In addition, this study showed that employees' emotional exhaustion, induced by the comparative feedback given by leaders with high performance goals, was also associated with more counterproductive work behavior. Interestingly, this finding suggests that although leaders with high performance goals strive to outperform other leaders, they, ironically, may find their own team of

employees to work more counter-productively. Regarding the practical implications, organizations may want to identify and consider their leaders' goal strivings, and more specifically the performance goals they endorse, to understand and prevent their stressful and negative effect on employees' wellbeing, and eventually their performance.

Relevance to the Congress Theme: In this unpredictable and constantly changing world of work, preserving employees' wellbeing and performance is fundamental. Enhancing our understanding of the potential impact of the leader in this regard, is critical (De Vos et al., 2020). In this research, we thus contribute to the congress theme by exploring the role of leaders' goal strivings on employees' wellbeing and performance. The current study particularly contributes to the conference topic of 'Engagement and Motivation', as it investigates how leaders' performance goal strivings might undermine employees' own performance, as evidenced by the counterproductive work behaviors shown by employees. In exploring this relationship, we focus on performance management, and more specifically the practice of feedback giving, as an underlying mechanism that explains this relationship.

Relevant UNSD goals : we particularly contribute to the UNSD goals of 'Good health and well-being' and 'Decent work and economic growth', as we enhance our understanding of how leaders' goal strivings - and the feedback they give - impacts employees' health (i.e., emotional exhaustion) and, in its turn, employees' performance (i.e., counterproductive work behavior).

*Keywords: goal strivings, feedback, counterproductive work behavior*

## Oral presentation OP79

### **Leadership and Well-being in Firefighter's Permanent Intervention Teams: Validating a Leadership Skills Development Program**

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science&practice

Firefighters are considered to have a high-stress profession due to a daily exposure to disturbing and traumatic situations. However, despite the adversities inherent to this profession, a significant part of firefighters demonstrates high well-being, revealing a greater ability to adapt to the circumstances of their function. Previous studies had proven the importance of the leadership style, particularly the transformational style, to ensure the well-being of subordinates. Therefore, this study aims to: (i) evaluate the effectiveness of a transformational leadership development program for firefighter leaders; (ii) understand the evolution of the transformational leadership style of participants in training program; (iii) examine the consequences of this evolution in transformational leadership on the resilience of the respective team and on the well-being of its members. The study will have a quasi-experimental design with 2 groups: experimental (team leaders that participate in the program) and control (team leaders that don't participate in the program). Team leaders and respective subordinates answering an online questionnaire at 3 different times (before the program, immediately after the program and approximately 3 months after the program). The data will be collected until March of 2023. Despite the homogeneous sample as a possible limitation, this study contributes theoretically and empirically for the theory of transformational leadership. Firstly, it is important to point out the methodological and innovative contribution of a transformational leadership development program for firefighters' team leaders and its relationship with subordinates' well-being. Moreover, it extends existing literature on the above-mentioned relationship, considering its effect and possible variations on leadership and well-being after 3 months. Hence, taking these variables together, this study can bring important implications for future research and practice, especially in what concerns to the implementation and use of skills development programs in a time where emergency organizations and emergency professionals are bringing the well-being concept to the table. Accordingly, this study gives an important contribution for the thematic of the changing world of work, specifically regarding emergency context and well-being. Likewise, it contributes for the UN Sustainable Development Goals, namely decent work. and economic growth plus good health and wellbeing.

*Keywords: Leadership, well-being, firefighters*

## Oral presentation OP92

### Leadership behaviour and employee recovery: A review and meta-analysis

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science

Leader behaviour is known to affect employees' recovery process; regular recovery, in turn, is important to sustain well-being and reduce strain. However, a systematic review and meta-analysis that examines the effect sizes are missing. Further, most research on this topic has not considered the type of leadership behaviour (constructive vs. destructive). For example, if there are enough resources in form of supervisor support available, in the end, it also helps to recover. On the contrary, when the supervisor's behaviour is inconsiderate, this can be perceived as threatening and hinders the person's recovery. Both, constructive and destructive leader behaviours, affect two different aspects of the appraisal within the transactional stress theory by Lazarus and Folkman (1984). Thus, we postulate that constructive leadership relates positively, and destructive leadership behaviour relates negatively, to employees' recovery. We conducted a search of leadership and recovery studies according to the PRISMA guidelines, which yielded 42 papers that were systematically reviewed. 23 papers with 12,860 observations were included in the meta-analysis. The meta-analysis supported the expected positive relationship between constructive leader behaviour and employees' recovery experience ( $r = .18, p < .001, 95\% \text{ CI } [.13;.22]$ ). Destructive leader behaviour relates negatively to recovery experiences ( $r = -.16, p < .001, 95\% \text{ CI } [-.29;-.02]$ ). The subgroup analysis revealed, that supervisor justice (constructive type) has the strongest relation with employees' psychological detachment ( $r = .23, p < .001, 95\% \text{ CI } [.18;.29]$ ), with no indication of publication bias. Moderator analysis of employees' age and countries with high recovery-friendly regulations ergo more vacation days, were overall not significant. However, the employees' age is an attenuating moderator of the relationship between supervisor support and psychological detachment. Limitations of the paper are that the research so far relies on self-report data and is mostly cross-sectional, so no causal conclusions can be shown by the summarized data. In the future, research dyads of employees and supervisors should be assessed in a diary study design for a better understanding of the causal relations and processes between leadership behaviour and employee recovery processes. The number of studies for the moderating analyses was limited and therefore also the strengths of the results.

This review and meta-analysis is the first holistic approach to examine the associations between leadership behaviour and employee recovery. As hypothesized, the research indicated a positive correlation between constructive leadership behaviour and recovery experiences as well as a negative correlation between destructive leadership behaviour and recovery experiences. The meta-analysis further revealed subgroups of constructive leadership such as supervisor justice and support associated with psychological detachment as well as relaxation. Overall, these results suggest that leadership behaviour may enhance (constructive behaviour) or threaten (destructive behaviour) employee recovery and plays an important role in employees' recovery process as a proxy indicator for well-being and performance. The topic of leadership behaviour and employee recovery should be further examined and be part of management training courses. Also, leaders should be aware of their role model function for employee recovery.

The changing world of work with technological acceleration and processes of digitalization, flexibilization, blurring boundaries, and the recent COVID-19 pandemic may lead to changing work characteristics such as increasing work intensification. When such work-related demands are high and resources in the form, for instance, of supervisor support, are low, employee recovery may be

threatened and in the long run, lead to decreased well-being. Therefore, in addition to optimizing work and job design, leadership behaviour plays an ever more important role in employees' recovery in a changing world of work.

The focus and results of the meta-analysis are in line with the goal of the UN SDGs to sustain good health and well-being. Companies can act socially sustainable by promoting, among others, a recovery-friendly leader behaviour in form of supportive and fair behaviour towards their employees. Moreover, they can prevent counter-recovery behaviour such as abusive supervision or passive leadership. Thus, with the help of constructive leadership behaviour, employees can recover and sustain well-being and health in the long run.

*Keywords: leadership behavior, recovery experiences, meta-analysis*

## **Oral presentation OP748**

### **Leadership emergence in politics: The role of personality and intelligence.**

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science&practice

#### **RESEARCH GOALS**

Two of the most important functions of a political party are to identify and select candidates capable of running excellent campaigns, winning votes, and ultimately delivering strong democratic government (Coller et al 2018). Yet little is known about psychological attributes that contribute to leadership emergence in politics – nor the role played by political parties in identifying future political talent. The aims of this research are to draw on theory and practice from work psychology to investigate (i) whether applicant personality and cognitive ability impact likelihood of being approved as eligible to become a candidate by a political party, and (ii) subsequent performance in a national election. Our research addresses an important gap in extant research, namely leadership emergence via elections (e.g., political roles, partnerships) as opposed to appointment by elites.

#### **THEORETICAL BACKGROUND**

The process of applicant approval allows a political party to control the ‘pipeline’ of potential candidates for elected office (Steele, Lee & Baron, 2021) and thus the quality and diversity of those who make onto the list of candidates (Rahat & Hazan 2001). This is important because while political parties may respect the democratic right of local party members to choose their own candidate, elections mean members of the public have the freedom to vote for whomever they prefer, based on whatever criteria they choose – relevant or not for performance as a candidate or in office. By introducing a standardized and evidence-based process of evaluation and approval a political party can identify a central pool of eligible, motivated and potentially trained applicants from which local party members can choose their candidate. However, key to success is understanding which psychological attributes contribute to performance both in elections and office.

Our research draws on evidence from studies of leadership emergence in business (Judge, Colbert & Iles, 2004; Schmidt & Hunter, 2000), to investigate hypothesized relationships between personality traits (FFM: Costa & McCrae 2006), cognitive ability, and leadership emergence in politics. We examine whether personality and cognitive ability contribute to applicant approval decisions and, controlling for seat effects, subsequent performance of political candidates in a general election. We predicted that extroversion, conscientiousness, and cognitive ability would be positively, and neuroticism negatively, associated with approval decisions and, controlling for seat effects, candidate electoral performance. We also use Latent Profile Analysis (LPA) to examine whether applicants with different trait profiles were selected to fight as candidates in target and non-target seats.

We examine the implications of these findings for understanding the contribution of candidate characteristics to strong democratic government, and to a broader understanding of leadership emergence in work contexts where leaders are elected rather than appointed.

#### **RESEARCH DESIGN AND METHODOLOGY**

Our research utilised self-report personality data from 416 applicants participating in a multi-method multi-trait (MMMT) assessment centre, designed to evaluate applicant eligibility for approval, and 123 of these applicants who were later selected as parliamentary candidates and

fought in the subsequent general election. We control for seat effects using economic data. Assessors and members of local associations were not provided with personality information about candidates.

## RESULTS

Our research found that the traits conscientiousness and cognitive ability were positively and significantly associated with applicant approval, controlling for seat effects conscientiousness also approached significance in predicting electoral performance. Using LPA, we identified three candidate types differentiating between candidates selected for lower and higher target seats. No significant gender differences were found for candidate approval or election performance.

## CONCLUSIONS

To our knowledge ours is the first longitudinal study of psychological attributes associated with leadership emergence and performance in elections. Our findings are similar to that of extant trait research which finds conscientiousness and cognitive ability important for leadership emergence in business settings.

## INTENDED AUDIENCE

Scientists and practitioners.

## RELEVANCE TO CONGRESS THEME

How politicians achieve office affects all citizens. While voters participate in the more public process of listening to candidate manifestos, and casting their votes, much less is known about the processes that lead up to becoming a political candidate which can play an important part in deciding what choices the electorate have.

## RELEVANCE TO UN SDGs

Peace, justice, and strong institutions : understanding and enabling psychological characteristics that contribute to good political leadership can help to ensure strong and ethical government institutions.

*Keywords: Leadership, personality, election*

## Oral presentation OP666

### Leadership profiles relationships with error culture and errors at work: A Latent Profile analysis approach and a mediation analysis

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science

#### Research goals and why the work was worth doing

Errors are ubiquitous within organizations. Since they have been mainly investigated at the individual-level of analysis, a recent line of research has recommended a more comprehensive approach which also consider organization-level processes, such as organizational culture (i.e., error culture), as determinants of errors. Leaders are acknowledged as the most influential actors for organizational culture and are fundamental in organizational life, determining collective efficacy and also in preventing and managing the errors. However, few studies have empirically investigated the association between leadership, error culture and work errors, and no one has used a person-centered approach. Thus, our study aims are: to identify different profiles of leadership styles through a latent profile analysis (LPA); b) to assess the association between leadership profiles and error management culture (EMC), error aversion culture (EAC) and its two facets (strain due to errors – STR; covering up errors – COV), and errors at work; and c) to investigate the influence of leadership profiles on errors at work through error culture. Our study answers recent research calls for a more nuanced examination of within-individual leadership styles. Indeed, we apply LPA to categorize employees who hold a similar set of leadership perceptions into qualitatively distinct profiles. Second, we contribute to the leadership literature by further exploring its potential correlates (i.e., error culture and errors at work). Third, we extend the existing literature on organizational culture by focusing on both positive (EMC) and negative (EAC) facets of error culture.

#### Theoretical background

We use the Social Information Processing theory (Salancik & Pfeffer, 1978) and the full-range leadership theory (Avolio, 1999) as our theoretical frameworks. Social information processing theory suggests that leader behaviors are crucial social information cue which can shape employees' perceptions about the work environment, and in turn, affects individuals' attitudes and behaviors. Thus, leaders act as role models who can encourage team members' engagement by framing mistakes as learning opportunities rather than something to be hidden or punished. The full-range leadership theory describes five leadership categories: transformational leadership, contingent reward, management by exception active, management by exception passive, and laissez-faire/avoidant. To better capture different nuances of leadership styles, in our investigation we also include the abusive leadership behaviors described by Tepper (2000).

#### Design

We reached 388 Italian workers (48.7% females). The Multifactor Leadership Questionnaire (MLQ) Short Form – 5X and the Tepper's abusive leadership scale were administered to investigate employees' perceptions of different supervisors' behaviors. Error culture was investigated using the scale developed by Van Dyck et al. (2005). LPA was used to identify leadership profiles. Through an ANOVA, we assessed the distinctiveness of the leadership profiles in their levels of error aversion, error management and work errors. Finally, through a mediation model we investigated the role of error culture as mediator of the influence of leadership profiles on work errors.

## Results

We identified four leadership profiles: positive (POS), corrective-abusive (CAB), passive (PAS) and passive-abusive (PAB) leadership. ANOVA showed significant differences between the leadership profiles in error management, error aversion (STR and COV) and work errors. Using the POS profile as our reference group, we found that CAB, PAS and PAB were negatively associated with ECM and positively associated with STR and COV. In turn, COV was positively associated with work errors. Moreover, CAB, PAS and PAB influenced work errors through COV.

## Limitations

The sample was composed of Italian workers and the results should be generalized with caution. Moreover, the constructs were measured with self-report scales. Finally, the study is cross-sectional.

## Conclusions and relevance to the congress theme

Errors are inevitable in work contexts. Our study demonstrates that organizations need to enhance their error-handling process by promoting error management culture (i.e., through promptly identifying errors and learning from them) and avoiding error aversion culture. As leaders are fundamental in influencing error culture, proper training courses should be provided to enhance leadership and, for example, to avoid abusive or passive behaviors against their subordinates. Since different leadership styles can co-occur, rather than designing leadership training around individual styles, a more integrated approach would be beneficial.

## Relevant UN SDGs

Decent work and economic growth

*Keywords: leadership, error management culture, error aversion culture*

## Oral presentation OP351

### Leadership Style and Safety Culture in Commuter Railroad Companies

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science&practice

#### Introduction

The relationship between organizational culture and organizational performance has been thought to explain why one company succeeds where another fails within an industry. Furthermore, Frazier (2018) suggested that organizational leaders might improve safety performance by utilizing transformational leadership practices. Additionally, Casey (2017) reported on several studies that linked safety climate to occupational safety performance and concluded that, "safety climate is firmly established as an organizational antecedent of safety performance." (Casey, 2017)

The US Department of Transportation Federal Railroad Administration (FRA) also determined that safety culture plays a key role in accident prevention. (FRA, August 2011). In addition, Canada's Transportation Safety Board (TSB) identified a number of factors that likely contributed to the catastrophic Lac-Mégantic derailment that resulted in a significant loss of life noting that, the company that owned the railroad, „was a company with a weak safety culture that did not have a functioning safety management system to manage risks."

Schein (1992) postulated that an organizations culture is its pattern of shared assumptions, values, norms and rules of behavior. He also wrote that leadership is the source of those beliefs and values. A leader's and values gradually come to be the shared assumptions, beliefs and values of an organization. Consequently, leaders and their leadership styles are essential to the formation, maintenance, and ultimately changing an organizational culture.

Reason (1998) argued that the safety culture develops in response to local circumstances, events, conditions, the character of the leadership and the mood of the workforce. According to Reason, the safety culture affects all aspects of an organization and influences the occurrence of accidents and injuries. In fact, only a positive safety culture is able to prevent the conditions and circumstances that lead to lapse, near misses and accidents.

Sherry & Colarossi (2016) developed the Safety Culture Scale to measure safety culture normed on a sample of employees from a large public transportation agency (N=1909). Validity of the measure was shown in that the scale significantly differentiated ( $p < .05$ ) between persons who had been involved in accidents and safety violations. A follow-up study with a large regional transportation company demonstrated significant differences in safety culture and attitudes between key departments in the organization.

This report summarizes demonstrated the empirical linkages between leadership practices, safety culture factors in an organization with an effective safety culture.

#### Methodology

Two mid-sized rail transportation companies in the United States agreed to complete the Safety Culture Survey (SCS) and items adapted from the Management Style Inventory (Hay Group, 1980) measuring Autocratic, Authoritative, Affiliative, Democratic, Pacesetter or Coaching leadership style using a five-point Likert style format. Useable data from a total of 103 participants was obtained.

#### Results

Ten factors of the SCS were significantly correlated with perceptions of the effectiveness and overall quality of the organizational safety culture. In addition, significant correlations between leadership styles and indicators of safety performance were also obtained. For example, a measure of Authoritative style, “regularly monitors compliance with safety rules/procedures”, was found to be significantly correlated with an effective safety culture ( $r=.70$ ,  $p<.001$ ). Similar results, of lesser magnitude, were found between Participative and Coaching styles. In addition, odds ratios were calculated that demonstrated that the utilization of an authoritative leadership style was more than nine times more likely to result in a perceived positive safety culture ( $p<.001$ ). However, the absence of these styles and inconsistent monitoring was negatively correlated with effective safety performance.

#### Discussion

Results provide support for the hypothesis that leadership behaviors demonstrated by supervisory personnel are significantly related to perceptions of safety culture and safety performance. The understanding of the relationships between supervisory behaviors and practices and the development of safety culture that leads to effective performance was enhanced by this study. An authoritative style that emphasizes desired practices and behaviors is most clearly related to a positive safety culture and fewer reported accidents and injuries. However, inconsistent monitoring and lack of training was found to be negatively related to effective safety culture. The implications of these results and recommendations for the development of effective and positive safety culture are presented.

*Keywords: culture, leadership, measurement*

## Oral presentation OP578

### Leadership training and development: the role of organizational structure and accountability systems

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science&practice

Research goals, why the work is worth doing and theoretical background

In the light of the changing world of work, leadership training and development remains an essential strategic priority for organizations. Although it is estimated that organizations spend an increasing and sizeable amount of money on different leadership programs, these investments are highly debated.

Beer et al (2016), for example, suggest that organizations are “victims of the great training robbery” (p. 51), as people often revert to or continue their usual ways of doing things. However, there are also studies providing substantial evidence that leadership training and development programs are effective. For example, based on a meta-analysis of 335 leadership training studies, Lacerenza et al. (2017) find, that leadership training programs can lead to increase in learning, the learning can be transferred and result in positive outcomes.

However, while the growing literature within leadership training and development has engaged immensely in how to design, deliver, and implement a leadership training program to ensure and maximize effectiveness, there is still a gap in knowledge on enabling versus hindering elements involved in ensuring actual transfer of learning and positive outcomes of leadership training and development programs.

By integrating a management control system perspective, we get hints towards the forces of organizational structure as well as accountability systems and contracts in place (Malmi & Brown, 2008; Merchant & Van der Stede, 2016; Otley, 1994). For example, Otley (1994) highlights that “The context and operation of contemporary organizations requires flexibility, adaptation and continuous learning to occur, but such characteristics are not encouraged by traditional control systems” (p. 298).

Therefore, in this study we take departure in a management control system perspective which encompass such vital elements, representing important context conditions that potentially can hinder or support actual transfer of learning and the continued use of learning in an organization. From this backdrop we investigate leadership training programs and their outcomes to identify potential supportive and/or limiting factors, which could assist organizations and leadership program educators towards more successful programs by overcoming or being aware of such factors.

#### Design/Methodology/Approach/Intervention

During the spring 2023, we will be conducting 36 interviews with leaders and employees participating in a field experiment based on a so-called VDOC project which stands for Value-adding Development of Organizational Collaboration. During the project period, 2019 – 2023, units from three different public organizations (Police, job centers and assisted living facilities) are randomly selected to receive a development course in one of three different treatments, relying respectively on visionary leadership, distributed leadership or employee motivation.

The 36 interviews will thus be conducted after the leaders and employees' participation in the treatments, more specifically in the period where the participants transfer and implement their knowledge from the course in their own unit. Our focus in the interviews is on understanding the role of the management control system in place, and how this might hinder or support the process. In our understanding of the role of the management control system in place, we will lean on the conceptual framework of Malmi and Brown (2008), which gives varied insights into the implications of cultural, planning, cybernetic and administrative controls that makes up the organization.

*Keywords: Leadership training and development, transfer, organizational structure and accountability systems*

## Oral presentation OP497

### Leading the sustainable careers of blue-collar workers: a comparative case study in the Dutch road-transport sector

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science&practice

#### Purpose

Today, manual labor is subject to change as a result of technological revolutions. This makes the employability of blue-collar workers critically important. Employability concerns the ability of the individual to adequately carry out work in current and future jobs, within and outside of the current organization. Automation, robotization, and artificial intelligence foster economic growth and welfare, but have far-reaching consequences for manual workers' future and way of working. Moreover, blue-collar workers may face disproportionately more issues concerning safety, and well-being in the workplace compared to other occupations such as white-collar jobs. In sum, the inherent manual and physically-intensive aspects of blue-collar work pose a threat to workers' sustainable careers (SC).

#### Theoretical background

Leadership is considered one of the most important factors in driving SCs. For instance, previous research has shown that certain leadership styles can result in increased employee learning, employee well-being, and sustainable employability. Therefore, leadership may be particularly important for blue-collar workers to foster their SC. However, we know little about how leadership can impact SCs among blue-collar workers. Given the underrepresentation of blue-collar contexts in leadership research on the one hand and the importance of leadership in fostering SCs among blue-collar workers, on the other hand, this study will contribute to the knowledge of SCs by focusing on the role of leadership as a crucial factor. It will do so by making use of the conceptual model of SCs, the competence-based employability framework, and the integrative model of leadership behavior (IMoLB).

#### Methods

To explore the processes and conditions by which SCs can be fostered by leadership behavior, and how context affects the way blue-collar workers are being led, this research has adopted a multiple comparative case study design. Semi-structured interviews with truck drivers, their operational supervisors, directors, senior management, and mentor drivers have been conducted in 6 road-transport organizations in The Netherlands. The organizations vary in size and geographical location. In total, 35 truck drivers and 6 operational supervisors have been interviewed. The interview protocol that has been used, was developed by using the three dimensions of the SC model: happy, healthy, and productive. Furthermore, a set of questions have been developed by using the competence-based employability model.

#### Preliminary results

First and foremost, respondents are unable to detect the discriminant validity of the SC indicators. According to them, the indicators share great overlap and contribute to each other as well: a happy and healthy driver is also productive. Moreover, they take ownership of their happiness, health, and productivity. Only with regard to material support (i.e. the right tools to carry out the job), they

generally put the responsibility on their supervisor. The professional development of truck drivers is highly limited. Their professional development is mainly geared toward achieving mandatory certificates. Little emphasis is put on upward mobility or adaptability. Secondly, leadership behaviors are often found to be distributed among several individuals within road-transport organizations. Operational planners, managing operational planners, and directors often display task-oriented leadership behaviors. It appears that in most cases, the mentor truck drivers display the most relation-oriented leadership behaviors. Mentor truck drivers are tenured drivers that are able to show the less tenured drivers the way of working. These findings seem to be in line with the phenomenon of dispersed leadership. Organizations that have employed mentor drivers appear to show more consideration for the individual worker compared to organizations that do not. These relation-oriented leadership practices appear to have a positive effect on drivers' happiness, healthiness, and productivity.

#### Preliminary conclusions

Multiple individuals within road-transport organizations display leadership behavior that affects truck drivers' SC. However, there is not much attention to one's career in the long run, and what current and potential future developments would mean for truck drivers' careers. Moreover, drivers find it generally difficult to reflect on their careers. Potentially due to the fact that they rarely reflect with their supervisor on their career or work.

#### Preliminary limitations

Selection bias may limit the validity and reliability of the results. Participating organizations were found through a sector institute of road transport that is responsible for workers' sustainable employability. Organizations that participated were often already taking action to improve workers' health, happiness, and productivity. Hence, road-transport leaders' harmful leadership behavior is unlikely to be covered in this research.

*Keywords: Sustainable careers, distributed leadership, blue-collar work*

## Oral presentation OP219

### Learning and developing capability of change – enhancing (work-related) well-being

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#### Aims and research goals

The impact of the coronavirus crisis has been particularly strong on the operating conditions and future prospects of the hospitality sector. The goal of the ESF-project “Capable – becoming resilient in the hotel and restaurant business” is to strengthen the capability of change of professionals in small and micro businesses in the hospitality sector by improving capability of change, general and work-related well-being, resilience as well as continuous learning skills.

The research goals were a) to examine the participants perceptions of the concept of capability of change and b) the association between resilience and learning.

#### Theoretical background

The ability to learn and renew are seen at the core of change capability. The concept is often examined as a change management (Burke, 2018) or change leadership (Stouten et al. 2018) where the focus is on organizational- and leadership-led change processes. However, here the capability of change is examined from the point of view of individuals, teams and companies (work-related) well-being. Learning with others and taking the advantage of social support are seen as an important part of capability of change and resilience.

The concept of resilience is closely related to the capability of change. Resilience is seen as a capability of a system, organization or person to maintain its core purpose and integrity in face of dramatically changed circumstances (Zolli, 2012). Recovering from stress (Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008), handling and bouncing back from challenges (Alliger, Cerasoli, Tannenbaum, & Vessey, 2015) and rebounding from unexpected, stressful and adverse situations (e.g., Kobasa et al., 1982; Sutcliffe & Vogus, 2003) are seen core resilience indicators on individual, team and organizational levels.

#### Methodology

The development project is based on the participatory action research where the participants play an active role in development. Research methods are utilized also as development tools.

The mixed method data used in this project, contains both quantitative and qualitative methods, such as questionnaire-based data ( N=78 ) and thematic individual, pair and group interviews (N=15 ) . The baseline questionnaire used in here was collected before the interventions.

#### Results

Interviews showed that the perceptions of capability of change were subjective. Features related to change capability were: 1) consciousness of the reality, 2) proactivity, 3) flexible thinking patterns, 4) willingness to learn and develop, 5) social interaction, 6) creativity, 7) criticality and evaluation, 8) positivity and 9) hopefulness.

Based on the survey data, the participants estimated their resilience as a good level (M = 3.70, scale 1-5), likewise their learning at work (M = 3.52, scale 1-5). They experienced to cope with challenging situations quickly (M = 3.91), recover from stressful situations fast (M = 3.40) and get to pounce back

fast when encountering problems ( $M = 3.79$ ). They wanted to continuously learn new things at their work ( $M = 3.93$ ) and from the other professionals ( $M = 3.94$ ). They also developed their ways of working regularly ( $M = 3.36$ ). Participants' resilience and willingness to learn were already at the good level at the beginning of the project. Based on the correlation analysis, learning correlated significantly with resilience ( $r = .32, p < .01$ ).

#### Limitations

The relatively small number of the respondents and the focus on one profession only are seen as the main limitations of the research.

#### Conclusions and implications

The "Capable" -project improves the capability of change of hospitality sector businesses and their personnel now and in the future by enhancing capability of change, resilience, continuous learning and work-related well-being. The quantitative analysis resulted significant correlation between resilience and learning. The capability of change was seen as a skill and an ability that can be learned and developed. Based on the data presented here, the emphasis in capability of change is on individual level. However, what is the role of social dimension in capability of change? Capability of change is an interesting and useful concept at nowadays working life. More research and deeper definition of the concept is needed.

#### Relevance to the Congress Theme

The challenges at the hospitality sector are huge due to covid pandemic and the consequences of war in Ukraine. The aim is, that as a result of the project, businesses, their employees, and supervisors have an improved ability and skills to stay functional in an ever-changing environment. This is enhanced by improving capability of change, resilience, skills of continuous learning and utilizing social support.

#### Relevant UN SDGs

We suggest that capability of change and learning and resilience should be considered as fundamental factors in developing work-related wellbeing and a socially sustainable working life.

*Keywords: Capability of change, resilience, work-related well-being*

## Oral presentation OP228

### Learning to share while sharing learning: How perceived shared mental models and team learning interrelate

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science

**Research goal:** Drawing on Social Cognitive Theory, this study aims to analyse the reciprocal relationships of perceived shared mental models (SMMs) and team learning. This work advances existing knowledge as we investigate how these variables influence one another, drawing on a temporal, integrative approach.

**Theoretical background:** In today's dynamic world, SMMs and team learning are paramount, yet we need to understand how these factors specifically influence one another in order to best exploit their relevance in improving team functioning. Perceived SMMs refer to a team members' awareness of shared understanding about key elements of their work environment. Team learning refers to the social-cognitive process underlying the development of shared conceptions and knowledge in teams. Prior studies only investigated the relationships between these constructs unidirectionally. We expect that team learning behaviours influence perceived SMMs through team members' interaction, behaviour, and observation of one another, and are influenced by SMMs through the perception and communication of a common, shared understanding about the team's function and processes. Failure to understand or capture how such reciprocal, temporal relationships between perceived SMMs and team learning manifest could mean that teams miss out on opportunities to better develop and improve their functioning over time.

**Research design and methodology:** We conducted a three-wave longitudinal study in a Master level course at a Dutch university with 96 project teams (340 students) over seven weeks. Teams worked on an assignment for this period. Participation was voluntary and we obtained data for 66 teams to date (n T1 =290, n T2 =254, n T3 =228 individuals). Respondents predominantly hailed from Germany (31.4%), the Netherlands (30.9%), and Belgium (11.5%); 68.4% were female; the average age was 23.7 years (SD= 1.98); and teams comprised 3.54 members on average (SD= .55).

We used validated scales to measure team learning and perceived SMMs at all three points. We conducted preliminary analyses using Process macro model 4 for SPSS to test four mediation models[1].

**Preliminary results:** The results indicated that (Model A) the indirect effect of perceived SMMs at T1 on T3 through T2 was significant (  $b = .33$ ; 95%CI [.04, .69]), (Model B) the indirect effect of team learning at T1 on T3 through T2 was significant (  $b = .26$  ;95%CI [.02, .60]), (Model C) the indirect effect of perceived SMMs at T1 on perceived SMMs at T3 through team learning at T2 was insignificant (  $b = .18$ ; 95%CI [-.05, .46]), and (Model D) the indirect of team learning at T1 on team learning at T3 through perceived SMMs at T2 was significant (  $b = .24$ ; 95%CI [.02, .54]).

**Limitations:** The main limitation to the study is that student teams are short-lived and work on a task for a limited amount of time. This may have implications for generalising the findings to other settings, yet student teams are often used and offer a more stable and controlled setting.

**Conclusion:** Preliminary results shed light on the reciprocal relationship between perceived SMMs and team learning. We find support for our argument that team learning and perceptions of SMMs

have a reciprocal effect over time. Our findings bridge unidirectional previous findings and provide insights into the timing at which either learning or perceived SMMs may offer teams benefits in their growth and development. We demonstrate that these relationships are more complex than previously thought and that they offer different avenues for coming to a shared understanding in our teams.

Relevance to the theme and UN SDGs: Teams are used in many organizations and their functioning is vital to organisational success. Due to changing and dynamic environments, teams increasingly need to be able to learn and adjust in order to perform. Perceived SMMs and learning provide mechanisms to support this, hence their relevance to the congress theme “The future is now: the changing world of work”. With regards to the UN SDG’s this study is, for instance, relevant to goal 8 (Decent work and economic growth), as it aims to improve mutual understanding and learning, which are helpful for reducing knowledge gaps and for improving knowledge transfer within teams.

[1] We will conduct longitudinal analysis on the final dataset and share the updated results during the EAWOP 2023 Congress.

*Keywords: Perceived shared mental models, Learning behaviours*

## Oral presentation OP395

### **Leave Me Alone, I Was About To Get Into My Zone! The Impact Of Others' Presence And Social Interruptions On Work-Related Flow**

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Research goals and theoretical background: Organizations have been striving to maximize workers' potential, in terms of overall functioning and performance, as this is crucial for their survival and success in the long-term (Csikszentmihalyi, 2004). To enhance their effectiveness and wellbeing, workers are often provided with more autonomy and flexibility to choose where and how to work (Demerouti et al., 2014). One of the largest contributions towards such positive psychology was made with the introduction of the concept of 'flow', which refers to an enjoyable state of mind that occurs when people feel fully engaged and absorbed in their activities (Csikszentmihalyi, 1975). Because flow is considered as a short-term, complex and dynamic experience, it remains unclear what workers can do, or where they can work, to create a situation that allows such deep involvement (Peifer & Wolters, 2021).

Because attention is at the core of flow (Harris et al., 2017), this study aims to comprehend how situational characteristics that affect workers' cognitive functioning impact work-related flow at the momentary level. We argue that both the nature of people's work and their work environments strongly impact flow experiences. Flow occurs when people work on challenging tasks that stretch their current abilities, because deep absorption is then required to perform well (Csikszentmihalyi, 1990). This study, therefore, investigates how the type of task someone is working on at a given moment – based on knowledge work characteristics – is related to flow at that moment, and what potentially influences this relationship. Distraction Conflict Theory (Baron, 1986) states that social disruptions are detrimental for workers' functioning when they perform tasks that require deep concentration. Because social stimuli are often indicated as the most common form of workplace distractions (e.g., Kim & De Dear, 2013), this article investigates how both the presence of others and social interruptions impact workers' flow on knowledge tasks.

Design/methodology: We conducted an experience-sampling study that uses a semi-random signal schedule to understand how task and environmental predictors jointly impact workers' state of flow. More precisely, 82 knowledge workers completed up to four surveys a day for two consecutive work weeks to report their flow experiences, knowledge characteristics of the task at hand and whether they work alone and without interruptions or not. In total, about 1600 surveys were filled in.

Results: Our analyses indicate that the state of flow is strongly related to the knowledge demands of workers' tasks. However, the presence of others has a different impact than hypothesized. Surprisingly, conducting knowledge work leads to higher levels of flow while working in the presence of others, whilst controlling for social interruptions. Also contrary to our expectations, the extent of interruptions negatively influences workers' flow levels, regardless of the knowledge demands of their tasks.

Limitations: We relied on self-reported measures to capture flow, interruptions and task characteristics. The ESM methodology allows to limit recall bias as much as possible, although we cannot rule out the possibility of common method bias. Moreover, the nature of tasks in our sample was rather social, with people working as instructors, supervisors, consultants, etc., which could limit the generalizability of our results towards knowledge workers.

Conclusions and practical implications: This study expands the current knowledge on work-related flow by looking at task and environmental characteristics that enable workers to obtain such a peak state. While doing so, our findings suggest that not only the nature of the work that is carried out is important, but also in what kind of environment workers perform their tasks. Our results suggest that workers could benefit from performing challenging tasks that enable the full use of their skills and abilities. Because working in an environment without interruptions facilitates flow, practitioners should stimulate a work culture in which people work in the presence of one another, while limiting the amount of interruptions.

Relevance to the Congress Theme: The current shift in working locations and expansion in remote and digital work raises uncertainty about where to perform which kind of tasks. Moreover, the rise of technology-related communication, the use of open-plan offices and increased overall workload has limited workers' opportunities to feel productive in their work without disruptions. This often results in stress, frustration and negative emotions while working (Demerouti et al., 2014). Our results suggest that workers should seize the opportunity to choose their work environments so that deep concentration is possible, to thrive and deal with the challenging demands of their work.

*Keywords: Knowledge work, Work-related flow, Social stimuli*

## Oral presentation OP127

### **Less or More? The Curvilinear Linkage between Workplace Interruptions and Task Performance – The Moderating Role of Mindfulness**

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The prime objective of this study was to explore how different work interruptions can influence employee's performance. Specifically, the current study explores the non-linear role of interruptions by looking both bright and dark sides. In the current work environments when people working in hybrid mode it becomes more necessary to see how interruptions originating from multiple sources can hurt work related task performance.

Researchers have argued that workplace interruptions are common in the current organizational settings as work is becoming more dynamic and complex (Grant & Parker, 2009; O'Leary, Mortensen, Woolley, 2011; Parke et al., 2018). Therefore, the prevalence of such phenomena can be costly to individuals and organizations (Cai, Gong, Lu, Zhong, 2018). Consider, for example, Spira and Feintuch (2005) stated that the direct costs of unnecessary interruptions had been estimated at an average of 28% of the daily time for workers in the United States. On contrary to this, emerging empirical evidence suggests that interruptions such as information gain may positively affect employees' performance (Baethge et al., 2015). For instance, a co-worker can indicate an error or facilitate work progress by giving valuable suggestions. Consequently, an employee may be able to deal with issues more effectively, and thus performance may increase, even if the interruption has disturbed the workflow (Baethge et al., 2015). Specifically, this study tests the interactive model of workplace interruptions such as intrusions, distractions, discrepancy detections, and breaks with task performance. Based on the too-much-of-good-thing (TMGT: Pierce & Aguinis, 2013) perspective, we suggest the curvilinear role of workplace interruptions in predicting task performance. In addition, based on the conservation of resources theory (Hobfoll, 1989), we explore how mindfulness as a valuable resource can moderate these nonlinear relationships.

A multi-source time-lagged study was conducted at two time points (T1 and T2) with an interval of two months. Online available questionnaires were completed by employees and their concerned supervisors working in different industries across Pakistan. At the second time point (T2), questionnaires were distributed and collected back from only those employees who had already participated at time 1. In addition to that, at time 2 respective supervisors also completed the questionnaires. Specifically, at time 1, the questionnaire included workplace interruptions, age, gender, and industry items. While at time 2, the employee questionnaire included scale items related to mindfulness, and the supervisor questionnaire comprised items related to employee's task performance. The final sample included N=323 with completed surveys from employees and supervisors.

Multi-sourced survey data from 323 supervisor-subordinates working in manufacturing, retail, and service industries showed significant inverted U-shaped relationships of intrusions and breaks with employee task performance. But we found linear negative impact of distractions, discrepancy detections on task performance. Furthermore, findings confirmed that curvilinear relationships of intrusions and breaks are significantly moderated by employee's mindfulness. We confirmed that workplace interruptions might not be necessarily bad, but the level of occurrence coupled with an individual's psychological resource, i.e., mindfulness, predicts employees' task performance.

First, due to the short time lag (two months) between time 1 and time 2 data collection, this does not allow us to rule out reverse causality completely; future researchers might be reexamining this model using a longitudinal design. Second, our findings may be generalizable only within the context of Pakistan. Due to differences in the work environment, nature, and complexity of interruptions, the optimal inflection level might differ in some other cultural contexts.

Our findings also provide organizations with practical insights regarding employees' task performance. Based on our study results, we suggest that workplace interruptions may be harmful and helpful; however, it depends on the frequency, duration, and complexity of interruptions during work. To establish effective strategies to reduce workplace interruptions, managers need to understand the effect of interruptions on outcomes. It would be helpful to know who or what the sources of interruptions were, such as frequency, duration (Meijman & Mulder 1998), and when interruptions occurred (Raban, & Westbrook, 2018). Once managers clearly understand what causes the interruptions, they can develop policies to control them.

The current research relates with congress theme by exploring differential role of workplace interruptions. We can expect different forms of interruptions in current work environment so study results remain beneficial for managers.

*Keywords: Workplace Interruptions, Task Performance, Mindfulness*

## Oral presentation OP698

### Let it go – the relevance of psychological detachment in entrepreneurs' recovery

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science

**Research goals and relevance** The extreme nature of entrepreneurial work can lead to high levels of stress. Particularly in times of crises and economic uncertainty, entrepreneurial well-being is at stake. Therefore, insights into how entrepreneurs can safeguard their well-being are particularly important in the current times. One avenue to cope with stress is recovery. Recovery-enhancing processes such as psychological detachment from work during none-work time, physical exercise, and sleep have the potential to protect well-being (Sonnentag 2018). Our mixed-methods study contributes to the growing field of research on entrepreneurial recovery and well-being (Stephan, 2018, Stephan et al., 2022). It addresses the recent call for more attention to recovery as a potentially promising solution to entrepreneurial ill-being (Williamson et al., 2021). First, this study offers new insights into the types of recovery experiences and activities that entrepreneurs themselves deem useful. Second, it examines psychological detachment as a particularly important recovery experience (Bennett et al., 2018; Sonnentag, Fritz, 2007, 2015) and its impact on perceived stress and well-being. **Theoretical background** Our study draws upon the Effort-Recovery Model (Meijmann, Mulder, 1998) and Stressor- Detachment Model (Sonnentag & Fritz, 2015). Following Williamson et al. (2021) we consider recovery experiences as crucial to maintain entrepreneurial wellbeing. Based on prior research in the field of entrepreneurship (e.g. Wach et al., 2021) we focus on psychological detachment from work as particularly relevant experience to enhance entrepreneurs' well-being.

**Design/Method** We collected data via online survey from April to June 2022. Our participants ( N =103) were German entrepreneurs, 31,2% male, 67% female and 1,8% diverse at an average age of 46 years. Two open-ended questions asked entrepreneurs about their preferred recovery experiences and activities. The answers were analyzed qualitatively using thematic content analysis (Mayring, 2015) and the MAXQDA software. Besides socio-demographic and firm data, we collected data on psychological detach from work, entrepreneurs' perceived stress and life satisfaction using established scales.

**Results** The results of the qualitative data analysis (Mayring, 2015) show that entrepreneurs desirable (most frequently mentioned) recovery activities were physical activity, social contacts, breaks during work, as well as mindfulness and relaxation. Further, we found psychological detachment was positively associated with wellbeing and negatively with perceived stress. Regarding psychological detachment, no mediation could be identified, i.e., the negative relationship between perceived stress and well-being was not weakened by recovery. In contrast, a moderator analysis showed that psychological detachment attenuated the relationship between perceived stress and well-being, i.e., entrepreneurs who experienced high levels of stress and high psychological detachment reported higher levels of happiness.

**Limitations** Our sample was relatively small and homogeneous, which limits the generalizability of our findings. Psychological detachment was assessed as a neutral emotional construct by using the REQ scale (Sonnentag & Fritz, 2007). Future research should consider more specific measurement of the valence of work-related thoughts such affective rumination and include other recovery experiences such as relaxation, mastery, and control. Particularly the latter was identified as

important by entrepreneurs in the current study. In a similar vein, including more specific work-related stressors (Stephan, 2018) might provide valuable insight.

**Research/Practical Implications** This study identified the preferred recovery strategies of entrepreneurs. Moreover, it identified psychological detachment from work as a particularly important to maintain a high degree of well-being, especially when perceived stress is high. Detachment during and after work can have a positive impact on well-being (Headrick et al., 2022; Wendsche & Lohmann-Haislah, 2017) but so far the majority of studies has studied detachment in employee samples (Karabinski et al., 2021). Our qualitative results on desired recovery activities offers important pointers for the design of future interventions. Relevance to the Congress Theme The theme of the congress indicates that the world of work is facing particular challenges. This is especially true for entrepreneurship, as entrepreneurs were strongly affected by the COVID-19 pandemic (Stephan et al. 2022) and they are now also confronted with the economic problems and the related international crises. Insights into promoting and sustaining entrepreneurial well-being are therefore particularly essential for building a resilient economy.

Relevant UN SDGs Good health and wellbeing (SDG3)Decent work (SDG8)

*Keywords: entrepreneurship, recovery, well-being*

## Oral presentation OP229

### **Let's stay in touch: Frequency (but not mode) of interaction between leaders and followers predicts better leadership-outcomes**

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science

Successful leadership requires leaders to make their followers aware of expectations regarding the goals to achieve, norms to follow, and task responsibilities to take over. This awareness is often achieved through leader-follower communication. In times of economic globalization and digitalization, however, leader-follower communication has become both more digitalized (virtual, rather than face-to-face) and less frequent, making successful leader-follower-communication more challenging. This may pose a challenge for leaders to practice effective leadership, in terms of making followers aware of the goals and norms to follow, and the responsibilities to assume. For this reason, we investigated how the above mentioned aspects (frequency and digitalization of interaction) relate to task-related leadership outcomes (i.e., followers' goal clarity, norm clarity, and task responsibility). Specifically, we expected frequency of interaction to predict more goal clarity, norm clarity, and task responsibility. For digitalization of interaction, however, we expected negative relations to all three outcomes.

The current research tested these assumptions in four studies (three preregistered). First, we conducted a cross-sectional study via direct approach (Study 1, N =200). Here, we regressed the task-related leadership outcomes goal clarity, norm clarity, and task responsibility on frequency and digitalization of interaction and found that frequency of interaction predicted more goal clarity and norm clarity, but not task responsibility. Digitalization of interaction, however, predicted neither of the three outcomes. Subsequently, we aimed to replicate these results in one longitudinal study (Study 2, N =305, time-lag of 6 months, Prolific). Results showed that, again, frequency of interaction predicted more goal clarity and norm clarity, but here also more task responsibility. In contrast, as in Study 1, digitalization of interaction predicted neither of the outcomes. To gain a clearer picture on the causal direction of the relations found, we afterwards conducted a quasi-experimental study (Study 3, N =178, Prolific), inducing different levels of recalled frequency of interaction (high vs. low) between leader and follower. In line with our hypotheses, the high frequency group reported more goal clarity, norm clarity, and task responsibility than the low frequency group. Furthermore, results of mediation analyses suggested that the relations between frequency and the outcomes are mediated by more work-related information sharing between leader and follower. Finally, another quasi-experimental study (Study 4, N =261, Clickworker) further targeted this mechanism by inducing different levels of recalled work-related information sharing (high vs. low); results showed that higher levels of work-related information sharing between leaders and followers were related to more goal clarity, norm clarity, and task responsibility.

Our studies have some limitations. Despite the fact that we approached our research question via several methodological approaches, thereby gaining solid evidence for our assumptions, we can not make definitive statements regarding causality. Even though we tried to attack this issue with our quasi-experimental studies, these studies are not entirely experimental and therefore cannot reveal causal relations. Moreover, all studies relied on self-report and on one data source (i.e., followers). Extending these via leaders' perspective or objective measures would be desirable in the future. Furthermore, contrary to Hypothesis 5, we found no relations between digitalization and the leadership outcomes that go beyond those of frequency (except for goal clarity in Study 3)—which,

overall, supports the idea that the effects of leader-follower interaction on task-related leadership outcomes depend on the frequency rather than the mode of interaction.

In summary, these results improve our understanding of contextual factors contributing to leadership success in collaborations across hierarchies. They highlight that it is not the digitalization but rather the frequency of interacting with their leader that predicts whether followers gain clarity about the relevant goals and norms to follow and the task responsibilities to assume. On a theoretical level, these findings enhance our knowledge about how exactly the frequency of interaction may shape subsequent outcomes - a question that was not directly addressed in prior work. On a practical level, our findings suggest that leaders may still practice effective leadership despite a potentially greater distance between them and their followers if they manage to stay in touch with each other.

The findings are also directly related to the congress theme "The Future is Now: the changing world of work", since it tackles the gradual shift from more "traditional" work settings to newer work models (e.g., home-office, virtual teams, flexible work models).

*Keywords: Frequency of interaction, digitalization, e-leadership*

## Oral presentation OP243

### Let's talk our walk: How psychological safety and conversational patterns predict team performance

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science&practice

Research goals and why the work was worth doing

Leadership is important for the creation of psychological safety in teams. However, new forms of teamwork evolve and raise the question of how psychological safety emerges when leadership is decentralized, and group dynamic processes come to the fore. To shed light on relevant within-group processes, this study examines the relationship between team psychological safety, group conversational patterns, and team performance in self-organized teams.

Theoretical background

In today's global work environment, collaboration in self-organized teams is becoming increasingly essential, and psychological safety is gaining attention as a key factor for team performance. Psychological safety is a shared belief amongst individuals as to whether it is safe to engage in interpersonal risk-taking in the workplace (Edmondson & Lei, 2014). Behaviorally, employees who feel psychologically safe engage more in interpersonally risky behaviors, such as communicating openly, coming up with questions and recommendations, voicing concerns and objections, seeking critical feedback, and engaging more in experimentation (Pearsall & Ellis, 2011; Nembhardt & Edmondson, 2012). This effect of psychological safety perceptions on individual communicative behavior implies that a team climate of psychological safety similarly effects communicative behavior and patterns within a team. Therefore, this study links team psychological safety to conversational distribution as well as conversational exchange. Equal conversational distribution refers to the degree to which conversational turn-takings are equally distributed among team members. For collaborative problem-solving, team members need to share their unique knowledge and skills and jointly organize these inputs (Larson, 2013; Macmillan et al. 2004). Extant research has demonstrated the importance of a high level and relative equality of conversational contribution for collective intelligence (Engel et al., 2014; Woolley et al., 2010). Hence, we argue that teams with high levels of psychological safety perform better because all team members participate in task-related discussions and therefore, conversational turn-takings are relatively evenly distributed. Thus, psychological safety should lead to higher performance through a higher and more even conversational.

Design/Methodology/Approach/Intervention

In our study, we assessed a total of 51 existing work teams (with 3 to 9 members) in online or face-to-face settings. Teams completed the desert survival task (Lafferty & Pond, 1974). Before the team task, we measured baseline psychological safety (with the Team Psychological Safety scale by Edmondson, 1999) and predicted team performance, which refers to how team members subjectively predict their general team performance. During the team task, we coded the number of conversational turns of each team member and computed conversational distribution, which refers to the standard deviation of individual contributions within a team. After the team task, objective team performance was assessed by comparing the team solution to an expert solution. All data were analyzed on the group level.

## Results obtained

We are currently in the process of analyzing the data. First descriptive results show that psychological safety does indeed highly correlate with predicted team performance, but not with objectively measured team performance. Contrary to expectations, there is a negative relationship between a team's total amount of conversational contributions and objective team performance, indicating that teams with fewer contributions performed better in the desert survival task compared to teams with more contributions.

## Limitations

The relatively small sample size of this study (51 teams) is its first limitation. We collected data from a convenience sample only including self-organized teams. Therefore, future studies with a larger sample size should be undertaken. The second limitation is the research's generalizability. Because of the characteristics of self-organized teams, not having a formal leader, it can be assumed that communication patterns differ from other teams. Therefore, the study's results may not be generalizable to other forms of teamwork.

## Conclusions

The results of this study will be important for high-performance and innovation-driven organizations, which have implemented agile collaboration structures, self-organized teams, and other project teams with little to no formal hierarchies. Our results will give them an applicable framework for conversational behavior within the team for decision-making and problem-solving processes.

## Relevance to the Congress Theme

This study investigates the relationship between conversational patterns and the performance of teams. Our research contributes to the overall Congress Theme because it points to future research in team communication and performance.

*Keywords: team psychological safety, team performance, team communication*

## Oral presentation OP180

### Linking Selective Incivility Theory to Turnover

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science

Theoretical background : Cortina's (2008) selective incivility theory argues that employees with marginalized identities are more likely to be targets of incivility at work, a subtle and covert form of workplace discrimination. This is because some people may consciously endorse values of egalitarianism and identify as nonprejudiced, but nevertheless harbor stereotypes toward marginalized groups. Such individuals feel free to express their negative emotions in the form of uncivil interpersonal behavior because the motives for such behavior are ambiguous and cannot be clearly attributed to the actor's prejudice. Yet, uncivil behavior has serious consequences for the targets, such as their ability to access information, instrumental resources, and career opportunities, and, thus may serve as a form of "modern discrimination." At the same time, Cortina recognized there may be situational factors that mitigate the experience of incivility for marginalized group members. Although the empirical evidence tends to be consistent in support of selective incivility theory with respect to gender, such that women report experiencing more incivility than men (e.g., McCord et al., 2018), the findings with respect to race are mixed (e.g., Cortina et al., 2013), and we are not aware of any research examining lesbian, gay, or bisexual (LGB) or disability identities. In addition, research has not yet examined situational factors that may mitigate incivility experiences, nor has incivility been linked to voluntary turnover.

Research goals and why the work was worth doing: The research goals of this study are to test and extend selective incivility theory by examining whether: (a) employees from marginalized social identities (e.g., women, racial minorities, disabled, and LGB) experience more incivility at work than do their majority counterparts; (b) social integration in one's work unit can mitigate the experience of incivility for marginalized identity groups; and (c) experienced incivility predicts turnover.

With respect to goal (b), we hypothesize that social integration moderates the relationship between the demographic identities and experienced incivility, such that marginalized identities will experience more incivility when they have low levels of social integration in the work group. Social integration is the degree to which one feels approval from and included in their workgroup (Kammeyer-Mueller & Wanberg, 2003). Social integration is important because it satisfies a fundamental need to belong, is a source of social support, and provides access to important instrumental resources. Consistent with Cortina's (2008) theorizing, we expect social integration to circumvent the pernicious effects of social categorization for employees from marginalized groups.

With respect to goal (c), we propose that experienced incivility will positively relate to turnover through turnover intentions. Experiencing incivility over time may lead to accumulated job dissatisfaction (e.g., Yao et al., 2021), which prompts thoughts of quitting and eventual turnover (Lee & Mitchell, 1994). Incivility acts are unlikely to be a "shock" that prompts immediate turnover, but rather, repeated exposure to incivility may slowly lead one to begin the job search process eventually resulting in turnover once an alternative job is secured.

Methodology: We collected two waves of survey data from 149 administrative staff at a North American university, with turnover data collected from organizational records 14 months after the conclusion of wave 2.

Results: Mean score differences indicated that women and disabled experienced more incivility than men and non-disabled, respectively, but there were not mean differences in incivility between minority (Blacks, Asians, & Hispanics) and majority (White) racial groups or between heterosexual and LGB employees. Further, path analysis indicated social integration moderated the relationship between the demographic identity and experienced incivility for gender, disability status, and race. Finally, there was a significant indirect effect of incivility on turnover through turnover intentions.

Conclusions and Limitations: Our findings extend selective incivility theory by identifying social integration as way to buffer marginalized groups from incivility and linking incivility to turnover. Limitations of the study include the small sample size that may not generalize to other settings.

Relevance to Congress Theme and UN SDGs : The findings of this study contribute to helping organizations retain employees from marginalized demographic groups and leverage the benefits of a diverse workforce. It is related to the conference theme of the “future is now: the changing world of work” in that the workforce is now demographically diverse in most countries. Further, our study helps to identify ways to “reduce inequalities” across various demographic groups through the reduction of incivility experienced at work.

*Keywords: incivility, turnover, diversity*

## Oral presentation OP649

### Lone working in rail: from theory to practice

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science&practice

#### Research goals

The first phase of this research aimed to create a definition of lone working in the rail industry, understand safety, health and wellbeing risks associated with lone working in rail and develop evidence-based guidance for addressing risks. The second phase aims to understand barriers and facilitators to the implementation of evidence-based guidance.

#### Background

Prior to this research, little was known about safety, health and wellbeing risks associated with lone working in rail. A rapid evidence review of literature identified only 16 academic papers and 6 practitioner papers covering lone working risks, with only one focusing on lone working in the rail industry.

#### Methodology

The first phase of this research used an evidence-based practice model approach, which included:

An industry mapping workshop to gather insights into lone working. A rapid evidence review, to explore lone working literature, gaps in knowledge and research opportunities. Interviews with 22 lone workers and 16 managers in the rail industry, to understand views and experiences of lone working.

The second phase, started 10 months later, focuses on implementation and uses participatory action research methods, which include:

An industry survey to measure usage of lone working guidance. Interviews with industry stakeholders to understand experiences in using guidance. Review of lone working policies and practices in the rail industry.

#### Results

This research established a rail industry definition of a lone worker as 'someone who works physically alone for a number of hours, with low levels of contact with other colleagues'. Using this definition, it is estimated that 47% to 79% of rail workers may be classified as lone workers, making it vital for the industry to adequately understand and manage risks associated with lone working.

Many lone workers appear to have chosen their roles due to a perceived sense of autonomy and a preference for working alone. At the same time, lone workers may experience negative outcomes such as isolation, fatigue, stress and exposure to safety risks (such as work-related violence). These appear to be associated with pressures of lone decision making and lack of social interaction and support.

Organisational empathy, proactive support and a review of management requirements appear to be key strategies for adequate lone working risk management.

An industry survey (n=36) suggests that a large proportion of rail organisations may not be familiar with the guidance developed in the first phase of the research, with only a small fraction (17%) having read it. Lessons learnt both from work developed with stakeholders in the first phase and practical implementation challenges and opportunities are currently being gathered. Outcomes for both ongoing activities are expected to be available in early spring 2023.

#### Limitations

This research focuses specifically on lone working in the rail industry and does not include considerations on home working, making it not generalisable to other contexts. Findings may however be relevant for other industries due to the nature and variety of roles in rail.

The number of respondents to the survey conducted in the second phase of the research was low. Ongoing implementation work is also currently limited to a small number of companies.

#### Conclusions

This is the first research to focus on the health, safety and wellbeing impact of lone working in rail and to develop an agreed definition for lone working in rail, together with guidance that translates evidence into practical recommendations. Three good practice guidance documents were developed to tailor recommendations to employers, managers and lone workers themselves. These include a decision tree to identify lone workers, tips on how to improve the provision of support and tools to help develop plans for their organisation.

Work currently being developed is expected to provide valuable insights regarding the practical application of evidence-based guidance.

#### Relevance to Congress Theme

The last couple of years have had a tremendous impact in the way people work. During the COVID-19 pandemic, many roles may have become lone working roles. With the current financial climate, it is likely that more roles will be carried out by lone workers. This research can support better integration between research and practice by exploring how research on organisational psychology can be communicated, understood and valued in contexts where other disciplines are historically prioritised (engineering in rail, for example).

#### Relevant UN SDGs

Good health and wellbeing is supported by understanding the risks faced by lone workers and the development of evidence-based guidance to adequately control those.

This research is also relevant to the provision of decent work and economic growth . Worker health and performance walk hand in hand. Adequately supported workers are more likely to be able to contribute effectively to their organisations' and wider economy.

*Keywords: lone working, health and wellbeing, safety*

## Oral presentation OP720

### Loneliness and the Covid 19 lockdown: Do working from home matter?

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science

#### Introduction

The outbreak of the Covid 19 pandemic generated large changes in the working conditions. Isolation was used to combat the spread of the virus and employees were ordered to work from home if possible. Many workers have learned to appreciate the increased autonomy entailed by working from home (Wang et al., 2021) and are reluctant towards returning to the organizational office (Liu et al., 2020). However, working from home does not only have positive consequences. Increased feeling of loneliness is among the unfavourable effects most often mentioned (Wax et al., 2022). Feeling of loneliness is considered detrimental and has been connected to reduced health and well-being as well as reduced productivity (Lim et al., 2020).

Research on hybrid work (i.e., the blend of working from home and from the company office) is still in its infancy, and the relation between the number of days individuals work from home and feeling of loneliness is poorly understood. To enhance our understanding, the aim of the present study was to investigate how the number of days working from home influence loneliness. Furthermore, the aim was to investigate if this relationship was mediated by work demands and/or moderated by perceived social support.

#### Methods

The study was conducted as a part of a large electronic work environment survey directed towards the administration of a large county in Norway. The sample consisted of 6500 participants (60.1 % females). Informed written consent was obtained from all participants and the participants were informed of the purpose of the study and their right to terminate participation without reason. Loneliness was assessed by three items from Hughes et al. (2004). Work demands (quantitative job demands and learning demands) were assessed by two sub-scales (three items each) from the QPS-Nordic (Pahkin et al., 2007). Social support was assessed by four items adapted from the Leiden Quality of Work Questionnaire (van der Doef & Maes, 1999). Statistical analyses were conducted in IBM SPSS Statistics v. 27. Mediation and moderation analyses were conducted using the PROCESS macro v.3.5 (Hayes, 2018).

#### Results and discussion

A parallel mediation model was drawn with days working from home as predictor variable, learning demands and quantitative job demands as mediators and feelings of loneliness and isolation as outcome. The total model explained 29% of the variance in loneliness. The number of days working from home ( $\beta = .18$ ) was associated with increased feeling of loneliness. Learning demands ( $\beta = .17$ ) and quantitative job demands ( $\beta = -.07$ ) were both associated with reduced feeling of loneliness. Thus, apart from corroborating the notion of a relationship between the number of days working from home and feeling of loneliness, the results indicate that having adequate and challenging work tasks reduce the feeling of loneliness.

In the second analyses, social support was introduced as a potential moderator. The analysis showed a significant main effect of social support on feelings of loneliness ( $b = -.055$ ,  $SE b = .075$ ,  $p < .001$ ) as

well as a significant interaction effect ( $b=.016$ ,  $SE\ b = .006$ ,  $p = .005$ ). The result indicates that although individuals experiencing low social support generally suffer from more feeling of loneliness when working from home, individuals experiencing high social support seem to have a somewhat steeper increase in the feeling of loneliness with increasing number of days working from home.

*Keywords: Loneliness, homework, social support*

## Oral presentation OP646

### **Machiavellian Leaders and Subordinate Affective Organizational Commitment: The Role of Political Skill**

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science&practice

Research goals and why the work was worth doing: While leader Machiavellianism has been linked to reduced subordinate job satisfaction and emotional exhaustion, it has – to our knowledge – not yet been investigated as a predictor of affective organizational commitment. Building on previous research, which has identified political skill as a potential moderator of successful Machiavellianism, we focused on the moderating role of leader political skill. It has been pointed out, however, that the Machiavellian scales used in previous studies fail to adequately assess the construct. To address this issue, we examined Machiavellianism with the recently devised Five Factor Machiavellianism Inventory (FFMI), which has been shown to more closely grasp the construct than other measures.

Theoretical background: Affective organizational commitment refers to employee's emotional attachment and engagement regarding their organization (Allen & Meyer, 1996). It is closely related to job involvement and turnover, physical and mental health (Eisenberger et al., 2010), as well as employee performance in general (Gao-Urhahn, 2016). We propose that leader Machiavellianism, a personality trait characterized by emotional detachment and linked to abusive supervision (Wisse & Sleebos, 2016), will be negatively related to subordinate affective organizational commitment. As prior research has shown that social skills, specifically political skills, can not only mask trait Machiavellianism (Blickle et al., 2020) but can also allow Machiavellians to be effective leaders (Genau et al, 2022), we expect that political skills will moderate the relationship between leader Machiavellianism and subordinate affective organizational commitment. When leader political skills are low (high), leader Machiavellianism will be negatively (positively) related to affective organizational commitment. Previous research has argued, that traditional Machiavellianism scales fail to sufficiently capture the construct and can instead be considered alternative measurements of psychopathy (Miller et al., 2017). We respond to this criticism by assessing Machiavellianism with the Five Factor Machiavellianism Inventory (FFMI; Collison et al., 2018), which has been specifically devised to combat those issues.

Design/Methodology: In our multi-source study, i.e. N = 276 leader-subordinate dyads, leaders completed the German translation of the Five Factor Machiavellianism Inventory (FFMI; Kückelhaus et al., 2020) and rated their political skills with the Political Skill Inventory (PSI; Ferris et al., 2005), while their subordinates provided self-assessments regarding their affective organizational commitment. A moderated regression analysis was used for hypothesis testing.

Results obtained: Leader political skill moderated the relationship between leader Machiavellianism and employee affective organizational commitment: when political skill was low, leader Machiavellianism was negatively related to affective organizational commitment. Contrary to our expectations, when political skill was high, leader Machiavellianism did not positively predict affective organizational commitment. Instead, in the case of high political skill, we found no significant relationship.

Limitations: Due to the cross-sectional design, causal or longitudinal inferences cannot be made.

Conclusions – research and or practical implications/Originality/Value: While leader Machiavellianism is negatively related to subordinate affective organizational commitment, this

relationship can be counterbalanced by leader political skill. We contribute to existing literature by identifying circumstances under which Machiavellian leaders may not be detrimental to organizations. We respond to criticism of traditional Machiavellianism measurements by examining Machiavellianism with the recently devised Five Factor Machiavellianism Inventory.

Relevance to the Congress Theme: Due to its relation to employee wellbeing and job performance, affective organizational commitment has great significance to both employees and organizations. In order to create healthy and conducive workplaces, it is important to understand predictors of affective organizational commitment, particularly how potentially harmful variables can be mitigated.

Relevant UN SDGs: Decent work and economic growth

*Keywords: Machiavellian Leadership, Affective Organizational Commitment, Political Skill*

## Oral presentation OP269

### Managers and staff' coping styles in the context of the 2022-war in Ukraine

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science

Research goal and why the work was worth doing

The 2022 Russia-Ukraine war has increased work-related uncertainty and risks, thus aggravating job stress experienced by managers and staff. To date, there has been limited research into how managers and staff cope with job stress in the conditions of war.

The aim of the present study was to investigate the features of coping styles used by managers and staff during the 2022-war in Ukraine.

Theoretical background. The research drew on the nature, content and classifications of coping styles (Endler and Parker, 1990, 1994; Frydenberg and Lewis, 2000; Lazarus and Folkman, 1984; Rodina, 2011; Willi and Heim, 1986) and on the role of coping styles in managing organizational stress (Hayness and Love, 2004; Modranský et al., 2020; Salinas and Webb, 2018), as well as on manifestations of and coping with war-related stress (Vivian, 2015; Miller and Rasmussen, 2010).

Design. The study was conducted in May 2022. The sample was made up of 344 respondents from the Central Ukraine, including 80.8% females and 19.2% males aged  $M = 39.1$ ,  $SD = 15.8$ . 7.0% of the respondents had high-school or vocational education, 84.3% had university degrees, 8.7% had scientific degrees. 25.0% of the respondents were managers and 75.0% were employees.

The Coping Inventory for Stressful Situations (Endler and Parker, 1990, 1994) was used to identify coping styles, such as Task coping (active and productive), Emotion coping (passive and unproductive), Avoidance coping (passive and unproductive), Distraction coping (passive and semi-productive), and Social Diversion coping (active and semi-productive). The data related to the respondents' organizational and professional characteristics were collected using a questionnaire specially developed by the authors. The data were collected through Google form. The data were processed using descriptive statistics and 1-Way ANOVA.

Results. On the whole, managers' and staff's coping styles were at mid-level: Task coping ( $M = 3.74$ ,  $SD = 0.54$ ), Emotion coping ( $M = 2.93$ ,  $SD = 0.71$ ), Avoidance coping ( $M = 3.24$ ,  $SD = 0.54$ ), Distraction coping ( $M = 2.98$ ,  $SD = 0.61$ ), Social Diversion coping ( $M = 3.44$ ,  $SD = 0.79$ ), with Task coping and Social Diversion coping having the highest scores, and Emotion coping having the lowest scores.

Organization's staff had statistically significant education-relevant differences in Task coping ( $F = 4.016$ ,  $df = 3$ ,  $p = 0.008$ ), Emotion coping ( $F = 8.042$ ,  $df = 3$ ,  $p = 0.000$ ), Avoidance coping ( $F = 5.528$ ,  $df = 3$ ,  $p = 0.001$ ), and Distraction coping ( $F = 9.219$ ,  $df = 3$ ,  $p = 0.000$ ). As the level of education increased, Task coping increased, too, while Emotion-coping, Avoidance coping, and Distraction coping decreased.

Staff also had statistically significant position-relevant (managers, rank-and-file employees) differences in Task coping ( $F = 15.315$ ,  $df = 1$ ,  $p = 0.000$ ) and Emotion coping ( $F = 2.740$ ,  $df = 1$ ,  $p = 0.05$ ): managers used mainly Task coping, while employees used Emotion coping.

Limitations. Since the sample consisted of the residents of the Central Ukraine, which is more socially stable compared to other regions, the sample cannot be considered a representative of the entire population of Ukraine.

Conclusions/Originality/Value. 1) The employed who were in managerial positions had higher scores on Task coping, while the rank-and-file employees had higher scores on Emotion coping; 2) as the level of education increased, the use of Distraction coping decreased, although, it was sometimes used by highly-educated staff to relieve psychological tension; 3) respondent groups had no statistically significant differences in Social Diversion coping.

The underuse of active and productive coping styles by some staff groups suggests a need for psycho-educational webinars as well as on-line and off-line psychological support groups and individual psychological counselling. This can be done by psychological services in organizations and territorial communities.

The conducted study is the first one on coping styles used by managers and staff during the 2022-war in Ukraine.

Relevance to the Congress Theme. The study falls under the 'Coping and social support' subtopic of the Congress 'Well-being' topic (item 18).

Relevant UN SDGs. The obtained findings can be helpful in promoting staff's mental health and psychological well-being in organizations, which meets the UN Sustainable Development Goal 'Good health and wellbeing'.

*Keywords: coping strategies, staff, war conditions*

## Oral presentation OP724

### **Managers' and HR's views on mobile phone behaviors in social situations at work – an ongoing qualitative study**

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#### Aim

As part of the research project “ Phubbing at work – mobile phone behavior in social contexts at the workplace and associations with the psychosocial work environment” , the present study focuses on habits of mobile phone use in social situations at work from managers' and HR's perspectives.

The aim is to explore 1) if mobile phone use behaviors in social situations at work are regulated with mobile phone policies in work organizations, 2) managers' and HRs' view on whether mobile phone use behaviors in social situations like coffee breaks and meetings in the organization are understood as a problem.

#### Why the work is worth doing

The situation when a person chooses to look on the phone instead of paying attention to the others who are physically there, is called “phubbing”, from “phone” and “snubbing” (Haigh, 2015). As the mobile phone use has increased, work organizations may have implemented a mobile phone policy which include restrictions for employees regarding posting photos, not visiting inappropriate web pages, not to use the phone in front of customers etc. If phubbing occurs at work, it may have implications for the organizational climate and the psychosocial work environment. However, there is a lack of research on managerial and HR perspectives on employee phubbing behavior.

#### Theoretical background

In the Swedish working life context, the manager is responsible for employees' work environment. HR, is often understood a support function which supports managers in their work with the organization's psychosocial work environment. This research is inspired by safety climate perspectives where our point of departure is that interventions regarding norms in an organization needs to be handled on a group- and organizational level. Accordingly, we view phubbing behaviors at work as social behaviors that are governed by norms.

#### Methodology

This interview study is currently ongoing. Participants are recruited through snowball sampling with approximately 25 managers and HR in health care and technical trade in Sweden. Interviews are analyzed with thematic analysis (Braun & Clarke, 2006) in ATLAS.ti.

#### Preliminary results

This is an ongoing study and final results can be presented at the conference. This far, five tentative themes have been identified: 1) mobile phone policy; 2) normalization of mobile phone use at work; 3) mobile phone use among different groups of employees; 4) phubbing as a matter of misconduct; 5) phubbing as a psychosocial risk factor.

The preliminary results suggest that mobile phone policies do not include social situations at work, with the exception for meetings. Managers and HR indicate that the use of mobile phones at work is normalized, especially among younger employees.

Even though some HR-personnel have received signals that phubbing has negatively affected the psychosocial climate, neither managers nor HR express that employees' phubbing behavior is a large problem. When complaints regarding mobile phone behavior reach HR, it seems to be mainly seen as an individual's behavior of misconduct, rather than a work environmental issue. However, some HR personnel have encouraged managers to set rules in their own group of subordinates, to manage the norms of mobile phone use in social situations, and some of the managers have questioned employees' phubbing behavior or put up limits for the mobile use in meetings and at breaks.

#### Limitations

This explorative study has been performed in a restricted number of workplace settings. We do not take for granted to encompass all organizational settings. The choice of informants, recruited through snowball sampling, may reduce the transferability of our results.

#### Conclusions

Preliminary results indicate that mobile phone use in social situations is not yet an identified organizational problem. Coworker phubbing does not seem to be discussed among managers or HR. When mobile phone use is understood as a problem at the workplace, the managers/HR seem to address it as a matter of misconduct – that is on the individual level. Since mobile phone use in social situations is becoming more normalized, phubbing behaviors may be a new psychosocial risk factor at work. If this is the case, it implicates that HR and managers need to be sensitive to signals that indicate mobile phone behavior as a work environment risk factor.

#### Relevance to the congress theme

The normalization of mobile phone use at work is ongoing. If phubbing behaviors has consequences on the individual-, work group and organizational level in practice, we need to implement measures on the right level.

*Keywords: smart phones, organizational climate, managers*

## Oral presentation OP353

### **Managing the Future Workplace: An Analysis of the Experiences and Intentions of London-Based, Public and Private Senior Managers Following the Covid-19**

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science&practice

**Goals:** This paper has two aims. The first is to develop an understanding of how employers in London experienced the Covid-19 pandemic and how this has affected their intentions towards managing employees' locations and methods of work in future. The second is to use this understanding to deliver insight into, and innovative recommendations towards, managing the future workplace.

**Background:** The Covid-19 pandemic precipitated an identifiable shift in the amount of remote working and the characteristics of remote workers (CIPD, 2020). While the pandemic served as a disruptive event triggering sudden change, diverse organisational practices continue to unfold (Kossek & Keliher, 2022). The manifestation of these practises can be seen as materialising through a process of collective sensemaking and ongoing negotiation (Langley & Tsoukas, 2010,p.4). As such, this study draws on the processual model of organisational change, which presents change as a 'messy' and continuous process, fashioned by aspects of an organisation's context, including its history, culture, and internal politics (Pettigrew, 1985). The intention is to use this perspective to understand and explain how the pandemic has been experienced in diverse organisational contexts. Moreover, it aims to uncover why and how certain conditions and experiences have shaped managers' intentions towards future workplace strategies, providing insights into potential ways of planning, organising, and overseeing employees going forward.

**Methodology.** Following the findings of a related survey of 2000 London workers, this research utilised thematic analysis to analyse data from 12, in-depth, semi-structured interviews with senior managers from 12 large London-based organisations. Respondents included representatives from organisations in the legal, infrastructure, retail, banking, tech, media and telecommunications industries, and from five London-based local authorities.

**Results.** Organisations across sectors and from within diverse industries accept, and generally embrace, a shift towards hybrid working. Most favour a 'light touch' approach, with responsibility for employees' working patterns delegated to line management, to enhance flexibility and inclusivity for employees. Distinct benefits to organisations, such as recruitment and retention enhancements, of catering to specific employee groups were also recognised. However, alongside acceptance of hybrid working, challenges of inequality and uncertainty were reported, and most organisations still value employee' presence. Initiatives including inducements, 'office days', and working space alterations were directed towards fostering collaboration and increasing employees' attendance. However, such interventions, in the face of wider normative shifts towards hybrid working, and challenging economic conditions, may ultimately deter employees' office attendance if careful policy-directed consideration is not employed.

**Limitations.** The research drew on a small sample of 12 respondents. However, purposive sampling was employed to carefully capture perspectives from a diverse range of industries and management responsibility which, alongside analysis of our preceding large-scale survey of London workers, enhanced triangulation of the findings. It should also be noted that the findings from this phase of the project were specific to London.

Implications. The findings provide unique insights into the workplace-related experiences and intentions of large employers following the pandemic. They can inform future workplace strategies which create mutual gains for both employees, such as improved wellbeing, and for organisations, such as increased flexibility and reduced staff turnover. For example, the study indicates that targeting specific groups, such as those in technical roles or within certain demographics and developing tailored organisational policies to assist these groups in achieving their aims, could result in essential improvements in employee recruitment and retention. Given the altered characteristics of hybrid workers (CIPD, 2020), a theoretical contribution follows from the identification of specific mechanisms by which these employees' work outcomes, such as wellbeing or commitment, may be enhanced in this new context.

Relevance to the congress theme: Informing organisations and their employees on ways to effectively respond to the changing world of work is the central consideration of this project. The findings support existing evidence that ongoing alterations to how organisations operate following the Covid-19 pandemic is accompanied by parallel shifts in the requirements and expectations of organisational members going forward (Kossek & Keliher, 2022). Importantly, this study provides direct insights into managers' intentions towards future working practices and provides targeted suggestions aimed at leveraging related opportunities and overcoming identified workplace challenges.

Full references on request

*Keywords: Future of work, Hybrid working, organisational change*

## Oral presentation OP345

### Managing the hybrid working team: A new leadership reality?

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science

Motivation and research goal

The COVID-19 pandemic has increased employees' demand for flexible working practices and has accelerated the discussion: What is the future of work? Hybrid work, the combination of working in-office and remotely, has been pointed out as a possible future working model, and many organizations are currently testing different approaches to "working-from-home". Most existing studies focus on employee experiences of hybrid work (Lund et al., 2022). However, research on how managers experience their new roles as "hybrid work managers" is limited. This is a scarcity as Ipsen et al. (2021) find that managers generally experience distance work as more challenging than employees. Moreover, current research shows that managerial stress and discomfort negatively influence employee well-being (Skakon et al., 2010), stressing the importance of exploring managers' experiences of new hybrid ways of working.

This study aims to investigate how managers in Danish Municipal departments experience managing hybrid working teams, and how the managers can best be supported in their new leadership roles.

Theoretical Background

Theoretically, this study approaches team managers' leadership as a relational and reciprocal process (Day, 2012). We draw on the concepts of reciprocity and followership, focusing on how leadership and the adoption of new leadership behaviors are greatly influenced by relationships with subordinates and contextual factors in the working environment (Graen & Uhl-Bien, 1995).

Study design

In this ongoing exploratory case study, we apply a longitudinal observational research design in which qualitative interview data is collected from team managers (N=11) over a 1-year period (Bryman, 2006). The research team conduct six rounds of semi-structured interviews with six weeks intervals in the period March 2022- Jan 2023. The team managers represent different municipal departments implementing hybrid working models.

Results

The study's preliminary results show that team managers experience hybrid working models as bringing both opportunities and challenges to their leadership practice. While opportunities include experiences of increased flexibility, efficient meetings, and high productivity, five key leadership challenges consist of how to: 1) Create team cohesion, 2) Ensure employee well-being from a distance, 3) Navigate between employee needs and organizational needs, 4) Show trustfulness while also controlling work processes and 5) Be available and present without over working. Results show that hybrid work can create interpersonal challenges when managers meet conflicting employee needs and expectations and when the virtual work setting make them act in ways that clashes with their leadership values, e.g., when "checking-in" on off-site employees while also wanting to show trustfulness. Finally, the findings indicate that team managers miss organizational support and request more organizational guidelines and rules which they can rely on in their leadership practice. The data collection is expected to be completed in January 2023.

## Limitations

The municipal departments of the study covers a broad variety of job functions. Thus, even though the team managers are on same managerial levels they manage teams with different job tasks and professional backgrounds. The character of job task may impact manager-employee relationships, as different tasks demand different forms of collaboration and coordination. This is a potential limitation when wishing to point out general experiences of being “hybrid work managers”.

## Conclusion

The study adds to the body of research investigating hybrid remote work, but helps fill a research gap with its distinctive focus on how hybrid work impacts daily leadership practice. The preliminary findings show that hybrid work imposes both opportunities and challenges on managers impacting their well-being and everyday interactions with employees. Thus, highlighting new leadership challenges and stressing managers need for organizational support, these findings are crucial for organizations who consider establishing hybrid workplaces. Moreover, the studies investigation of different types of municipal departments contributes with valuable insights into what contextual factors, e.g., team structure, team size, work setting and job tasks, that may affect leadership of the future’s hybrid working teams.

## Relevance to Congress Theme

This study makes essential contributions to the conference theme , pointing towards transitions regarding both working life and leadership practice that we do not yet know the everyday consequences of. A longitudinal study exploring the leadership of hybrid working teams over time can help us address questions such as: How do managers navigate in both opportunities and challenges of leading hybrid working teams? (contribution), and what should organizations pay attention to in supporting the hybrid leadership practices of the future? (delivery).

*Keywords: Hybrid Work, Leadership, Perceived Organizational Support*

## Oral presentation OP409

### **Managing the Negative Effects of Mobile Technology Out-Of-Hours Work Demands. A Systematic Literature Review and Co-Design of a Prototype Toolkit.**

Charlie Eyre, Workspheres Ltd. & Birkbeck, University of London; Rachel Lewis & Jo Yarker | Birkbeck, University of London & Affinity Health at Work

science&practice

Research goals and why the work was worth doing

The research goals were twofold. Firstly, to understand what interventions and strategies have been used for managing the negative impact of out-of-hours work-related mobile ICT demands. Secondly, to assess the feasibility of an evidence-based, co-designed toolkit for managing these negative side-effects.

Theoretical Background

The growing use of advanced mobile ICT devices for work has led to significant changes in the boundaries between work and home. Work-related email, phone calls and instant messaging have become increasingly accessible. Over the past decade, much research has focussed upon the impact of out-of-hours work-related ICT usage (and the 'always on' culture) on individual employees' well-being (e.g. Schlachter et al, 2018). A significant evidence base has been developed around the potential negative impacts of these out-of-hours demands. These include work-home conflict (Gadeyne et al, 2018), negative impact on general well-being (Adisa et al, 2017), reduced psychological detachment (Derks et al, 2014), exhaustion (Barber and Santuzzi, 2015), insomnia (Park et al, 2020). However, there has been far less research focus on practical strategies to minimise these negative impacts.

Design / Methodology / Approach / Intervention

Study 1 (the systematic literature review) was completed in 2021, following PRISMA guidelines (Page et al, 2020). The search criteria focussed on interventions or strategies designed to minimise the negative impact of out-of-hours mobile technology demands. Study 2 was completed in 2022, and involved the co-design of a evidence-based, prototype toolkit. The co-design methodology has been used successful in a range of healthcare settings (e.g. Leask et al, 2019). Its aim is to maximise the success of an intervention through involving end users throughout the design process (Davies et al, 2016). A longitudinal focus group design was used, with thematic analysis used to inform the content and format of the prototype toolkit.

Results Obtained / Expected

From Study 1, a total of thirteen papers were identified. The findings provided some insight into the strategies and interventions that could be used at individual, leadership and organisational levels. These were synthesised to highlight areas relevant for the Study 2 intervention. However, the review showed that there was limited systematic evaluation of the effectiveness of these strategies, and few longitudinal intervention studies had been conducted. The detail and implications of these findings will be discussed.

For Study 2, a total of 25 participants took part in the co-design process, representing HR professionals, leaders and employees across public and private sector organisations. The prototype toolkit was developed based on both the literature review findings, and the outcomes of the Round 1

focus groups. The toolkit included a range of information resources, exercises, coaching tools, and goal setting activities. Refinements were made following Round 2. Overall, the participants felt that the toolkit concept would be a valuable resource for individuals and organisations. However, successful adoption would be contingent on clear leadership support and role modelling. In particular, the toolkit should have sufficient flexibility to adapt to individuals' personal and work circumstances. Key factors include personal boundary management preferences (e.g. Crowe & Middleton, 2012), perceived locus of control (Ohly & Latour, 2014), ability to psychologically detach (Sonnentag & Fritz, 2007), and organisational culture (e.g. Grawitch et al, 2018).

#### Limitations

The output of the research is still at prototype stage. Further work is still required to finalise this as an operational tool. Further work is still needed to systematically assess the long-term benefits that the toolkit might deliver in an operational setting.

#### Conclusions – research and or practical implications/Originality/Value

The evidence review shone a light on the need for more accessible interventions, and a co-designed toolkit was developed based on these findings. The toolkit concept was found to have value. Its success would be contingent on factors such as leadership support and organisational culture, and it may be best suited as part of a broader organisational well-being intervention.

#### Relevance to the Congress Theme

The research is of direct relevance to the conference theme of 'the changing nature of work', as it focuses on the psychological impact of how technological developments have blurred the boundaries between home and work.

#### Relevant UN Sustainable Development Goals

Good health and wellbeing

*Keywords: well-being, co-design, technology*

## Oral presentation OP266

### **Managing Well-Being and Performance at Distance: Development of a Telework Leadership Scale (TWLS)**

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science&practice

#### Research goals:

Hybrid or full teleworking arrangements implies several changes in the way of working. Different institutions have raised the importance of developing new digital competencies and the digitalization of soft competencies. Thus, it is important to reflect on how the function of leadership must be adapted to this new context and identify the most relevant competences to accomplish this function, favoring both well-being and performance of their teams.

To facilitate the development of these competencies it is important to have appropriate measurement tools. Thus, our main research goal is to develop a scale for measuring leadership competencies that impact positively on teleworkers well-being and performance.

First, we developed a competencies model for the development of leadership for telework based on a systematic review and qualitative analysis. Second, we constructed a first version of the scale that was further reviewed by two waves of experts and practitioners in the field. Finally, we will conduct the analysis for the validation of the scale.

#### Theoretical background:

Leaders and leadership have been found to play a key role in the performance and wellbeing of workers (Avolio et al., 2009; Inceoglu et al., 2018) even more in telework arrangements (Cortellazzo et al., 2019; Kozlowski et al, 2021). The task of leaders in this new context is to reduce virtual distance, in an operational and relational way (Sobel & Reily, 2020).

Well-being and performance are the main expected outcomes of leadership. The happy-productive worker theory considers that there is an alignment between them. However, most part of the research in leadership has been focused on performance (Inceoglu et al., 2018), and it has shown that misalignments can also be found (Peiró et al., 2014). Thus, it is important to measure effective leadership in a way that can improve both.

#### Methodology:

First, a systematic review of 74 qualitative and quantitative studies of telework leadership from the last 22 years has been developed. We included only empirical articles (qualitative and quantitative) that had investigated a real population of teleworkers.

Second, we analyzed current leadership practices and challenges through focus groups and interviews to a sample of Spanish managers and teleworkers.

Third, we proposed a competencies model for the development of leadership for telework (described in the next section).

Fourth, based on this model we constructed an 88 items scale for measuring telework leadership.

Fifth, we analysed the content validity of the scale with a sample of experts and practitioners in the field.

Finally, in November and December 2022 we will conduct the validation study in a sample of teleworkers in Spain. Confirmatory factor analysis and internal consistency analyses will be done.

Results:

Using the findings of the systematic review and the qualitative study, a pool of behaviours grouped in six competences were proposed for the scale.

Digital Communication: Establishing rules about media usage, planning meetings, managing videoconferences, and providing feedback in virtual media.

Digital Trust: Promoting trustworthiness in digital media, facilitating self-openness virtually, and demonstrating professional and digital competence.

Remote Goal Management: Involves planning virtual work, promoting self-management, and facilitating remote tasks.

Relationships Development in Virtual Environments: Involves strengthening collaboration, social cohesion and team identity using available technologies.

Work/Life Balance in Telework: Actions aimed at promoting and modelling work-life balance and disconnection behaviours.

Results of the validation of the scale will be shown in the congress.

Limitations:

The scale is being developed in the Spanish context. As further steps, we consider making a cross-cultural adaptation of this tool.

Conclusions:

The development of a model of leadership competences for telework and the scale for measuring them provides a valuable tool to guide the training and development of leaders in the context of work digitalization program for leaders, which is the future line resulting from this research.

Relevance to the Congress Theme:

The model and the scale presented contribute to the development of leadership competencies in this changing world of work. It aims to respond to the challenges of the new work arrangements related to digitalization and telework.

Relevance to UN SDGs:

This research contributes to the “Decent work and economic growth” development goal, in the way that provides a tool for measuring effective leadership in telework context, which can help to implement interventions for improving working conditions of employees in a sustainable manner.

Also, it impacts in the “Good health and wellbeing” development goal, because it measures leadership competencies that improve wellbeing of teleworkers. With this tool, interventions for improving wellbeing at distance can also be assessed.

*Keywords: Telework, leadership, well-being*

## Oral presentation OP613

### Mediating processes for the effects of subjective socioeconomic status on well-being and performance in the work context

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science

Research goals and why the work was worth doing:

The current global and national inequality in the distribution of wealth can be seen as a societal risk factor, as socioeconomic status (SES) shows an inverse relationship with various health outcomes and well-being. Current political and economic crises lead to an increased risk of social division based on rising differences in access to socioeconomic resources. Although employees with various SES interact within the workplace and one's job role can significantly influence the own SES, there is a lack of deeper understanding of how SES affects experiences and behaviour in the workplace. Therefore, the present study aims to investigate explanatory mechanisms in the effect of SES differences on psychological well-being and withdrawal behaviour in the organizational context.

Theoretical Background:

Research already showed that employees' SES has critical implications in organizations (Côté, 2011). Preliminary results show that people from a lower social class perceive emotions of colleagues more accurately than their higher class counterparts (Kraus et al., 2010). Furthermore, a lower social class can be identified as a stigmatized identity at work which influences how it is concealed or disclosed (Kallschmidt & Eaton, 2019). However, the relationship between SES and work-related behaviour and well-being remains largely unexplored. On the basis of COR-Theory, which states that those who lack resources are more vulnerable to resource loss and less capable of resource gain (e.g. loss spiral; Hobfoll et al., 2018), we propose that a low subjective SES increases perceived weekly stressors (e.g. interpersonal conflicts) and decreases perceived uplifting events (e.g. goal achievement). This shift in perception should reduce well-being and increase withdrawal behaviour. Additionally, we predict that implicit assumptions towards social classes (i.e., appreciation of higher & devaluation of lower classes) further amplify the effect of SES on employees' functioning. This prediction derives from the notion that implicit attitude measurement is particularly relevant in areas where self-presentation concerns are high, such as prejudice and stereotyping (Greenwald et al., 2009). Accordingly, negative self-evaluations concerning social categories can cause psychological distress that reflects loss spirals and should hence intensify the deleterious impact of SES (John-Henderson et al., 2013).

Design:

Our predictions will be tested via a twelve-week diary study with about 150 participants. After a pre-survey (e.g. SES, implicit bias), the participants receive a survey each Friday. The acquisition is currently carried out via Prolific Academic. The use of Prolific is mainly due to the possibility of generating a specific sample (people under greater strain e.g. due to precarious working conditions) that is relevant to the purpose of the study and the high data quality, which can, for instance, be observed in the comparatively high diversity of the sample and high criterion validity, that can be achieved (Palan & Schitter, 2018; Walter et al., 2019).

Results:

Our hypotheses focus on temporal changes depending on SES differences. Following recommendations from previous studies (Chen et al., 2011; Dust et al., 2021), we will therefore calculate mixed models with a random intercept and fixed slope to examine the change trajectories of perceived uplifts, perceived stressors as well as well-being and withdrawal behaviour on the within-person-level. We hypothesize that the trajectories of perceived stressors and uplifts, which are dependent on SES, predict the trajectories of well-being and withdrawal behaviour. Additionally, we will test the moderated mediation (between-person level) by following the procedure from Chen et al. (2011), which can be used to integrate change trajectories in mediation models (e.g. Dust et al., 2021). Data collection will be completed in the first of quarter of 2023, making the results available by May.

Limitations:

All measures were assessed based on self-reports which increases the risk of common method bias. Future studies should also use objective indicators like physiological parameters for stress (e.g. skin temperature, Arza et al., 2018).

Conclusion:

The study provides initial insights into the explanatory mechanisms between SES and employees' behaviour at work. These findings should then be expanded to include further attitudinal dimensions as well as organizational boundary conditions. Overall, the results should help to understand the dynamics of SES that influence employees and help to find ways to provide equal opportunities.

Relevance for the Congress Theme:

The unequal distribution of resources is not only a socially relevant issue but has important implications for the work context and is in turn strongly influenced by it. Therefore, it is important to understand the dynamics at stake in order to design measures to address this inequality in the future.

*Keywords: social class, well-being, inequality*

## Oral presentation OP52

### Medical students' career decision-making stress during clinical clerkships

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science

#### Objectives:

Many medical students experience career decision-making stress in the final phase of training. Yet, the factors that induce or reduce career decision-making stress and how progression in their clerkships relates to these factors, are unknown. This knowledge gap limits the possibilities for medical schools to develop and implement interventions targeting students' career decision-making stress.

#### Theoretical background:

Theoretically, we draw upon the CPC-framework by Lent and Brown (2020) which takes a comprehensive view on career decision-making including content (i.e., elements of people's self-concept regarding their work), process (i.e., factors influencing the process of career decision making), and context factors (i.e., environmental features that can aid or impede choice-making) involved in the process. This study explores the content, process, and context factors that may affect career decision-making stress among medical students.

#### Methods:

Using cross-sectional survey data from medical master students from two medical schools ( N =507), we assessed content (future work self), process (choice irreversibility, time pressure, career decision-making self-efficacy), and context (supervisory support, medical school support, study load, competition) factors and their relationships with career decision-making stress. The hypothesized relationships were tested with structural equation modelling.

#### Results:

A clearer future work self and higher career decision self-efficacy were associated with lower career decision-making stress, while experienced time pressure, competition, and study load were associated with higher career decision-making stress. Choice-irreversibility beliefs, supervisory support, and medical school support were unrelated to career decision-making stress. As students' clerkships progressed, they gained a clearer future work self, but also experienced more time pressure.

#### Limitations:

The cross-sectional nature of this study does not allow conclusions to be drawn about the direction of relationships. In addition, common method bias might have attenuated relationships between the variables in this study. Finally, the data of this study were collected during the COVID-19 pandemic. It is possible that students experienced relatively more insecurity about setting and attaining their career goals and their study progress might have been delayed.

#### Conclusions:

Results suggest that clinical clerkships help students to form a clearer future work self, which can diminish career decision-making stress. Yet, students also experience more time pressure as the period of clerkships lengthens, which can increase career decision-making stress. A school climate of

high competition and study load seems to foster career decision-making stress, while school support hardly seems effective in diminishing this stress.

Results bear practical implications for medical schools. First, medical schools could provide tools to stimulate the timely development of students' future work self. Second, medical schools could focus on helping students deal with time pressure and competition, both of which promote career decision-making stress. Third, medical schools could invest in career supportive practices.

Relevance to congress theme:

The COVID-19 pandemic has had a severe impact on medical students as well as healthcare workers in general, with some even reevaluating their career choice. To ensure a healthy workforce in the future, it is of critical importance that medical students make a career choice fitting with their personal interests, values, and competencies.

Relevance UN SDG's:

This study contributes to the third (good health and well-being) and fourth (quality education) sustainable development goals from the UN. Optimizing students' career choices not only keeps them healthy, but contributes to the quality of healthcare as well. Besides, part of high quality education is providing adequate career guidance. This study does several suggestions for medical schools to optimize career guidance for medical students.

*Keywords: Career decision-making, decisional stress, clinical clerkships*

## Oral presentation OP97

### **Mental illness and substance abuse (non-)disclosure to a supervisor: A cross-sectional study on beliefs, attitudes and needs of military personnel.**

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science

#### Purpose & theoretical background

The decision for workers whether to disclose their mental illness, including substance abuse, to their supervisors can potentially have far-reaching consequences for their sustainable employability. Disclosure can lead to workplace support and accommodations, which can prevent worsened symptoms and sick-leave, and non-disclosure can lead to missed opportunities for this support. However, disclosure can also lead to being stigmatized and discriminated against.

The disclosure dilemma is expected to be even more prominent for trauma-prone occupations, such as the military, where workers are expected to be 'strong' and disclosure may yield less positive outcomes. Additionally, workers in these high-risk occupations are exposed to stressors at work, increasing their risk of developing mental illness.

Research suggests that military personnel frequently delay disclosing mental illness, including substance abuse, to supervisors. This delay causes missed opportunities for sustainable employability. The current study aims to examine disclosure related beliefs, attitudes, and needs, to create better understanding of military personnel's disclosure decision-making.

#### Methods

The current study consisted of a cross-sectional questionnaire study among military personnel with (N=324) and without mental illness (N=554). Military personnel with and without mental illness were approached based on earlier questionnaires which personnel receive after deployment. For the current study, beliefs, attitudes, and needs regarding the (non-)disclosure decision to a supervisor were examined, including factors associated with (non-)disclosure intentions and decisions. Military personnel with mental illness, were asked about their past disclosure decisions, and military personnel without mental illness were asked about their intentions regarding possible future disclosure if they would develop a mental illness. Descriptive and regression (logistic and ordinal) analyses were performed.

#### Results

Common beliefs and attitudes pro non-disclosure were the preference to solve one's own problems (68.3%), the preference for privacy (58.9%), and a variety of stigma related concerns. For example, 32.4% believed that disclosure would lead to negative career consequences and 25.2% believed that disclosure would lead to social rejection.

Common beliefs and attitudes pro disclosure were that personnel wanted to perform well at work (93.3%) and the desire to act responsibly towards work colleagues (84.5%). The most reported need for future disclosure (96.8%) was having a supervisor who shows understanding for mental illness.

The following factors were associated both with non-disclosure intentions and decisions: higher preference for privacy (OR (95% CI) = 1.99 (1.50 – 2.65) intention , 2.05 (1.12 - 3.76) decision ) and

self-management (OR (95% CI) = 1.64 (1.20 – 2.23) intention , 1.79 (1.00 - 3.20) decision ), higher stigma related concerns (OR (95% CI) = 1.76 (1.12 – 2.77) intention , 2.21 (1.02 - 4.79) decision ), and lower quality of supervisor-employee relationship (OR (95% CI) = .25 (.15 – .42) intention , .47 (.25 - .87) decision).

#### Limitations

First, due to the cross-sectional design of the study, no conclusions about causality can be drawn regarding the factors associated with disclosure (intentions). Second, the sample is not representative for the entire military, due to the sampling method used.

#### Conclusion

To facilitate (early-)disclosure to a supervisor, creating opportunity for workplace support, interventions should focus on decreasing stigma and discrimination and align with personnel's preference for self-management. Furthermore, training is needed for supervisors on how to recognize, and effectively communicate with, personnel with mental illness. Focus should also be on improving supervisor-employee relationships.

#### Relevance for congress

This research is relevant to the congress theme as it focusses on the UN Sustainable Development Goal 'Good health and Wellbeing'. The findings of the current study can help to inform future research and interventions which can create a more inclusive work environment. In a more inclusive work environment, disclosure of mental illness is possible, creating opportunities for supervisor support and work accommodations, which contribute to good health and wellbeing.

*Keywords: Mental illness, disclosure, stigma*

## Oral presentation OP14

### **Mental workload mediates the effect of communication on team performance and work satisfaction in interdependent teams during a simulated Mars Mission**

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science&practice

Research goals and why the work was worth doing

High Responsibility Teams, like astronaut crews and their support teams, that are interdependent, geographically separated and time-delayed need to communicate effectively to work error-free, reliable and achieve high team performance in complex work environments. Thus, the research goal of this study was to identify the aspects of communication in teamwork that are important for team performance and work satisfaction and how this relationship is mediated by mental workload.

Theoretical background

Isolated, confined, and extreme (ICE) environment-specific team research is still in its early stage. As for all other high responsibility teams, teamwork skills are an important, yet less emphasized, aspect of flight controllers' and astronauts' job. Team communication, resp. information exchange with its facets clarity of objectives and information flow, is a key coordination process in order to develop a shared understanding and to not experience so-called "process losses" and to achieve high team performance and work satisfaction. As miscommunication has shown to lead to increasing workload in terms of effort and frustration in teams working under time-delayed communication, the following hypotheses are set up: 1) Clarity of objectives positively influences a) team performance and b) work satisfaction. This relationship is mediated by the mental workload facet "effort". 2) Information flow positively influences a) team performance and b) work satisfaction. This relationship is mediated by the mental workload facet "frustration".

Design/Methodology/Approach/Intervention

The experiment INTERTEAM was executed during the AMADEE-20 analogue Mars mission hosted by the Austrian Space Forum. Six analogue astronauts (AAs) lived in isolation for four weeks in the Negev desert in Israel. They were supported by Mission-Support-Centre (Innsbruck) and On-Site-Support team (Israel). As these three teams work closely together in conjoint teams throughout the mission to execute tasks correctly, it is essential that they communicate effectively with each other. Clarity of objectives and information flow are important factors of communication between these teams. Communication between teams is complicated as Mission-Support-Centre is the only contact line for the AAs, including a communication time delay of 10 minutes one-way. This time delay reflects the signal propagation time between Earth and Mars. Three experiment runs, each of one and a half hours duration, with changing conjoint team members were conducted during the four-week mission. For that, two participants each from the AAs, Mission-Support-Centre and On-Site-Support worked as a team and had to exchange information to solve an interdependent task in a specified time. Communication, work satisfaction and mental workload (subjectively measured) as well as team performance (objective measure) were assessed in each run. Hypotheses were tested by mediation analysis based on bootstrapping.

Results

Results show that the communication aspects clarity of objectives (  $B = .62, p < .01$ ) and information flow (  $B = .68, p < .01$ ) significantly influence team performance positively. The positive relationship between clarity of objectives and team performance is mediated by the level of effort (  $B = -.46, p < .05$ ). Only information flow has been shown to significantly influence work satisfaction positively (  $B = .48, p < .05$ ), which is mediated by the level of frustration (  $B = -.69, p < .05$ ).

#### Limitations

Generalizability of the results is limited due to the small sample size of three teams including six participants each. Furthermore, no standardized conditions could be applied for the experimental implementation.

#### Conclusions

Findings show that communication in regard to clarity of objectives and information flow is very important for interdependently working and geographically separated and time-delayed teams. Thus, specific communication trainings and support by humans and technique are really necessary for all team members of future Mars missions to achieve safe and reliable work throughout the mission.

*Keywords: communication, teamwork, analog mars mission*

## Oral presentation OP770

### Meta-analyses investigating if work engagement is related to contextual, adaptive, and creative performance

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science

#### Introduction

Meta-analyses have shown that work engagement and task performance are positively related (e.g., Hakonen et al., 2006; Christian et al., 2011). However, it is less clear if work engagement is also related to other important types of work performance, such as contextual performance (i.e., organizational citizenship behavior), creative performance (i.e., generation of ideas, procedures, and products), and adaptive performance (i.e., capability to modify behavior according to the requirements). To the best of our knowledge, only one recent meta-analysis (Christian et al., 2011) showed that work engagement and contextual performance were indeed related. However, at the time of that meta-analysis, only 11 studies were available. Therefore, a meta-analysis with a larger sample of studies is needed to assess the true effect size more reliably. Furthermore, to our knowledge, there are no meta-analyses investigating if more work engagement is related to creative and adaptive performance.

#### Methods and results

To address this, we used meta-analyses to investigate if work engagement was related to contextual performance (111 studies,  $N = 44,116$ ), creative performance (42 studies,  $N = 14,120$ ), and adaptive performance (14 studies,  $N = 5,909$ ). In doing so, we followed the PRISMA method for meta-analyses. The results indicated relatively large effect sizes, showing that work engagement is positively related to contextual performance ( $r = .49$ ), to creative performance ( $r = .50$ ), and to adaptive performance ( $r = .44$ ). Moderator analyses showed that for contextual performance the relationship with engagement was stronger for self-assessed performance than for performance assessed by the supervisor. However, effect sizes for contextual performance were similar for western vs. non-western populations, contextual performance vs. organizational citizenship behavior, cross-sectional vs. longitudinal designs, or used questionnaire. For creative performance, we found that the relationship with engagement was stronger for studies using the questionnaire by Zhou and George (2001) than for studies using the questionnaire by Wang and Netemeyer (2004). Furthermore, for creative performance, effect sizes were similar for self-reported performance vs. performance reported by the supervisor, western vs. non-western populations, and cross-sectional vs. longitudinal designs. Our sample size was too small to do any meaningful moderation analyses for adaptive performance. We did not find evidence of publication bias in any of the meta-analyses. Importantly, for all performance types, we found high levels of heterogeneity in the effect sizes (91-93%) which were unrelated to sample size, as shown by the asymmetric funnel plots.

#### Discussion

Our meta-analyses show that more work engagement was related to better contextual, adaptive, and creative performance. This indicates that employee motivation is important to consider if companies want to improve not only task performance but also other forms of job performance. However, the large differences in effect sizes between studies for all the studied performance types make interpreting the results difficult. This large variance in effect sizes (unrelated to sample size) may indicate that the study characteristics greatly impacted the studied relationships. Likely

candidates of influence are the studied population and characteristics of the job. In support of this, our moderator analyses showed that some study characteristics (performance rater and used questionnaire) did reduce the heterogeneity of the effect sizes for some performance types. However, variability in effect sizes remained high, even after controlling for these factors. This suggests that we were unable to include the most important moderators and that future study designs need to address this. Alternatively, perhaps we need to improve how we conceptualize, operationalize and measure these types of performances. Indeed, contextual, creative, and adaptive performance are more prone to subjectivity and interpretation compared to task performance.

#### Congress and UN SDGs relevance

This research is relevant to the congress theme of “changing the world of work” because this study highlights that work engagement does not only relate to task performance. Well-designed work also needs to value other forms of job performance, such as contextual, creative, and adaptive performance, which are studied in this research. Our study is also relevant to the UN Sustainable Development Goals of “Good health and well-being” as it is important to know how work performance and engagement relate to each other to stimulate employee well-being.

*Keywords: engagement, performance, meta-analysis*

## **Oral presentation OP769**

### **Methodological Issues Related to the Theory of Self-Presentation**

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science

Recently, several articles have been published that have dealt with the verification of Marcus' (2009) theory of self-presentation (SPT). Several core propositions have been successfully confirmed. However, various methodological issues have also been raised, which I examine using four empirical studies, including non-student samples. I present the results in this talk.

Analytical self-presentation skills and motivation, core constructs of SPT, have been operationalised through profile comparisons. Based on the available data and considering practical trade-offs (like usability in practice), I recommend the use of the Pearson correlation as a profile similarity index for calculating analytical self-presentation skills and motivation, rather than using more elaborated indices. The issue of normativeness is discussed, but raises several problematic managerial implications and needs to be further examined in additional studies. I also show, why more sophisticated methods like Dyadic Response Surface Analysis or the Social Accuracy Model are not applicable in this context.

Furthermore, I show results that support existing evidence on the criterion-oriented validity of the theory. Thus, the assumption is supported that SPT could be suitable to explain some of the inconclusive results regarding the impact of faking on validity.

Finally, I make clear that a central element of the theory, analytical skills, can be distinguished from the ATIC concept, contrary to recently voiced concerns in literature.

*Keywords: self-presentation, faking, selection*

## Oral presentation OP422

### **Min and/or max goals: A dynamic account on ongoing goal failure and the development of efficacy beliefs and self-set goal standards within individuals**

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science

**Research goals:** We study the effects of ongoing goal performance failure within individuals. Specifically, we centre on the development of self-efficacy feelings and self-set goals. By considering minimal and maximal goal standards, we show how framing goals as maximal (versus minimal) goals can buffer against expected negative consequences of not achieving a goal. This allows us to provide managerial recommendations of how to effectively use (maximal) goal standards in organisational settings.

**Theoretical background:** Looking to provide insights in how managers should approach the balancing act of setting difficult goals to motivate employees to perform at top level (Locke & Latham, 2002; 2019) while at the same time increasing the risk of continuous failure (Ordóñez et al., 2009), we addressed this problem by integrating the theoretical framework of minimal and maximal goal standards (Brendl & Higgins, 1996; Giessner et al., 2020) with goal-setting theory and explored effects on task self-efficacy beliefs (Bandura, 1986; Locke & Latham, 1991) and self-set goal levels (Bandura & Locke, 2003).

**Methods :** We conducted three experimental studies (N=124/N=223/N=253) to test for our beliefs. Participants engage in a performance challenge over several rounds.

**Results :** Externally assigned maximal (versus minimal) goal standards resulted in overall lower self-set goal-setting (i.e., minimal, and maximal self-set goals). Furthermore, repeated negative performance feedback reduced task self-efficacy over time. However, this effect seems to be reduced if individuals received a maximal (versus minimal) externally-set goal standard. We found similar effects on subsequent self-goal-setting. More precisely, while repeated failure decreased the self-set goal levels over time, maximal (versus minimal) goal standards buffered against this negative effect of goal failure. Furthermore, self-efficacy beliefs mediate the effects between externally set minimal versus maximal goal-setting on self-set goals.

**Limitations :** Our research focused on the effects of goal standards on self-efficacy and self-set goal over time under repeated failure. As a consequence, we limited the time for the tasks in our design and, thus, did not allow to test for the performance persistence which self-efficacy and goal setting would predict (Wood & Bandura, 1989). As a result, our research design does not allow to reliably test for performance outcome effects. Second, even though the experimental approach makes it possible to draw causal inferences between the key variables, it does restrict extrapolating the findings to more realistic settings beyond the laboratory and student participants/online panel sample.

**Conclusions :** We show that repeated failure experiences indeed decrease task self-efficacy beliefs (cf. Ordóñez et al., 2009), our extension with the minimal and maximal goal standard framework (Giessner et al., 2020) reveals that this negative side-effect of goal setting is reduced when maximal (versus minimal) goal standards are used. In line with earlier research (Donovan & Williams, 2003; Ilies & Judge, 2005), our studies demonstrated a downward development in the average level of self-set goal standards when individuals were confronted with continuous failure feedback.

Differentiating for the two specific self-set goal standards – self-set minimal or maximal goal standards – the change over time is most extreme for the maximal (versus minimal) self-set goal standard. Our theoretical and empirical extension of prior research yields a clearer picture of how leaders should deal with their own goal-setting balancing acts. Hoping to ‘get the most out of individuals’ in one-off situations, our advice would be to assign goals in a minimal way, to stimulate relatively higher levels of self-set goal standards as a result of the goal internalisation process. In repeated situations, we would recommend managers to generally set performance goals that they are assigning to their subordinates as maximal standards – particularly if it is likely to expect adversity over time (i.e., negative performance feedback): not only does it weaken the (inevitable) negative development of the experienced levels of self-efficacy, but eventually it also results in relatively smaller decreases in self-set goal standard levels.

Relevance to the Congress Theme : Goal-setting plays a central role in HR’s performance management practices, as they allow organisations to motivate current and future workforces. To compete in and deal with this changing world of work, understanding how goal-setting exactly impacts employee beliefs will futureproof organisations in delivering desired changes.

Relevant SDG#8 : Decent work implies not only workplace security and better prospects for personal development, but also work that motivates. Understanding how to motivate individuals – even when faced with continued adversity – will create more ‘decent’ workplaces and enhance employee’s well-being.

*Keywords: Goal-setting, Motivation, Failure*

## Oral presentation OP293

### **Mindfulness and Negative Performance Feedback – the Mediating Role of Cognitive and Emotional Self-Regulation**

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science&practice

Due to a continuously changing world facing various challenges and an ever-faster evolving economy, the demands for innovation and learning processes on a societal and economic level are rising. Intensified by the simultaneous shortage of skilled workers, human capital becomes essential for economic success (Carmeli & Schaubroeck, 2005). Thus, organizations are not only striving to recruit and retain valuable employees, but also to develop them to enhance their learning and performance (Aguinis & Pierce, 2008). In this context, practitioners consider performance feedback effective. However, research findings question its effectiveness and point out a paradox: Negative feedback creates a tension between (1) the intended goal of performance improvement on one side and (2) its risk to cause dysfunctional responses (Alam & Singh, 2019; Kluger & DeNisi, 1996; O'Malley & Gregory, 2011) and to diminish feedback's effectiveness (Eskreis-Winkler & Fishbach, 2019) on the other. The essential question therefore is: How do individuals respond more constructively to negative feedback? One potential way is to perceive feedback in a more neutral and differentiated way which may initiate a learning process with higher levels of adaptive self-reflection and insights about how to improve behavior rather than perceiving it as a threat to their self-esteem.

To better learn from negative feedback, Kuhl's Personality System Interaction theory (PSI; 2000) states that self-growth grounds on a dialectical process of (1) a strengthened problem focus and (2) the downregulation of negative affect for a successful integration into the self. This process may be supported by mindfulness. Research findings indicate that mindfulness leads to higher awareness and less avoidance behavior as well as reduced affective reactivity (Lindsay & Creswell, 2017; Uusberg et al., 2016), reduced self-esteem threat (Heppner et al., 2007), and improved self-regulation (Hölzel et al., 2011).

Thus, this study investigates the extent to which mindfulness, through modified cognitive and emotional self-regulation, enables people to learn more constructively from negative feedback. For this purpose, an online experiment with a 2x2 design (N = 422) was conducted. Subjects were randomly assigned to a mindfulness induction vs. no-treatment condition as well as a negative vs. positive-negative mixed 360-degree feedback vignette. The mindfulness induction covered one educational video and one audio exercise based on evidence-based inductions (e.g., Garland et al., 2015; Reynolds et al., 2015; Watford and Stafford, 2015). To enhance participants' identification and involvement, we enriched the vignette with personalized information for each participant (i.e., job position, project objective) so that hypothetical feedback towards real work experience was created. Both experimental manipulations were controlled via manipulation checks and were rated as sufficient.

We used structural equation modeling to examine the effect of mindfulness state on cognitive feedback response (i.e., rumination, insight), mediated by cognitive and emotional self-regulation (i.e., avoidance, reappraisal, and acceptance). Results indicate mindfulness fosters more constructive responses to negative feedback: Mindfulness significantly reduces rumination via an indirect partial mediation of higher cognitive acceptance and emotional adjustment. Further, mindfulness increases

participants' insight into their strengths and weaknesses directly as well as via an indirect partial mediation of higher emotional tolerance.

Limitations include problems regarding the construct validity of mindfulness questionnaires as well as self-report data's limited validity and potential biases. Nevertheless, the study offers a significant contribution to answer the research question of how individuals learn better from negative feedback. Results indicate that mindfulness could operate as preventative treatment before receiving feedback to generate (more) constructive responses to negative feedback. Future research should conduct further analyses of the differential indication of mindfulness treatments with respect to target groups, specific mindfulness methods, and contexts of application. Field studies and investigations of potentially negative effects of mindfulness could be beneficial. Additionally, mindfulness should be measured multidimensionally and outcomes via alternative approaches to self-reports (e.g., learning outcomes, behavior).

In light of the urgency of solving various social and economic problems, learning after criticism is crucial to foster problem awareness and, in turn, behavior change. Our study sheds light on how mindfulness can help employees learn more constructively after negative performance feedback, develop new competences, and improve performance. Thus, this promotes reflection and learning processes within organizations to support necessary future developments and economic growth.

*Keywords: mindfulness, negative feedback, learning*

## Oral presentation OP344

### Mitigating the Negative Impact of Remote Work: The Role of Identity Leadership

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science&practice

As a result of the COVID-19 pandemic, a massive shift towards remote working is taking place in organizations worldwide (Forbes, 2022). This shift towards remote work comes with many benefits for organizations and employees (e.g., more flexible work arrangements, reductions in commuting hours and office space; Allen et al., 2015). This shift, however, also comes with costs as research suggests that employees who work remotely lose their sense of identification with, and connectedness to, their coworkers and team, in turn, reducing their job performance and satisfaction (e.g., Wood et al., 2022; van Zoonen et al., 2022). The shift towards remote work thus creates an important challenge for managers how to ensure that remote employees feel connected to, and identified with, their coworkers and workplace.

At this moment, we know little about what type of leadership behaviors remote employees endorse and which leadership behaviors are most effective in increasing employees' affiliation needs when working remotely. Drawing on a social identity perspective of leadership (Hogg, 2001; Turner & Haslam, 2001; van Knippenberg & Hogg, 2003), we propose that identity leadership - a leadership style characterized by enhancing a sense of togetherness among team members - is a crucial factor in increasing team identification and reducing feelings of isolation in a remote work context. In particular we propose that employees who work remotely favor an identity leadership style, because these identity-enhancing activities are crucial in fostering a sense of belonging. We further hypothesize that identity-promoting leadership behaviors buffer against the negative effects of remote work regarding employees' reduced team identification ("lost identities") and increased feelings of isolation ("lost connections"), and as a result, reduced work engagement and job satisfaction.

We conducted two studies to test these predictions. We first conducted a field survey among 181 employees ( $M_{age} = 37.38$ , 50.3% female; UK), who all had remote working experience, to examine what type of leadership behaviors they preferred when working remotely. Results confirmed that employees endorsed identity leadership behaviors more in a remote compared to on-site work context. We then carried out another field study among 203 employees ( $M_{age} = 38.45$ , 47.5% were female; UK), to examine the moderating role of identity leadership for the relationship between remote work and employees' team identification and feelings of isolation, as well as, work engagement and satisfaction. Results revealed that working remotely (measured objectively in terms of the proportion of time employees spent working remotely) was negatively associated with team identification and positively associated with feelings of isolation. Moreover, as expected, identity leadership moderated these effects, such that remote work was only negatively (positively) associated with team identification (isolation) when identity leadership was low. Furthermore, the negative indirect relationships between remote work and employees' work engagement and job satisfaction through team identification were less severe when identity leadership was higher.

Our research makes several important contributions to the literature. First, our findings provide first empirical evidence that employees endorse specific types of leadership behavior in a remote working context. Second, our findings reveal the importance of identity leadership in a remote working context. In doing so, our findings suggest that leaders should increasingly show, promote, craft, and embed a shared identity among their employees when working remotely. By doing so, leaders can

prevent that their employees will experience a loss of team identification and connectedness. The findings of this research should be interpreted with some limitations in mind. Most importantly, our studies utilized cross-sectional and correlational data. Therefore, we are unable to eliminate common method bias and cannot make strong causal claims. In future research we therefore plan to conduct additional studies to replicate findings in a multi-wave study and/or using an intervention of identity leadership. Moreover, participants for the two studies were recruited only via online samples obtained in the United Kingdom. It would be a significant extension to replicate these findings in other countries experiencing the transition to remote work.

Overall, the present research demonstrates the importance of supervisors engaging in identity leadership in remote work contexts. Remote employees value such identity-building activities more and it enhances their sense of team identity and connectedness-two crucial aspects of a high work engagement and satisfaction. Accordingly, our research is relevant to the future of work especially in identifying the critical role of leadership in remote workplaces.

*Keywords: remote work, identity leadership, team identification*

## Oral presentation OP175

### **More than a respect issue: Basic psychological need frustration and satisfaction through illegitimate tasks and appreciation**

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science

#### Research goals

Work characteristics affect employees through a variety of pathways. The Stress-as-Offence-to-Self (SOS) framework mainly focuses on negative emotions, offenses to the self, and stress outcomes. In the present study, we attempt to integrate basic psychological needs (BPN) into this framework to shed light on motivational processes elicited by threats (illegitimate tasks) and boosts (appreciation) to self-esteem.

#### Theoretical background

The SOS concept highlights that tasks, violating the norms of what can be reasonably expected from a person in a certain position are stressors and lead to anger, felt disrespect and lower self-esteem. Appreciation through supervisors, colleagues or clients, in contrast, is seen as a self-esteem relevant resource. As Semmer et al. (2019) suggested, there might be other ways (beyond the self-esteem relevant messages of disrespect and appreciation) in which illegitimate tasks and appreciation influence employee well-being. Research on motivational aspects and consequences of these two constructs is still young and thus far not well integrated in any theoretical framework. We address this issue in our research by employing the BPN theory. Within BPN theory a not satisfied need is not automatically frustrated, therefore the differentiation between need frustration - which leads to ill-being – and need satisfaction – which leads to well-being – is made. Based on this differentiation we argue that illegitimate tasks mainly frustrate needs for autonomy, relatedness and competence and thus lead to emotional exhaustion. Appreciation, on the other hand, should mainly satisfy those needs and therefore lead to engagement. Furthermore, both theories portray self-esteem as a relevant outcome of their respective constructs. Hence, we want to examine the direct effect of illegitimate tasks and appreciation on self-esteem while controlling for the motivational indirect effect through need frustration respectively satisfaction, as a new pathway to organisational based self-esteem.

#### Design

We designed a three-wave longitudinal study with a time lag of three month to test our hypotheses. Data collection for the first measurement occasion is currently ongoing in the German energy sector. Except for BPN satisfaction and frustration (BPNSF) we employ established measurement instruments. To measure BPNSF in the work context we used a newly developed and validated scale by Olafsen et al. (2021). Hypotheses will be analysed by ways of latent growth curve modelling. Due to complications in data collection, only the results of the first two measurement points will be presented.

#### Results

Preliminary results of the first 40 participants at T1 indicate significant indirect effect of illegitimate tasks on self-esteem and emotional exhaustion through all frustrated needs. Direct effects of illegitimate tasks stay consistently significant for emotional exhaustion, but only in the case of

competency frustration for self-esteem as well. Appreciation effects self-esteem and engagement mainly directly and only indirectly through relatedness satisfaction.

#### Limitations

This study employs only self-report data. Additionally, we decided to use a three-month time interval but are aware that some effects may also develop in a shorter period of time, such as frustrated needs through illegitimate tasks.

#### Implications

While managers might be able to compensate the disrespectful nature of illegitimate tasks by being appreciative, it might as well be necessary to address the motivational effects of illegitimate tasks to negate their unfavourable outcomes. Furthermore, a theoretical contribution of this work is the new mechanism via psychological need frustration through which illegitimate tasks influences self-esteem perception.

#### Relevance to the Congress Theme

This research contributes to the congress research themes of well-being as well as engagement and motivation by disclosing the motivational effects of illegitimate tasks and appreciation, their consequences for personal self-perception as well as exhaustion and engagement at work. In the next step this insight provides ideas on which resources might be necessary to address consequences of illegitimate tasks to keep employees motivated and well at work.

#### Relevant UN SDGs

We believe for economic growth to be sustainable the implementation of decent work a necessity. Our research helps to give an understanding of what work tasks reduce BPN of each and every employee, subsequently leading to less well-being and productivity at work. Company's, leaders and team members can create respectful and motivational work environment by recognising and addressing illegitimate tasks on a self-esteem level via appreciation and on a motivation level via a compensation of frustrated needs through a satisfaction of them in another work areas.

*Keywords: stress-as-offence-to-self, basic psychological needs*

## Oral presentation OP114

### Motivation Profiles at Work and Their Relationship with Core-Self Evaluations and Perceived Organisational Support

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science

Research goals and why the work was worth doing

Recent studies in the context of self-determination theory are concerned with the identification of motivational profiles. Motivational profiles consist of combinations of multiple motivations regulations that characterise subgroups of a given population. This study is the first to analyse motivational profiles of German professionals and their antecedents. Thereby, it answers the call for replication studies and extends existing studies on how to positively influence motivation at work.

Theoretical background

Person-centred approaches allow to model multidimensional motivational profiles and to analyse their antecedents and consequences. These profiles consist of autonomous regulation (intrinsic and identified) and controlled regulation (introjected and external) constellations. Importantly, these profiles relate differentially to adaptive and maladaptive work outcomes. Previous studies have identified four to six motivational profiles and have called for more research on their antecedents.

Design

Data of 573 professionals was collected in Germany. Confirmatory factor analyses were used to examine concept discrimination of the motivational regulations. Next latent profile analyses were applied to determine the motivational profiles. Finally, multinomial logistic regressions were used to analyse their relationship with antecedent core-self evaluations (CSE) and perceived organisational support (POS).

Results

Results reveal four profiles, that are characterised by (1) low autonomous and moderately controlled regulation, (2) high autonomous and low controlled regulation, (3) very low autonomous and moderate to low controlled regulation, and (4) high autonomous and moderate to high controlled regulation. CSE and POS relate positively to the more autonomous profiles (2) and (4). Further, these constructs relate to the profiles differentially. While CSE relates stronger to profile (2), POS relates stronger to profile (4).

Limitations and future research

As the study is based on cross-sectional, self-report data, future research with longitudinal and multi-source designs is recommended. Furthermore, additional antecedents can be explored in their relationship to motivational profiles. These might include variables such as perceived supervisor support, organizational or job fit, and basic psychological need satisfaction and frustration.

Practical implications

The identification of motivation profiles allows to tailor human resource and work design activities to different needs in the workforce. Especially those displaying low to moderate motivation profiles could benefit from increased organizational support and activities that foster CSE, i.e. coaching, mentoring and trainings.

Relevance to the congress theme

Research on self-determination theory in the workplace aims to generate knowledge on how to positively influence motivation in this context. Thereby, it adds knowledge on the congress theme how to change the world of work for the better.

*Keywords: Self-determination theory, motivation profiles, antecedents*

## Oral presentation OP804

### **Multidimensional Model of Subjective Work Environment: A conceptual and empirical development**

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science&practice

#### Objectives:

In this framework, the main objective of this study is to validate a theoretical construct called Multidimensional Model of Subjective Work Environment (MM-ALS), which aims to guide the assessment and intervention in complex organisations. In addition, it aims to validate the psychometric properties of the Subjective Work Environment Battery (B-ALS), which is based on the theoretical foundations of the MM-ALS, an instrument that assesses the well-being and occupational health of people in organisations and how this affects work performance.

#### Theoretical background:

The MM-ALS model brings together the influence of two theoretical approaches; the Multilevel Model of Organisational Culture and Climate by Ostroff, Kinicki, and Muhammad (2012) and the Demands and Resources at Work (DRL) theory by Bakker and Demerouti (2018) and its definition states that the „balance between personal resources - coping strategies - and job demands - job burnout - to which employees are exposed, are explained by organisational culture and climate and mediated by leader support, which in turn moderates intersubjective processes and organisational practices and impacts on well-being and job performance”. From the model of Ostroff et al. (2012), the MM-ALS construct considers the dimensions of organisational culture and climate focused primarily on the shared meanings of the work context, and mediated by organisational structures and practices, and in its specific dimensions of professional burnout (demands) and co-active coping styles (personal and work resources), it frames us directly with the theory of Demand and Resources at Work (DRL; Bakker and Demerouti, 2018). From the proposed construct, a Subjective Work Environment assessment instrument is developed that considers its different dimensions, called the Subjective Work Environment Battery (B-ALS, Barria-González et al., 2021; Pérez-Luco, 2008).

#### Design/Methodology/Approach/Intervention:

The sample is composed of 1,439 workers from service and production organisations, seven public and two private, in different cities distributed throughout Chile. In total, 55% of the sample belonged to public organisations, 34.5% to private for-profit organisations and 10.5% to private non-profit (social development) organisations. The age range was between 18 and 65 years, with a mean of 39.48 years and a standard deviation of 11.13. Forty-five percent of the sample were women. The organisations were purposively selected to represent different productive sectors and to be nationally representative.

#### Results obtained or expected:

So far, the MM-ALS is in the process of conceptual development in the doctoral thesis of the undersigned and the empirical formulation of the construct through the validation of the psychometric properties of each of the scales that arise from the construct and that make up the B-ALS instrument. Articles derived from the validation of the psychometric properties of the B-ALS scales are in the process of being published. Also, the application of the instrument to the employees

of a Chilean University is being piloted. In the medium term, the results of the evaluation and creation of interventions oriented to the work teams will be obtained from the model.

Limitations:

The model is multidimensional and integrates different dimensions, which makes its simplicity and analysis difficult. One of the important dimensions of the model is Organisational Culture and Climate, which in the literature there are few empirical studies of this relationship between the constructs as pointed out by González-Romá (2019). On the other hand, the B-ALS is a battery that has an important extension of scales and items that could affect the efficient response of employees.

Practical implications of the research:

The practical purpose of the MM-ALS and its B-ALS is to continuously provide the organisation with strategic information on the working conditions from the subjective experience of its workers, allowing it to manage through differentiated intervention the satisfaction and well-being of employees and the health of the organisation, with the consequent impact that this has on productivity indicators and operating costs.

Relevance to the conference theme:

This study presents a new model and instrument for the improvement of organisational well-being and health, considering dimensions that are little considered in the models of organisational diagnosis and intervention.

*Keywords: Model, Multidimensional, psychometric properties; assessment*

## Oral presentation OP49

### Multidimensional narcissism and emotional exhaustion at work

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science

Research goals and why the work was worth doing

Research on narcissism and emotional exhaustion at work has yielded heterogeneous results, often used homogeneous samples (e.g., in-patients or employees from one industry or company), and focused on unidimensional grandiose narcissism. Therefore, we examine the relationship between narcissism and emotional exhaustion at work (i.e., burnout and workaholism) with an industry diverse sample, focusing on the relative importance of the three narcissism dimensions narcissistic agentic extraversion, narcissistic neuroticism, and narcissistic self-centered antagonism.

Theoretical background

Workaholism and burnout are both indicators of emotional exhaustion at work. While workaholism describes a need to work excessively and hard, burnout encompasses a decrease in mental resources and a sense of indifference to the work environment (Schaufeli et al., 2008). Research on narcissism and burnout or workaholism has mainly focused on unidimensional grandiose narcissism and yielded heterogeneous results with some studies finding positive (Andreassen et al., 2012; Clark et al., 2010; Von Känel et al., 2017) and some studies finding non-significant relationships (Falco et al., 2020; Prusik & Szulawski, 2019). However, narcissism is a multidimensional construct (Crowe et al., 2019) and it is important to identify the differentiating associations of its dimensions (Lilienfeld et al., 2015). Research suggests that grandiose and vulnerable narcissism comprise three subdimensions, which are the focus of our study: Narcissistic agentic extraversion involves striving for acclaim and authority, and grandiose fantasies. Narcissistic neuroticism involves a need for admiration and validation, and feelings of shame. Narcissistic self-centered antagonism includes manipulative and exploitative behavior, and reactive anger (Miller et al., 2016). Von Känel et al. (2017) found, that the maladaptive dimension of grandiose narcissism (i.e., narcissistic self-centered antagonism) is positively associated with burnout. Furthermore, the Big Five correlates of narcissistic neuroticism (reversed emotional stability) and narcissistic self-centered antagonism (reversed agreeableness) suggest positive associations with burnout (Alarcon et al., 2009; Crowe et al., 2019). Therefore, we hypothesize that narcissistic neuroticism and self-centered antagonism are positively associated with burnout (H1). We hypothesize that due to the fear of shame and need for admiration and validation and due to the strive for acclaim (Miller et al., 2016), narcissistic neuroticism and agentic extraversion are positively associated with higher workaholism (H2). As narcissistic agentic extraversion should be positively related to workaholism, and workaholism is an antecedent of burnout (Moyer et al., 2017), we hypothesize that workaholism mediates the relationship between narcissistic agentic extraversion and burnout (H3).

Design/Methodology

Our sample consisted of 279 employees from different industries. All reliabilities were  $\alpha > .70$ . Supporting the measurement model, a five-factor model showed superior fit compared to a one-factor model ( $\Delta \chi^2 (10 \text{ df}) = 593.16, p < .001$ ). We simultaneously regressed all three narcissism dimensions onto burnout (H1) and workaholism (H2). H3 was tested with the PROCESS Macro for SPSS (model 4 with 10000 bootstraps; Hayes, 2018), while controlling for the other two narcissism

dimensions. All analyses were carried out with and without occupational status (1 = unskilled worker to 15 = proprietor of a large business ) as control variable (Dietl et al., 2016).

#### Results obtained

Supporting H1, only narcissistic neuroticism and self-centered antagonism were significantly positively associated with burnout. Supporting H2, only narcissistic agentic extraversion and narcissistic neuroticism were significantly positively associated with workaholism. Supporting H3, there was a significant positive indirect association between narcissistic agentic extraversion and burnout via workaholism. Results remained stable when occupational status was controlled.

#### Limitations

Future designs should realize at least two measurement points to disentangle the association of workaholism and burnout.

#### Conclusions

It is important to study narcissism multidimensionally as its dimensions have differentiating associations with burnout and workaholism. Particularly narcissistic neuroticism seems to be a risk factor as it relates to both workaholism and burnout. Narcissistic self-centered antagonism is also associated with burnout, especially with its subdimension depersonalization. The adaptive dimension narcissistic agentic extraversion is also linked indirectly with burnout through workaholism.

#### Relevance to the Congress Theme

To prevent emotional exhaustion at work in the future, it is important to identify associated personality traits.

#### Relevant UN SDGs

Good health and wellbeing

*Keywords: Narcissism, Burnout, Workaholism*

## Oral presentation OP417

### **Multilevel Job Demand-Control-Support: A between- and within-person examination of work characteristics and employee well-being**

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science&practice

#### Research goals and why the work was worth doing

Research on the characteristics of the work environment has mainly focused on between-persons differences, investigating whether employees dealing with high job demands and low job resources generally experience impaired well-being (Morrison et al., 2003). A major shortcoming is that this approach assumes that variables are completely stable over time. Conversely, recent studies highlighted that the perceptions of work characteristics and well-being are likely to vary over the course of employees' work experiences (e.g., Totterdell et al., 2006). Moreover, recent evidence showed that within-person fluctuations in work characteristics' levels could have contingent effects on well-being (e.g., Pindek et al., 2019). Thus, the present study is aimed at: (a) investigating the degree of stability and fluctuations of the three main components of the Demand-Control (-Support) model (DCS; Karasek & Theorell, 1990) and well-being across a three-months period; and (b) examining the association among work characteristics and well-being at the between-persons and the within-person levels. In doing so, we provide an updated representation of the DCS by testing whether the model is also suitable for understanding how well-being may result from interactions between employee and more situational, dynamic characteristics. Moreover, we integrate the between-persons and the within-person perspectives to investigate whether and how work characteristics are associated with well-being at both levels of the employee functioning.

#### Theoretical background

We rely on the DCS as our theoretical framework. The underlying rationale of the DCS is that impaired well-being occurs when specific combinations of workload, control and support make it difficult for employees to provide effective strategies to deal with the challenges of their job (Karasek & Theorell, 1990). This assumption has been tested at between-persons (or trait-like) level and, albeit only rarely, at within-person (or state-like) level. While the between-persons level reflects inter-individual variability and capture differences between employees, the within-person level reflects intra-individual variability and capture processes that happen within the individuals. So far, little is known on to what extent work characteristics and well-being (and their associations) differ with respect to their trait-like and state-like features, although most personality and organizational researchers contend that these variables are determined by both stable and dynamic factors.

#### Design

We recruited a sample of Italian employees to set up a shortitudinal research design (Dormann & Griffin, 2015). At time 1 (T1) we had a total of 1308 participants. One month later (T2) we had 638 participants. After one month, the final sample at T3 included 317 workers. Workload, control and support were investigated through the Management Standards Indicator Tool (Rondinone et al., 2012), while well-being was assessed with the General Health Questionnaire (Goldberg & Williams, 1988). We used a Doubly Latent Multilevel Structural Equation Modelling approach (Marsh et al., 2009) to investigate our research questions.

## Results

About two-thirds of the true variance in workload, control, support, and well-being was accounted for by the trait-like component, revealing that, although relatively stable, considerable within-person variations occur in the four variables. At between-persons level, trait-like workload, control and support were all significant predictors of trait-like well-being, explaining a total variance of 26.7%. Moreover, at within-person level, a non-negligible proportion of variance in well-being (6.4%) was accounted for by work characteristics, with higher-than-usual workload and higher-than-usual support significantly associated with state-like well-being.

## Limitations

The constructs were measured with self-report scales. Moreover, we limited our investigation to the three main components of the DCS and we did not include individual characteristics in our investigation.

## Conclusions and relevance to the congress theme

Our study demonstrates that the perception of work characteristics can fluctuate over time, and that such fluctuations can trigger certain levels of well-being on a more contingent basis. As the costs of poor mental health in the workforce are significant, proper occupational health interventions are needed to promote and protect employee well-being. These should enable employees to properly perform their tasks on a day-to-day basis, and to protect them against particularly intense periods of work which may lead to well-being issues.

*Keywords: work characteristics, well-being, multilevel model*

## Oral presentation OP244

### MY LIPS ARE SEALED! HOW EMPOWERING LEADERSHIP AFFECTS EMPLOYEES' ERROR REPORTING

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science&practice

**Research Goals:** This research aims to investigate the antecedents of employees' error reporting by exploring the role of empowering leadership. We argue that empowering leadership should positively influence employees' paradox mindset and, consequently increase employees' likelihood of reporting their errors. Additionally, we explored whether the positive effect of empowering leadership on employees' paradox mindset is affected by their gender. Our work advances knowledge on factors and conditions that affect employees' error reporting and contributes to the leadership literature by exploring the boundary conditions and mechanisms of empowering leadership.

**Theoretical Background:** Employees more often cover up their errors rather than report them (Carroll et al., 2021). As a result, leaders may not possess important information that otherwise could reduce the negative consequences of errors and lead to increased performance and innovation (Frese and Keith, 2015). Past research on error reporting suggests that the organizational context influences how employees perceive their errors and their willingness to report them (van Dyck et al., 2005). Although leaders are a critical element of this context (Christian et al., 2011) and the direct recipients of employees' error reporting (Zhao and Oliveira, 2006), little is known about how different leadership styles affect employees' error reporting. We propose that one leadership style likely to affect error reporting is empowering leadership as past research shows that it is particularly valuable for discretionary and potentially risky behaviors (Lee et al., 2016). Under empowering leadership, employees' should perceive less costs associated with reporting their errors, increasing their willingness to report them. We draw on social information processing theory (Salancik and Pfeffer, 1978) to argue that one's paradox mindset (i.e., the extent to which one is motivated and energized by tensions; Miron-Spektor et al., 2018) mediates the effect of empowering leadership on error reporting. Employees' paradox mindset enables them to constructively approach the tension imposed by the perceived costs and benefits of error reporting and reduce defensive strategies (e.g., ignoring the error or blaming a colleague). However, prior research shows that not all employees respond equally to empowering leadership, and that its effects depend on individuals' perceptions of these behaviors (Lee et al., 2016). We draw on social role theories (Eagly, 1987) to argue that due to persisting gender stereotypes, men and women are likely to react differently to empowering leaders.

**Design/Methodology:** We conducted a time-lagged field study in a variety of industries ( N = 254), with three data collection moments.

**Results:** We found that empowering leadership is directly associated with error reporting and that gender tempers the indirect effect of empowering leadership on error reporting via paradox mindset.

**Limitations:** We collected our data from the same source (i.e., employees), which may raise concerns regarding common method variance (Podsakoff et al., 2003). Nevertheless, we employed procedures to account for this possibility (Podsakoff et al., 2003).

**Research/Practical Implications:** Our research expands current understandings of the antecedents of employees' error reporting (Zhao and Oliveira, 2006; Russo et al., 2015), and specifically on the role of leaderships styles. Furthermore, by considering the mediating role of one's paradox mindset (i.e.,

a cognitive mechanism), we contribute to the empowering leadership literature which tended to focus on motivational mechanisms. Fostering employees' ability to embrace tensions in the workplace and react constructively to them (i.e., promoting their paradox mindset) should have an impact on how they approach the tension imposed by reporting their errors and increase their willingness to report their own errors. Finally, we contribute to the discussion on the effectiveness of empowering leadership by introducing gender as a boundary condition.

Originality/Value to the Conference: We demonstrate how leadership affects employees' error reporting. Also, we highlight gender differences in reactions to empowering leadership.

Value to the UN SDGs: Our study speaks to the goal of promoting gender equality, by showing that the same leadership style may produce different results for men and women.

Intended Audience: Academic and practitioner.

*Keywords: empowering leadership, error reporting, paradox mindset*

## Oral presentation OP448

### Narcissism and identity motives underlying self-employer brand relationship

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science

Studies on the role of narcissism, particularly grandiose narcissism, in organizational context are arising, however it was not studied as a factor related with employer brand nor with identity motives. Two studies regarding connections of narcissism and identity motives underlying self-employer brand relationship will be reviewed. Narcissism as a personality characteristic in subclinical sense is related with higher sense of superiority and sense of being better over others, desire for recognition and admiration, focus on own needs, with some differences between narcissism grandiose (e.g. dominance) and vulnerable (e.g. social withdrawal). The model of identity motives underlying self-employer brand relationship refers to a model of Vignoles of six identity motives (belonging, continuity, distinctiveness, efficacy, meaning and self-esteem) which was expanded by qualitative and quantitative studies of the first author in the area of work by submotives, e.g. distinctiveness includes individualism and superiority). The term of inclination to build self-employer brand relationship based on identity motives refers to beliefs, emotions and intention of behaviors toward ideal employer brand. In turn, the term sense of satisfaction of identity needs by employer brand refers to the present employer.

The first study focused on relationship between grandiose and vulnerable narcissism with inclination to build self-employer brand relationship based on identity motives. In the sample of 111 participants, who had considered changing jobs in the last 12 months, positive correlations between grandiose and vulnerable narcissism and all identity motives and sub-motives were found. Grandiose narcissism was a significant predictor explaining the level of all six motives. The specific target group and analyzing only inclination to build self-employer brand relationship as well as very limited literature on vulnerable narcissism constitute some of main limitations of the study.

The second study was aimed to understand moderating effects of employer brand strength and identity needs satisfaction on the relationship between grandiose narcissism and counterproductive as well as citizenship voluntary work behaviors. In the sample of 125 working persons, one of hypotheses was confirmed that grandiose narcissism, particularly leadership, was a significant predictor of counterproductive work behaviors. Explorative analysis revealed the positive relationship of narcissistic self-sufficiency and citizenship work behaviors. The hypotheses on moderating role of brand strength and sense of satisfaction identity needs by employer brand neither interaction of self-sufficiency and sense of satisfaction of identity needs on citizenship behaviors were not supported by data. One of key limitations of the study include predominance of the short work experience and of people during studies, what could result in not expressing full range of organizational behaviors, as well as wide range of occupations, what can dilute the effects.

We find the role of personality and identity as of key importance for understanding complexity of human functioning in modern organizations, and as such the studies contribute to research on the role of narcissism in functioning of an individual on the labour market, as well as for research on narcissism. The results of the studies may be particularly relevant with regard to growing scholarly interest about the meaning of the personality traits traditionally regarded as malevolent in organizational setting. The findings point out that highly narcissistic people are especially prone to look for the employment opportunities where they can satisfy their identity needs. However, the level of need satisfaction may not be indicative of their future involvement in organizational -

counterproductive or citizenship - behaviors. Furthermore, the findings underscore the need for more nuanced reconceptualization of grandiose narcissism.

The studies indirectly addresses the conference theme The Future is now? Delivery as it regards the role of one of arising individual characteristics for organizations.

The topic is relevant UN SDGs in the area of strong institutions.

*Keywords: narcissism, employer brand, work behaviors*

## Oral presentation OP331

### **Navigating resocialisation into the workplace as a mother-worker following an extended career break**

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science

**Research goals and why the work was worth doing:** The term women returners refers to women coming back into paid work after spending a significant number of years raising a family, having devoted themselves to motherhood (Tomlinson et al., 2009; Herman and Webster, 2010). The skills of women returners are of crucial importance to the labour market, yet there is little empirical evidence on women's experiences of this transition. Research suggests that returners face considerable structural obstacles to reentry (Cabrera, 2007), and experiences during return-to-work transitions have critical consequences for career success and professional relationships (Freeney et al., 2021). Moreover, the transition back to work amplifies tensions between identity as a mother and identity as a worker-mother (Ladge & Greenberg, 2015). We know little about how mothers navigate this transition back to work, particularly when confronting maternal penalties and inequalities (O'Brien & Liddy, 2021). Thus, this study seeks to gain insights into the lived resocialisation experiences of mothers who have spent three or more years at home caring for children.

**Theoretical lens:** We conceptualise return-to-work experiences through the lens of organisational socialisation theory (OST; Van Maanen & Schein, 1979), employing Chen & Klimoski's (2003) stages model of OS. This suggests that a newcomer progresses through three socialisation stages: anticipation, encounter, and adjustment.

**Method, Analysis and Findings:** We adopt a qualitative approach conducting semi-structured interviews with 34 mothers in a range of occupations. Inductive analysis revealed that, during the anticipation phase, mothers are attuned to market realities and take steps to up-skill and draw on their networks to orchestrate their return. The participants made decisions to return in the context of their relationships and personal values, some choosing to work part-time to balance motherhood responsibilities, others changing careers to occupations more consistent with their values. Women experience challenges predominantly in the anticipation phase: recruiter bias toward their CV gap, an undervaluing of motherhood, and poor fit with state support. In the encounter phase, mothers face challenges with finding their professional voice and adapting their work-life interface. The shift to the adjustment phase of socialisation is supported by positive professional relationships and often involves an evolution of mother-worker identities enabled by valuing their own contributions at work and at home.

**Limitations:** Our results are limited by the retrospective nature of the interviews. Ideally, longitudinal qualitative research would capture women's experiences during the early stages of the anticipatory phase so that we can fully identify triggers, in terms of content and timing, for occupational downgrading.

**Originality / Value:** Our analysis supports a stages model of resocialisation but identifies some inherent challenges in employing OST to inform our understanding of mother's reintegration. Traditional OST defines the 'anticipatory' phase, as the period just before "getting in" when individuals gather information about what/how the organisation is and their possible role within it. Our analysis suggests that, for mother-returners, the anticipatory phase begins long before the actual

return and, as they internalise stigmatised attitudes that exist towards mothers, they engage in 'occupational downgrading', opting for jobs for which they are overqualified.

We contribute to the literature on motherhood and work in surfacing subjective experiences of mothers' return-to-work experiences after a hiatus by applying Chen and Klimoski's (2003) phases model. We identify that, in the context of career breaks, the definition of the "anticipatory" phase should be extended to include, not only the period before "getting in", which is concerned with organisational/role expectations, but also the decisive "looking forward" period, in which women start preparing to transition back to employment. Emerging findings point to worker-mothers engaging in deep reflection on their sense of sense, with an emerging 'temporal identity' where they subjectively assess their current self in comparison to their past self and future ideal self. The distance between these temporal-based selves is associated with well-being and contentment.

Conclusion: Our study raises awareness of the unique issues confronting mothers as they interact with their worker-mother identities during the resocialisation process following a career break. Our findings highlight a lengthy 'anticipatory phase' where women internalise stigmas as a result of the barriers they face to successful reengagement with work.

*Keywords: career break; identity; motherhood*

## Oral presentation OP771

### Network analysis: an intuitive perspective on complex phenomena

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science&practice

With the advances of open science, researchers and practitioners face new challenges: deciphering large volumes of information data and maintaining inherent structures. Other areas of science have tackled this challenge by using network science and graph theory methods. In psychology, Network Analysis (NA) can be used as a novel psychometric approach for surveys. Literature suggests that NA provides a better way to understand both the architecture and the associations between the components of a model. This analysis offers an intuitive perspective on complex phenomena via models depicted by nodes (variables) and edges (correlations). One of its main advantages is the identification of components that are central, stronger, and actively involved, leading to a better understanding of the model with a potential impact on improving the application in work-related variables. Our main goal was to test the reliability and the structure of a questionnaire using NA, while comparing it with a traditional Exploratory Factorial Analysis (EFA). A total sample of 263 employees (89% Male) with ages between 19-61 ( $M=33.35$ ;  $SD=8.90$ ) and an average tenure of 7.84 ( $SD=5.78$ ). Participants responded to an online questionnaire of 28 items to evaluate 5 dimensions of the job-related questionnaire (leadership, task, engagement, individual expectations, organizational satisfaction); their voluntary consent was recorded by accepting the form. Data were analysed using JASP-stats. We applied Regularized Partial Correlation Networks (RPCNs) to explore relations among items without assuming any structure or model. We chose the Expected Bayesian Inference Criteria (EBIC) estimation with the graphical Least Absolute Shrinkage Optimization (gLASSO) regularization as the network estimation method since it provided the most adaptable estimations for ordinal, approximately normal data. Descriptive statistics were obtained for all variables and plots were examined. Reliability analysis presented alpha coefficients between .70 to .90. Results showed a positively correlated network and a stable 5-dimension structure. Based on visual inspection, theoretical dimensions showed good preliminary correspondence within the network. The Kaiser Meyer-Olkin was .95 and Bartlett's Test of Sphericity was significant ( $X^2=4731.15$ ;  $p<.001$ ). EFA found a five-structure explaining 58% of the variance. As a limitation, our measure was a self-report, which impedes control for single-method bias. Future research could also explore the use of NA in other variables or models. Our study confirms that the NA method can be used as an alternative to identifying the structure of the psychological scale. Furthermore, the results of the analysis are presented in a visual form facilitating the researchers to quickly identify the scale structure based on the relations displayed in the form of lines (thick-thin) and colours (blue-red). This NA will significantly help researchers, especially if some items or dimensions are very highly correlated so it is difficult to determine whether they are from the same structure. This is because NA presents network plots, weights matrix, centrality plots, and centrality tables that help researchers to make decisions. All this data visualization is useful for both researchers and practitioners not used to statistics, so this technique can help non-statisticians to get familiar with reliable statistics for validation purposes.

*Keywords: Network analysis, Psychometric networks, Exploratory factor analysis*

## Oral presentation OP390

### Network Approach to Work Addiction: A Cross-Sectional Study

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science

Research goal and why the work was worth doing: In this study, I aimed to use a network approach to conceptualize work addiction as a dynamic system of symptoms that are in direct relationships with each other. Such conceptualization might provide novel insights regarding potential targets of therapeutic interventions and prevention programs focused on work addiction.

Theoretical background: According to the World Health Organization and the International Labour Organization, every year over 745 thousand people die worldwide due to overworking. One of the mental health problems contributing to these deaths is work addiction, which has a prevalence rate of up to 10% among working individuals. Besides death, work addiction leads to other negative work-related phenomena such as occupational stress, job burnout, work-life conflict, and a global burden of disease. Typically, work addiction is investigated within the latent trait framework. However, previous studies showed some non-trivial direct relationships between the symptoms of work addiction. The presence of these relationships might indicate that there exists an additional process in which symptoms of work addiction influence each other. Such a process would be congruent with both clinical practice, in which intervention strategies focused on symptoms and relations between them are usually successful (e.g., cognitive-behavioural therapy), and the network theory of mental disorders (i.e., a theory behind network approach). Consequently, the network approach to work addiction might constitute a bridge between the results of quantitative studies on work addiction and intervention strategies applied in clinical practice.

Methodology: I used four datasets in which work addiction was measured with the Bergen Work Addiction Scale. Two datasets comprised responses from working Norwegians (  $n_1 = 16,426$ ,  $M_{age1} = 37.31$ ,  $SD_{age1} = 11.36$ ;  $n_2 = 776$ ,  $M_{age2} = 29.76$ ,  $SD_{age2} = 7.12$ ) and two datasets comprised responses from working Poles (  $n_3 = 719$ ,  $M_{age3} = 36.39$ ,  $SD_{age3} = 11.36$ ;  $n_4 = 715$ ,  $M_{age4} = 25.58$ ,  $SD_{age4} = 3.41$ ). I jointly estimated the four networks of work addiction and estimated the stability of the four networks. Then, I searched for potential clusters of symptoms, estimated symptoms' centrality (based on node strength), and estimated symptoms' predictability in each network. Finally, I quantitatively compared the edge weights in the four networks.

Results: Stability analyses indicated that all four networks were accurately estimated, with small to moderate confidence intervals around the edge weights. The four jointly estimated networks featured many consistent edges (e.g., an edge between conflict and problems) and two clusters of symptoms. The first cluster included salience, mood modification, and withdrawal. The second cluster included tolerance, relapse, conflict, and problems. Relapse was the most central symptom and mood modification was the least central symptom in each network. Mean symptom predictability varied between 23.1% and 28.6% across networks. In the omnibus tests of the six possible pairwise comparisons, only Network 1 differed from Network 4 (  $p < .001$ ), and Network 2 differed from Network 3 (  $p = .030$ ). Out of all 21 edges, four edges differed significantly between Network 1 and Network 4 and three edges differed significantly between Network 2 and Network 3.

Limitations: The symptoms of work addiction were measured with single items, which might have biased estimates of networks' parameters and reduce the validity of the results. The data were cross-sectional, which puts limitations on causal inference. Last but not least, the four samples were predominantly female and represented general populations from just two European countries, which

puts restrictions on the generalizability of the results to clinical populations and populations from other countries and cultures.

**Conclusions:** This study showed that the network approach constitutes a promising framework for studying work addiction. However, it also highlighted the need for conceptual clarification of the meaning of centrality in cross-sectional networks. The obtained results seem to indicate that centrality represent diagnostic importance of a symptom rather than its potential to influence other symptoms in a network.

**Relevance to the Congress Theme:** In recent years, there has been an exponential growth in the amount of research papers applying network analysis to psychological phenomena. It is probable that in the future, network analysis will become an important statistical tool for analysing work-related behaviours. Consequently, this presentation might allow the congress attendees to familiarize themselves with network analysis and make them aware of strengths and limitations of this statistical tool.

*Keywords: network analysis, work addiction, workaholism*

## Oral presentation OP129

### **Never Too Much? The Curvilinear Relationship Between Employees' Humor and Customers' Enjoyable Interaction: Moderating Role of Service Climate**

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science&practice

The current study intended to explore the usefulness of employee humor as a tool to make enjoyable customer interaction. Specifically, the current study explores the curvilinear role of employee humor by testing how much humor could remain beneficial and when it can start hurting the customer's experience. In the current environments, organizations are struggling to make their customers happy and for that purpose they are utilizing various tools to succeed in this purpose.

An enjoyable customer experience has been one of the prime goals of retail firms (Mottl, 2015) because a positive customer experience is crucial to the success of service organisations. Notably, a customer experience is expected to be improved if frontline employees (FLEs) use affective components when communicating with customer. One such component might be is "humor" which is an effective way of communication that allows FLEs to keep intact with customers and can promote customers' positive behaviours (Kobel and Groeppel-Klein, 2021) during their service interactions. Though, interpersonal interactions have an emergent, dynamic quality whereby key variables can change from moment to moment (Diefendorff and Gosserand, 2003). Consequently, we posit that the aspect of "when" is important to consider the difference between various time slots in a single service interaction because time sequence may positively or negatively impact customer outcomes. We, therefore, anticipate that the timing (the beginning, the middle or the ending) selected (when) by the FLE to use the humorous comments during service interaction may have differential effects on enjoyable interaction.

Although former studies attest the positive effects of humour on firms' outcomes (Blanchard et al., 2014), questions remain about how effective use of humor is unanswered. In other words, previous research shortfalls in explaining, Is more humor necessarily better? Therefore, by questioning the assumptions regarding the beneficial role of humor, previous research has drawn our attention to the fact that humor can be a potential tool in employee-customer interaction. When use it inappropriately, it can have serious consequences for organisations. Using the framework of too-much-of-a-good-thing (Pierce and Aguinis, 2013), we argue that while FLE's humorous remarks can bring joy, create a sense of intimacy and create a successful relationship between FLEs and customers up to a certain level, too much humor might not be fruitful for customer interaction (Eatough, 2021).

Service interactions are potentially uncontrollable and unexpected, it may appear that service organizations may face challenges in managing their positive and negative consequences through organizational policy and practice. However, organisational factors might serve as moderators, buffers, or help meet these demands (Kahn and Byosiere, 1992; Morris and Feldman, 1996). Specifically, we draw from social exchange theory (Blau, 1964; Cropanzano and Mitchell, 2005) that we presume that organisational service climate could potentially moderate a novel, curvilinear relationship between FLEs' humor and enjoyable interaction.

In study 1 (n = 318), using 2 × 3 factorial design, the ANCOVA results supported that humor used by the frontline employee in the time slot in the middle of interaction remains more enjoyable for the customers. In study 2, dyadic data from 387 service interactions between the frontline employee and

customers show a curvilinear relationship of frontline employees' humor with customers' enjoyable interaction. Our study results demonstrate that service climate moderated the curvilinear relationship of frontline employees' humor with customers' enjoyable interaction.

First, the current study used a cross-sectional design, and therefore we cannot claim a causal relationship between study constructs. Second, we have demonstrated that a moderate level of workplace humor is optimal for enjoyable interaction. Neither we nor our predecessors in humor research have been able to clearly define a moderate level of the workplace.

The results of two separate studies showed that unwise use of workplace humor has a dark side. The extent to which this dark side appears depends on two factors, such as suitable time and an appropriate quantity of humor to be used that can positively impact affect enjoyable service interaction. We also gleaned some information about the condition under which workplace humor strengthens or weakens the curvilinear relationship between workplace humor and enjoyable interaction.

The current research relates with congress theme by exploring positive and negative sides of employee humor at work. It remains relevant in current work situations where organizations are exploring more ways to provide quality service experience to their customers and compete with other organizations.

*Keywords: Employee Humor, Customer Enjoyable Interaction, Service Climate*

## Oral presentation OP656

### **New Ways of Work and Mental Health: Work Intensity as a Mediating Factor and Target Variable of Job Resources**

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science

Research goals and why the work was worth doing

The world of work has profoundly changed. Information and communication technology has expanded the availability of information and shaped our way to communicate and collaborate during the last decades. The variety of communication tools has increased, such as video conferencing, and work settings have changed due to increased flexibility both concerning work locations (e.g., working from home) and working hours (e.g., working in the evening). Also, the Corona crisis has accelerated these developments such as working from home. These recent changes in the world of work have not been given a uniform name in research but can be summarized under the general term “new ways of work”. The consequences of these new ways of work are the subject of controversial discussions on whether they are good or bad for employees’ health. To understand the impact of new ways of work on mental health, we have to address two fundamental questions. First, how are new ways of work related to consequences for mental health? Second, under which conditions do these consequences occur?

Theoretical background

Central dimensions of the “new way of work” are digitalization of work processes, flexibility concerning working times and locations as well as the dissolution of boundaries between the spheres of work and non-work. Digitalization and flexibility of workplaces are associated both positively and negatively with employees’ well-being. However, the mechanisms behind this relationship are not clear yet. Thus, we present work intensity as a link between new ways of work and mental health. Furthermore, we address two job resources to reduce this association: autonomy and boundary control.

Autonomy in the workplace means that employees have control over decisions within their job. We assumed that autonomy in the workplace negatively relates to work intensity and that the higher autonomy in the workplace, the weaker is the association between flexibility and work intensity.

The rise of technological devices such as laptops and smartphones allows the performing of work tasks at home outside of the workplace and regular working hours, thereby weakening the boundaries between the spheres of work and private life. As a countermeasure, a stronger perceived segmentation norm may protect from work-related technology use at home during non-work hours. Thus, we assumed that the perception of control over the self-determined drawing of boundaries between work and private life contributes to lower work intensity. Furthermore, we assume that boundary control buffers the relationship between the dissolution of boundaries and work intensity.

Design/Methodology/Approach/Intervention

Overall, 1097 employees of a public administration organization participated in the survey and answered a web-based questionnaire. All variables were assessed with existing measures. We tested all models with the statistical software R and conducted hierarchical regression analyses.

Results obtained or expected (if not available, it must be made clear when they will be)

The results provided evidence that flexibility and dissolution of boundaries were related to irritation and work engagement through work intensity. Moderated mediation analyses revealed that autonomy and boundary control moderated the relationship of flexibility respectively dissolution of boundaries with work intensity, protecting mental health.

#### Limitations

The present study has some limitations. First, we relied on cross-sectional data, which does not permit any strong conclusions about causal relationships. Therefore, future studies should focus on longitudinal processes to unravel the interrelations among new ways of work, work intensity, and mental health. Second, another limitation of the present research is the use of self-reported data, which may inflate the correlations between the variables. However, the use of self-reports for the assessment of work intensity and strain is appropriate because these aspects are experienced by the persons.

#### Conclusions – Research and/or Practical implications/Originality/Value

The results indicated that work intensity could be perceived as a conceptual bridge between new ways of work and mental health providing a promising starting point for the deployment of job resources such as autonomy and boundary control. However, these resources have to match the specific demands imposed by new ways of work. The matching of appropriate resources and implementing them in organizations remains an ongoing task in the face of changing work arrangements.

#### Relevance to the Congress Theme

This research explicitly addresses with new ways of work the congress theme “The future is now: the changing world of work”.

#### Relevant UN SDGs

Good health and wellbeing, Decent work and economic growth

*Keywords: new ways of work, work intensity, mental health*

## Oral presentation OP381

### **New Ways of Working in Relation to Job Characteristics and Well-being: A Cross-Lagged Panel Study**

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science&practice

New Ways of Working (NWW) refer to a work design in which employees can determine the timing and location of their work, while being supported by electronic communication. Although this work practice is gaining popularity in the work field, it is surprising that research on this topic seems to be lagging behind. While past research on this topic suggests that NWW are related to both beneficial (e.g., increased engagement and performance) and detrimental (e.g., blurred work-home boundaries and fatigue) employee outcomes, most of these findings stem from correlational studies conducted in specific work sectors (Kotera & Vione, 2020).

Building on the Job Demands-Resources Model (JDR; Bakker & Demerouti, 2007), job demands and resources have traditionally been studied at the task level. However, they can also be conceptualized at a higher level. In this regard, organizational demands and resources refer to employee experiences of the distal, contextual, or system-level aspects of the organizational environment (Albrecht, 2012), which provide context for how employees experience their work (Albrecht et al., 2015; Leiter & Bakker, 2010). Consequently, they may impact individual demands and resources and influence their effect on employee outcomes (Bakker & Demerouti, 2007; Demerouti & Bakker, 2011). In this study, building on the JDR and Renard et al.'s (2021) positive conceptualization of NWW as organizational practices that lead to positive employee outcomes, we wanted to examine whether NWW can be conceptualized as an organizational resource that impacts employees' well-being over time through changes in their perceived task characteristics. In specific, we focus on two well-being indicators (i.e., pleasure at work and risk of burnout), and seven task characteristics (i.e., work intensification, task changes, norms of colleagues to stay connected, workplace telepressure, and manager's support of employees' commitment).

Data were collected from a heterogenous sample of 881 Belgian workers who participated in at least one of two online surveys during the period June-September 2021 (time lag of three months). At Time 1, a large proportion of the labor force was required to work from home to contain the spread of the COVID-19 virus. At Time 2, this obligation was lifted which could have caused changes in NWW over time. We performed cross-lagged Structural Equation Modeling (ML estimator) in MPlus 8.7 to test the hypotheses. Bootstrapping was used to calculate 95% confidence intervals of the indirect effects.

The results show that NWW at Time 1 was negatively related to both work intensification and task changes at Time 2, and positively to norms of colleagues to stay connected to work during after-work hours at Time 2 (after controlling for baseline values at Time 1). However, we did not find a significant effect of NWW at Time 1 on workplace telepressure and manager's support of employees' commitment at Time 2. NWW at Time 1 negatively predicted WHI, but was not significantly related to HWI at Time 2. Next, none of the task characteristics at Time 1 predicted work pleasure and risk of burnout at Time 2. Accordingly, no indirect effects proved to be significant.

Study limitations are the use of self-reports to measure the study variables, and the two-wave cross-lagged design only allowing us to investigate rank-order (between-person) relationships across time instead of intra-individual processes.

This study contributes to previous studies on NWW by offering a comprehensive test of multiple task characteristics that may explain the relationship between NWW and employee well-being. As such, it answers the call for more research into the impact of NWW on employees that considers a wide range of outcomes and to test its effect in diverse workforces using a longitudinal design (Kotera & Vione, 2020; Renard et al. 2021). Our results suggest that NWW might be particularly beneficial to employees by making the work situation less demanding in terms of work intensification, task changes and WHI. However, we did also observe a negative effect of NWW as manifested through greater pressure from colleagues to be available after working hours. Notably, none of the task characteristics affected employee well-being over time. As multiple factors can account for this, like the context of the study (COVID-19 pandemic) and the length of the time-lag (short time-lag of three months), we urge researchers to further explore these relationships and probe into possible moderators on individual, team and organizational level that may amplify or buffer outcomes related to NWW.

This study best fits within the '8. Organisational design and development' EAWOP topic area. It also contributes to the UN Sustainable Development Goals of 'Good health and wellbeing' and 'Decent work and economic growth', as it investigates the relationship between NWW and employee well-being and addresses ways to protect the welfare of home workers.

*Keywords: work characteristics, hybrid work, wellbeing*

## Oral presentation OP640

### **No One-Size-Fits-All: Paradoxical Leader Behavior Influences Followers' Creativity Depending on Followers' Integrative Complexity**

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science

#### 1. Research goals

As paradoxical cues can elicit out-of-the-box thinking, they improve the creativity of those confronted with them. First studies show that the same is true for paradoxical leader behavior ("seemingly competing, yet interrelated, behaviors to meet structural and follower demands simultaneously and over time"; Zhang, 2015, p. 538), as paradoxical leader behavior is associated with higher creativity of followers. Yet, evidence on this effect is scarce and consistently non-experimental. We therefore provide experimental evidence on how paradoxical leader behavior influences followers' creativity, depending on the followers' characteristic of integrative complexity.

#### 2. Theoretical background

Leaders have to meet seemingly contradictory demands like treating followers uniformly while allowing individualization, or maintaining decision control while allowing their followers autonomy. Therefore, some leaders show paradoxical leader behavior (PLB) to meet those demands. Studies show positive relationships between PLB and various measures of followers' performance including creativity. Nevertheless, PLB also has the potential to confuse followers with its contradictory nature, especially if followers cannot differentiate and integrate different facets of a complex issue (i.e., integrative complexity), potentially hampering those beneficial effects. We therefore expect followers' integrative complexity to moderate how their creativity is impacted by PLB, such that followers with high levels of integrative complexity profit more in creativity from PLB than followers with low levels of integrative complexity.

#### 3. Design

We conducted an online vignette-experiment with two times of measurements ( $N = 164$ ): At  $t = 1$ , participants wrote paragraphs for coding integrative complexity. At  $t = 2$ , participants were randomly assigned to a vignette for PLB (PLB condition) or one of two vignettes for non-PLB (later combined to the non-PLB condition). Afterwards, creativity was measured using the Compound Remote Associates Test. Participants who did not complete the survey and participants who gave no or only nonsensical answers in the tasks for integrative complexity or creativity were excluded ( $N = 17$ ).

#### 4. Results

As expected, there was a significant interaction of the conditions and integrative complexity: Higher levels of followers' integrative complexity were associated with higher creativity in the PLB condition (but not in the non-PLB condition). We found no main effect of PLB on creativity.

#### 5. Limitations

While being a strength of our study, the experimental design using vignettes also compromises ecological validity of our findings.

Despite measuring integrative complexity a-priori and assigning conditions randomly, high values of integrative complexity were scarce in the PLB condition, making evidence on followers with high IC in the PLB condition less reliable.

#### 6. Research/Practical Implications

Although current literature emphasizes the positive effects of PLB on followers, we found a negative impact of PLB on followers with low integrative complexity. Leaders aiming to enhance creativity with PLB should make sure to not confuse their followers, especially those low in integrative complexity.

#### 7. Originality/Value

To our knowledge, this study constitutes first experimental evidence for the influence of PLB on follower creativity.

#### 8. Relevance to the Congress Theme

Our study contributes to the facet „The future is now. Contribution.“ of the Congress Theme: The future as being created by professionals from many fields will be rich with paradoxes, meaning seemingly contradictory demands. To handle the paradoxical demands, we need to develop new competences to compete and collaborate. Leaders need new competences to handle paradoxical demands connected to the leader role and followers need new competences (e.g., integrative complexity) to benefit from their leaders' paradoxical behavior in order to produce, for example, highly creative work.

*Keywords: Paradoxical leader behavior, integrative complexity, creativity*

## Oral presentation OP457

### **No Profile, No Job? Investigating the Role of Missing Information and Recruiter Perceptions in Cybervetting**

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science

#### Research goals

Cybervetting, i.e., recruiters assessing applicants' social media profiles, is a new standard procedure in personnel selection: Various studies found that two of three recruiters engage in such scouring of online information. The goals of this study are three-fold, (1) to evaluate the influence of online information absence on recruiter judgments, (2) to investigate recruiters' decision processes in cybervetting, and (3) to evaluate the factors that influence these processes.

#### Background

There is a controversial debate about whether HR professionals should use social media for selection. So far, decision processes in cybervetting have remained a black box: That is, it is still unclear which cybervetting perceptions drive a recruiter's judgment. In our study, we investigate three variables that are promising mediators in cybervetting evaluations: Warmth and competence (two major dimensions of interpersonal perceptions, see social cognition theory) and the professionalism construct (often mentioned in practitioner surveys). One further concern in this debate is that social media profiles might be highly unstandardized: They differ in the quantity of available information, e.g., due to privacy concerns, personal preferences or general skepticism. Yet, it is unclear how recruiters react to such differing levels of information: Surveys with HR professionals suggested that missing or outdated profile information elicits negative reactions. At the same time, they reacted positively to the applicant's use of privacy settings, i.e., restricting available information. These contradictory information leave job seekers and practitioners with uncertainty.

#### Methods

Based on a power analysis, we recruited 363 German working professionals. In an online experiment, we asked them to act as a recruiter for a position as a junior project manager. Then, participants were randomly assigned to an experimental group, in a 2 x 3 x 2 between group design: Depending on their group, as manipulated, they saw the CV of a high or low qualified candidate (2 levels), who had a LinkedIn profile (3 levels of content detail: (1) maximum privacy settings: name and current occupation; (2) basic information about education, prior employers; (3) full profile: postings, details about prior jobs, study majors, grades, specific interests, and skills) that included either a profile picture or not (2 levels). Additionally, as a baseline, a subsample of participants rated the hireability of an applicant who had no LinkedIn profile. We will conduct variance analyses (MANOVA) and structural equation modeling (SEM) to test our hypotheses. The local ethics committee approved our procedure; we pre-registered our procedure.

#### Expected results

Data was collected in late 2022, data analysis is ongoing. We expect that the availability of information and a profile picture will impact hireability judgments, namely expectations of task performance, organizational citizenship behavior, counterproductive work behavior, and overall hireability judgments: The higher the amount of information, the more positive the judgments. As

mediators, i.e., recruiters' perceptions that drive their judgments, we suggest that perceptions of honesty, agency, communion, and professionalism are central mediators in cybervetting judgments. As a moderator, we expect that a higher perception of the applicant's privacy intention reduces the effect of missing information.

#### Limitations

We point out that our study is a vignette study: Thus, we call for future research to investigate how our findings transfer to other contexts. Also, joint effects of various platforms should be investigated. Research should also address the influence of applicants' attitudes on their profile design as well as cybervetting effects in comparison to "classical" CVs.

#### Implications

This study contributes insights to the debate about cybervetting, a growing yet controversial HR practice. Specifically, we provide substantial evidence how recruiters react to missing information in cybervetting, e.g., due to the use of privacy settings. Further, beyond self-reports, we illuminate recruiters' decision processes in cybervetting. These results send an important signal to HR professionals and provide input to the controversy about cybervetting validity.

#### Relevance to the Congress Theme

From hand-written cover letters to one-click applications: The future of HR is now. Online footprints from job seekers might be substantial first impressions—but studies need to investigate whether cybervetting can truly fulfil this promise. However, such research is still scarce. This is mirrored in that most organizations use cybervetting, but provide no guidelines for their HR professionals how to do so. With this study, we echo calls for insights into how the world of work is changing.

*Keywords: cybervetting, social media assessments, personnel selection*

## Oral presentation OP146

### No work at work: Is it better to recover than to be idle?

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science

#### Research goals

We investigate how idle time at work, a period during which in-role tasks cannot be done for reasons beyond one's control, affects employees. The job demands-resources model assumes that recovery is a resource and an advantage for employees, whereas action regulation theory states that individuals want to achieve the goals they set for themselves and that adjustments in the goal achievement strategy negatively affect individuals. We want to find out which theoretical framework is the appropriate one for idle time and recovery: Recovery during idle time as a positive resource from a JDR perspective or a costly adaptation to the action regulation process from an action regulation perspective.

This research is worth doing because little is known about the effects of idle time at work on employees. Until now, only either objective or subjective measures have been investigated, but not both. We thereby do not know how objective idle time influences employees subjectively. With this study, we are able to identify the effects of idle time on employees, additionally mediated through boredom. We expect objective idle time to have negative effects on (a) task satisfaction, (b) motivation, and (c) well-being, and (d) a positive effect on exhaustion and that recovery experiences during idle time moderate these effects.

#### Theoretical background

The job demands-resources model argues that job demands positively influence exhaustion, while job resources positively influence motivation. We argue that idle time is a job demand that employees need to overcome during their work but often cannot and that recovery experiences are resources that may buffer the negative effects of idle time. Action regulation theory argues that sequentially complete actions are beneficial for employees, making both idle time and recovery experiences interruptions to the action regulation process.

#### Design

We used an experiment to investigate the effects of idle time on participants. After the baseline questionnaire (containing age, gender, and education), we presented 20 of the 60 items HEXACO, then asking participants about their task satisfaction, motivation, well-being, and exhaustion as baseline measures. After presenting the next 20 items of the HEXACO, we manipulated idle time in 6 experimental groups: (1) no idle time (control group), (2) mouse click condition (to indicate that participants are still at their computers), and the four subscales of recovery experiences: (3) relaxation instruction, (4) detachment instruction, (5) mastery instruction, (6) control instruction. Idle time duration was 5 minutes for all experimental groups. Participants were instructed to continue with the study as soon as the continue button appeared (cover story: an AI generates new items). We then presented the last 20 HEXACO items before the final questionnaire, again containing task satisfaction, motivation, well-being, and exhaustion. We additionally asked for the four recovery experiences subscales, whether they engaged in the suggested activities during idle time, and how much they enjoyed them. Finally, we asked whether they subjectively experienced idle time and how bored they were.

## Results

We expect idle time to have negative consequences for participants. Recovery strategies may buffer the negative effects on the outcomes. After preregistering our hypotheses, we will conduct the experiment and we expect to obtain the results in December 2022.

## Limitations

We could not control whether participants actually engaged in the activities we assigned them to but measured whether they did.

## Conclusions

By using the job demands-resources model as a framework we may identify whether recovery strategies at work are always a resource for employees and which might work better than others. Action regulation theory argues that individuals want to achieve their goals and that interruptions or necessary adjustments to goal pursuit cost energy, which could include (recovery during) idle time. Our results contribute to a better understanding of both theoretical frameworks and the relatively new construct of idle time.

## Relevance to the Congress Theme

How do we want to work in the future? The workday is becoming increasingly flexible and employees and companies need to develop strategies on how employees can effectively deal with certain adversities in the workday. We need to educate stakeholders on how to deal with certain situations, such as idle time.

## Relevant UN SDGs

We argue that employees need to have “decent work and economic growth” as well as “good health and well-being” not only in their work. We want to identify whether idle time at work may be detrimental or beneficial for employees and translate these findings into practice. By identifying strategies that employees can use to counter idle time, we contribute to active work design.

*Keywords: idle time, recovery, boredom*

## Oral presentation OP43

### Noise as stress factor for school staff: Results of a qualitative interview study

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science&practice

Noise exposure and poor room acoustic (reverberation) are among the greatest stress factors in the teaching profession. Surveys conducted with school staff show that specially noise coming from students is perceived as highly stressful. Depending on the situation, average sound pressure levels between 60 and 80 dB(A) can be measured at schools and during classes, which causes numerous physical and psychological reactions (e. g. impaired concentration, influenced affectual state).

The present interview study is part of a multi-component research project of the Occupational Health Institute for Schools in Bavaria (abbreviation: AMIS-Bavaria), which aims to identify school-specific noise sources and explore how noise affects the daily work and the stress experience of school staff.

In semi-standardised interviews, teachers and school administrators were asked to assess recurring noise situations at their schools. In doing so, participants should consider their cognitions, emotions, and actions when assessing noise-related effects and strategies used in order to cope with noise exposure. In addition, typical noise sources and situations in schools were to be evaluated with regards to the perceived loudness and level of annoyance. As part of the multi-component research project the interview data is supplemented by acoustic measurements at schools. The results enable the derivation and implementation of suitable noise prevention measures in schools.

The transcribed interviews were evaluated using qualitative content analysis by helps of the statistical software MAXQDA. Overall, 25 interviews have been conducted between March and September 2021. A heterogeneous sample was selected with regards to professional experience, type of school, etc.

The results indicate that school noise is perceived as particularly stressful if the noise source cannot be influenced. This especially applied for noise coming from the school environment (e. g. noise from the schoolyard, road traffic) and for noise generated by technical equipment (e. g. beamers, heating, ventilation). When assessing noise generated by students' verbal and non-verbal activities, teachers' perceived stress depends on the respective context. If students' noise is assessed as reasonable or useful, e. g. because a question is being discussed, the perceived stress level is low, even if the volume increases. Initial results of acoustic measurements indicate that situations reported as particularly annoying in the interviews, actually reach high volume levels. This is especially true for sports lessons in gymnasiums and the working environment in the teachers' lounge.

The data shows that there is a need for appropriate actions to reduce noise exposure and create space for recovery. Furthermore, the reported coping mechanisms provide valuable approaches in dealing with school noise.

*Keywords: noise, teachers, health*

## Oral presentation OP736

### **Not all jobs can be done from home – Developing the Mobile Work Potential Score to identify characteristics of jobs that can be done from home**

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science&practice

Research goals and why the work was worth doing

When the pandemic hit large numbers of employees were working from home (WFH) or had other flexible work arrangements. Even with a relaxed obligation to work mobile flexible work arrangements remain in many organizations. However, it stays unclear which jobs require physical presence in the organization and which jobs can be performed remotely without major limitations.

We do not know which employees should be allowed to work mobile. Given the high saliency of the topic, we developed the Mobile Work Potential Score (MWPS), a scale that is independent of general factors such as industry, occupation, personal traits instead limited to an individual's job.

Theoretical background

The job-characteristics model (JCM) (Hackman & Oldham, 1976) identified five core job characteristics affecting relevant work related outcomes. Since the working environment changed rapidly with the increased amount of mobile work, work design scholars argue for the need of theory keeping up with the changing working environment (Gibson et al., 2011; Humphrey et al., 2007).

Following this argumentation, we identify relevant job characteristics that allow for a job to be performed from home. We argue that there are four distinct dimensions that determine whether a job can be performed mobile:

Digitizability refers to the potential of a task being digitally feasible. It focusses on the technical possibility to work mobile.

The dimension Autonomy is built on the argument that increased autonomy leads to higher employee motivation (Gajendran & Harrison, 2007), one of the most relevant characteristics when researching the potential to work mobile.

The dimension Internal Cooperation focuses on exchange between employees. We explicitly consider informal exchange as it shapes social networks and the culture in organizations. Incorporated here is feedback from colleagues and supervisors.

External Cooperation focuses on the exchange between employees to other persons outside their organization, drawing from media richness theory (Daft & Lengel, 1986) . We argue it is easier to build trust to external partners and customers in person (Rockmann & Northcraft, 2008).

Design/Methodology/Approach/Intervention

Following interviews, literature search and a pre-survey, we developed a set of items included in two surveys for two independent samples. These items were grouped into the four dimensions theoretically developed, consisting of four or five Likert-type scale items.

We ran exploratory factor analysis (EFA) followed by confirmatory factor analysis (CFA) on the first sample with 619 employees from one company. This first survey was conducted in April 2021 in a company mostly not allowing its employees to work mobile before the pandemic. We used a second

general labor force sample with 346 employees of another CFA for validation of our results and performed structural equation modeling on several dependent variables we hypothesize to be influenced by the MWPS, such as performance, engagement, exhaustion. A third such survey with another company is its finishing stage.

#### Results obtained or expected

The EFA supports our assumption there are four distinct factors and all items load on their intended factor with Cronbach's Alpha ranging from .79 to .93. The CFA results in a model with a very good fit (CFI is .963, TLI is .951, RMSEA is .081 with a CI (90 per cent) from .068 to .093, SRMR is .093).

In our SEM we find a strong positive relationship of the employee's performance and assume positive relationships to the other work-related outcomes. Further results of the two samples will be available in December, the analysis of the third sample has not yet started.

#### Limitations

In future surveys we might incorporate and test an adapted version of items we had to remove since it was formulated negatively resulting in a bad fit.

#### Conclusions

Adding to the growing literature of WFH, the MWPS can be used by researchers and practitioners to assess the mobile work potential for research as well as for decision making.

#### Relevance to the Congress Theme

The changing world of work comes with a lot of unanswered questions – both challenging for science and practice. We know there are many employees wishing to continue to work mobile at least some days of the week. The current developments call for investigation and with the MWPS we close one relevant gap by extending the established job characteristics knowledge to the digital work world.

#### Relevant UN SDGs

This work is relevant to the UN SDGs of reduced inequalities (10) as well as for decent work and economic growth (8) as it advocates for fair and equal work design decisions based on evidence about a jobs characteristic. Some jobs are labelled "unsafe jobs", as they put the workers at risk of being infected by viruses when WFH is not possible. Such jobs are very unequally distributed across types of workers (Basso et al., 2022). Our scale development helps to promote better work conditions.

*Keywords: Working from home, mobile work, job characteristics*

## Oral presentation OP250

### **Not in need for help? How type of work-family conflict shapes the amount of social support received**

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science&practice

Research goals and why the work was worth doing: Many parents experience work-family conflict when trying to fulfill both work and family roles. Experiencing this conflict leads to negative consequences on well-being, attitudes, and behavior at and outside work (Amstad et al., 2011). Recent evidence shows that parents experiencing family negatively impacting work (FIW; e.g., leaving work earlier to pick up children from school) are perceived more negatively than parents experiencing work negatively impacting family (WIF; e.g., missing family events due to work) (Butler & Skattebo, 2004; Steiner et al., 2021). This research examines to what extent the social support these parents receive also depends on whether they experience more FIW or more WIF, and how gender could moderate this effect.

Theoretical background: A vast body of literature shows that experiencing work-family conflict is associated with negative effects in the work, family and health domains (Amstad et al., 2011). Social support is an important buffer of these negative effects, attenuating the negative health consequences of both WIF and FIW as well as the level of conflict (French et al., 2018). However, social support may depend on the type of conflict: Parents experiencing FIW are perceived more negatively by others (e.g., colleagues, supervisors) at work compared to parents experiencing WIF (Steiner et al., 2021). These perceptions may determine the willingness to provide support. We therefore conducted two studies examining to what extent the type of work-family conflict determines the amount of social support provided.

Design/Methodology/Approach/Intervention: Study 1 was a vignette study with a 3 (type of conflict: WIF vs. FIW vs. no conflict) x 2 (Gender in profile: man vs. woman) between design. 251 participants were recruited (mean age 42.43 years, 45.8% of women, 47% of parents). We measured emotional and instrumental support by adapting Vaux and colleagues (1987) scale, so that participants reported social support they provide to the coworker described in the vignette. Advice support was measured by asking the participants whether they would like to give advice to the target in an open text format. For Study 2, we recruited 257 participants (mean age 39.97 years, 44% of women and 56% of parents). As gender did not show an effect in Study 1, only the type of conflict was manipulated in Study 2. Same variables measured in Study 1 were measured in Study 2, but we added a measure of instrumental support, i.e., charity donation (amount of money donated to a charity supporting working parents).

Results obtained or expected (if not available, it must be made clear when they will be): We found that participants tend to give less social support to coworkers facing a WIF than to coworkers facing no-conflict or FIW in both studies. They also tended to donate less money to charities supporting working parents after being confronted with an individual experiencing WIF. In line with these tendencies, the analysis of the advice content showed that participants suggested less frequently to ask for help and more frequently to simply handle both work and family care to coworkers facing WIF compared to coworkers facing FIW. This pattern of advice was consistent across Study 1 and 2.

Limitations : Both Study 1 and 2 were vignette studies. Future research should investigate these questions in organizational settings.

Conclusion/Practical Implications: This research showed that the type of work-family conflict tends to play a role in determining how much social support individuals receive. Individuals facing WIF tend to receive less social support from their coworkers, suggesting that they are perceived as less in need for it than coworkers experiencing FIW. Because social support is important for both workers experiencing FIW and WIF, organizations could implement measures (e.g., empathy trainings (Johnson et al., 2013) to increase the willingness to help parents facing work-family conflict.

Relevance to the Congress Theme: This research highlights the inequalities in receiving social support when facing work-family conflict and raise the question of the possibility to provide some type of social support (e.g., emotional support) in new work-settings, like remote work.

Relevant UN SDGs: Work-family conflict leads to negative mental and physical consequences, which could in turn impact work performance. To overcome these difficulties, individuals need social support from work. This research is thus important as it showed inequalities in receiving social support between types of work-family conflict, and thus, that individuals facing work-family conflict could not only rely on coworkers for help. Indeed, organizations should implement strong policies to guarantee equal work opportunities for all parents facing work-family conflict.

Intended audience (Academic, Practitioner, Both): Both.

*Keywords: Work Family Conflict , Social support, Gender*

## Oral presentation OP181

### Not us, not now: Why the climate crisis is not perceived as a corporate crisis

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science&practice

Climate change not only poses a threat for human survival in the long run (McMichael, 1993), but is already now a tangible risk for organizations: Physical and transitional risks resulting from climate change have significant impact on organizations (Sanderson et al., 2019) and their members' well-being (Lamb & Steinberger, 2017). However, despite the scientific evidence for such risks, the so called "risk perception paradox" prevents people to act (Wachinger et al., 2013). Even when people are confronted with natural hazards and should therefore develop a high-risk perception, they are not necessarily prepared to act or willing to mitigate future risks.

Compared to other risks, climate change is characterized by unique features – magnitude, complexity, and distance in time and space (Spence et al., 2012) – that influence how it is perceived (Breakwell, 2010). Therefore, advancing a more detailed understanding of the psychological factors that drive individual risk perceptions of climate change is a pivotal task, given that a large amount of studies are indicating that risk perception is an important predictor of the public willingness to engage with climate change (Leiserowitz, 2006). However, to our knowledge there is no empirical evidence on the psychological factors shaping climate risk perception and action in the corporate context. Therefore, we address the following questions in our study: Why is the climate crisis not perceived as a corporate crisis, and what can we learn from the engagement with other social-environmental crises?

These questions were the focus of a sixteen-month ethnographic case study of a German Energy Company (EnCo). EnCo offered a particularly instructive case, because we could investigate the corporate engagement with several socio-environmental crises in real-time across hierarchical levels: During our research period, the company was exposed to a natural disaster, the war in Ukraine, and the overarching climate crisis. Through analysis of observational (>60 days), interview (70+ interviews), and documentary data (500+ pages) we explored how differently the actors in the organization dealt with the three crises. To guide our analysis, we followed the principles of grounded theory in our inductive study (Glaser & Strauss, 1967), and draw on the method of Gioia et al. (2013).

We introduce the PANNIC model of corporate climate risk perception, thereby extending the PAIN theory (Gilbert, 2014). Our analysis shows that six factors mainly influenced the low climate risk perception and consequent low engagement of corporate actors. Compared to the other two socio-ecological crises, the climate crisis is not perceived as

Personal [substantial effect on work role and work environment, direct link between private and business role],

Abrupt [immediate influence on everyday business, establishment of new normal],

Now [visibility of consequences, real-time permanent engagement],

Negative [strictly negative emotional engagement, physical stress reaction, no positive re-framing],

Immoral [strong link to human crisis, perception of malpractice],

Collective [collective action and sensemaking enforced].

Thus, this study advances our understanding of the relative contributions of various risk features to corporate climate action. Moreover, we show how perceived tensions between the three dimensions of sustainability (economic, ecological and social) dissolve over time to the extent that the climate crisis is no longer perceived as a purely environmental-technical crisis, but as a social-economic crisis.

Because we studied a single case, our proposed model comes with limitations. We studied the risk perception in the energy industry, which is highly exposed to several sustainability risks and thus might differ from other industries and locations. Moreover, our model was developed based on qualitative data and needs to be verified quantitatively with a larger sample.

Yet, we respond to the call by van der Linden (2015) to further explore the connection of cognitive, experiential and socio-cultural factors in shaping risk perceptions of climate change in contrast to other types of environmental risks and crises. Hence, this paper contributes to the literature on climate change cognition (Boon-Falleur et al., 2022) and risk perception (Slovic, 1993), as well as to organizational risk management by showing how social-psychological factors steer corporate climate action. We discuss how the public debate can take the six factors of the PANNIC model into account in order to increase visibility of climate change, risk perception but also response to the climate crisis.

This research project mainly addresses SDG 8 and 12, as we investigated corporate engagement with several socio-ecological crises that now ask for immediate action to prevent further devastating changes of our world (of work). Hence, it clearly fits the theme of EAWOP 2023.

*Keywords: climate crisis, risk perception, corporate climate action*

## Oral presentation OP327

### Novel aspects in strengthening identification in a self-managing organisation

Merja Luostarinen, Work Research Centre, Tampere University, Finland; Jari Hakanen, Finnish Institute of Occupational Healthcare; Anne Mäkikangas, Work Research Centre, Tampere University, Finland

science&practice

#### Research goals

Given the limited amount of research on identification in self-managing organisations, where the number of formal leaders has been minimised, this study aimed to understand the measures a case organisation takes to strengthen identification. Specifically, the research aimed to find novel means organisations could employ to promote identification in their employees. Promoting identification seems to benefit both parties of the employment; from the employer's perspective, it's predicted to lead into e.g., more in-role and extra-role behaviour, as well as carefully co-ordinated teamwork. On the other hand, employees who identify strongly are likely more satisfied and motivated by their work, as well as experience psychological wellbeing and engagement.

#### Theoretical background

Previous research has shown that strong social identity leadership that is, leaders seen as 'one of us', actively crafting what it means to be 'us', advancing 'our' shared goals, and structuring 'our' meaningful actions towards the shared goals, lead into strengthened identification in the employees. Similarly, stronger organisational justice perceptions, particularly processes considered fair, have been shown to promote identification. Furthermore, experimental evidence suggests the initial identification may be aided by including prototypical members in the recruitment and induction, as well as by discussing the organisational values during these practices. However, only limited amount of qualitative research exists on the topic, and barely any studies have addressed the topic in self-managing organisational context.

#### Methods

Qualitative case study and triangulation were chosen as methods to secure rich data and uncover new approaches to the topic. The primary data consisted of five semi-structured interviews with the CEO, COO and two informants in HR team, as well as three focus groups with the employees of the IT consultancy. Four recorded townhall meetings were also included. The additional data sources strengthened the understanding of the lived organizational experience. The data was analysed following theory-guided content analysis.

#### Preliminary results

The results extend prior research on Social Identity Leadership (SIL) in four ways. First, the data evidenced strong shared SIL from the leaders and the employees alike. Secondly, the leaders were not only seen as 'one of us', but truly perceived to be equal to the employees. Thirdly, an important part of SIL and guiding the team's actions towards the shared goals was designing and implementing core practices like line management duties and professional development together. Similarly, significantly contributing to SIL were the structures the leaders created to enable the team to make decisions and champion the shared goals autonomously. Fourth, the leadership style of giving the employees the space to contribute to the steering the workplace direction and inviting them to co-

create new organisational initiatives was noteworthy. Altogether, these measures in turn resulted into strong organisational justice perceptions.

Furthermore, the results extend the prior experimental research into organisational context by showing how the socialisation practices led by prototypical members and including a shared meaning-making of the organisational values resulted in a community full of similar but appropriately different members. The shared value-base provided a sense of familiarity and strengthened cohesion, which in turn promoted identification. Furthermore, the socialisation practices secured a personally meaningful endorsement of the organisational values, resulting in a sense of authenticity, as the members perceived to be accepted as their genuine selves at the workplace. This in turn, made the identity more personally important, and further strengthened identification.

Full results will be available in the congress.

#### Limitations

By design, the case study does not offer generalizable results across self-managing organisations, nor does it directly offer evidence that hierarchically organised workplaces would not offer similar advantages than the ones captured.

#### Conclusions: implications and originality

The results show indications that particularly through strong Shared Social Identity Leadership exercised by both leaders and followers, as well as modern socialisation practices, the self-managing organisations seem to make the organisational membership highly meaningful for their employees. The results suggest practitioners would be wise to apply these learnings and give the employees more room to be included in the organisational decision making to build more effective and engaged teams.

#### Relevance to Congress theme and UNSG

Understanding how the novel self-managing organisations operate from a psychological perspective helps to develop more inclusive and decent working conditions in practice. Thus, the topic is directly related to the congress theme as well as the UNSG.

*Keywords: Leadership styles, Organisational justice, Organisational commitment*

## Oral presentation OP668

### Novel technologies to enhance resiliency: the Hybrid and Sustainable Worlds Project

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science&practice

The strict restrictions imposed by the COVID-19 pandemic have severely impacted economies all over the world, with small and medium enterprises (SMEs) being especially hampered in various sectors (e.g., retail, tourism): while the large enterprises with a strong presence online increased their profits, the small and medium businesses with little or no presence online recorded significant losses [1-4]. Indeed, the prolonged lockdowns have revealed the weaknesses of those businesses that strongly rely on the physical co-presence to deliver their services and sell their products (e.g., brick-and-mortar stores), along with their difficulty in promptly responding to the changing market needs.

The research project Hybrid Sustainable Worlds (HSW) merges the knowledge and expertise of the academic world with the know-how of enterprises to design and implement innovative and concrete tools that will enable small and medium companies to respond to the increasingly ephemeral market conditions. The project addresses several strategic business sectors, including tourism, cultural heritage, and retail. With respect to retail, the project Hybrid and Sustainable Worlds aims to develop an innovative e-commerce platform that exploits Augmented Reality (AR) and 3DWeb technologies, to support the online retail of small and medium businesses.

The platform has been designed in a user-centric perspective [4] and it features two main components: the back-e-shop, addressed to sellers, and the e-showroom, addressed to customers. The platform can be managed directly by the small shop owners. Differently from all the other platforms for online shopping, in the HSW platform the seller can share the 3D models of their products, so as to enhance the customer's shopping experience and compensate for the lack of sensorial stimulation, which is typical of the shopping online [5]. Since one of the main issues encountered by small shop owners in running an e-commerce website is the time and effort required to learn and use a new system [5], the back-e-shop interface has been designed to be intuitive and easy to use.

Moreover, the back-e-shop includes an extension that allows the shop owner to set up an AR shopping window to be seen by the consumer using a head-mounted display. In so doing, it will be possible not only to showcase the products that are currently out of stock, but also enable the customer to interact with the 3D model in a novel way, e.g., by resizing the object.

The e-showroom will also include special features that are aimed to enhance the shopping experience. The products will be displayed as 3D models within the 3D shopping environment, and the customer will be able to manipulate the model and explore additional interactive information.

*Keywords: retail; small-medium enterprises; innovation*

## Oral presentation OP245

### Observer Ratings of Honesty-Humility and their Relationship with Extra-Role Behaviours

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science

Research goals and why the work was worth doing: Previous research established that the personality traits of honesty-humility, agreeableness, and conscientiousness are predictors of counterproductive work behaviour (CWB) and organizational citizenship behaviour (OCB) (Berry et al., 2007; Chiaburu et al., 2011; Lee et al., 2019). However, these meta-analytic findings relied on self-reported personality. Other emerging research highlighted the value of acquaintance-rated personality for predicting work outcomes (Connelly & Hülshager, 2012; Kluemper et al., 2015; Oh et al., 2011). Here we build on and extend this stream of research by focussing on honesty-humility, agreeableness, and conscientiousness, and investigating how those self- and acquaintance-rated personality traits predict CWB and OCB in a multi-source study with matched triads.

Theoretical background: Research found that observer-ratings of personality predict job performance better than self-ratings (Oh et al., 2011). There are two perspectives which can explain the predictive advantages of observer-ratings: the clearer lens perspective and the narrower scope perspective (Connelly & Hülshager, 2012). The clearer lens perspective assumes that predictive advantages stem from the greater accuracy of observers because they see targets clearer than the targets themselves. The narrower scope perspective suggests that work-specific expressions of personality may differ across distinct contexts (e.g., work and private life) but stay consistent within a context (Mischel & Shoda, 1995). Typically, observers have only access to context-specific expressions of personality (e.g., only within the work context). Therefore, the frame of reference for observers at work is more closely aligned with important work outcomes. Self-reports of personality, however, draw trait information from a variety of contexts. The clearer lens perspective received support from findings showing that acquaintance-rated conscientiousness was a better predictor of colleague-rated job performance (Connelly & Hülshager 2012) and CWB (Kluemper et al., 2015) than self-reported conscientiousness, providing incremental validity beyond self-reports. We therefore hypothesized and tested whether acquaintance ratings of honesty-humility would predict CWB and OCB beyond self-ratings of honesty-humility. We also compared the predictive validities of honesty-humility, conscientiousness, and agreeableness.

Design/Methodology: We employed a cross-sectional multi-source design and collected data from three sources: 194 target employees provided self-ratings and were rated by 194 co-workers and 194 personal acquaintances (totalling 582 raters). We collected self-ratings, personal acquaintance ratings, and work colleague ratings of honesty-humility, conscientiousness, and agreeableness using the HEXACO-60 (Ashton & Lee, 2009). Work colleagues also assessed employee's CWB (Bennett & Robinson, 2000) and OCB (Staufenbiel & Hartz, 2000). Cronbach's alphas ranged between .64 and .89.

Results: Self-rated and acquaintance-rated honesty-humility, agreeableness, and conscientiousness had positive relations with OCB. Moreover, acquaintance-rated honesty-humility and conscientiousness had incremental validity for predicting OCB beyond self-ratings. In addition, multiple regression analyses showed that acquaintance-rated honesty-humility was the strongest predictor of OCB. However, self- and acquaintance-rated honesty-humility, agreeableness, and conscientiousness did not significantly predict CWB in both correlation and regression analyses.

Limitations: We did not collect self-ratings of CWB. CWB self-ratings may also assess covert behaviours, that are unlikely to be observed by coworkers. In addition, the field study design does not allow conclusions about causality.

Research/Practical implications: The findings for predicting OCB support the theoretical perspective of the clearer lens, suggesting that self-ratings suffer from self-misperceptions and observers have higher accuracy. The results for CWB may indicate that it is difficult to predict work-colleague rated CWB by self- and acquaintance ratings, and that work-colleagues may not be able to observe covert CWBs. Organisations might consider employing observer ratings of e.g., personal acquaintances in their assessment procedures to complement target employees' self-ratings.

Originality/Value: This research extends the few studies that have examined the validity of acquaintance-rated personality for work outcomes by investigating the validity of acquaintance rated honesty-humility in the prediction of CWB and OCB. This helps to better understand the predictive advantages of observer ratings of personality.

*Keywords: honesty-humility, counterproductive work behaviour, organizational citizenship behaviour*

## Oral presentation OP533

### Occupational Stress in Spain: Validation of the Perceived Occupational Stress Scale

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science&practice

Work-related stress produces disadvantages at the individual, organizational, and societal levels (Hassard et al. 2014). Thus, developing tools to assess it is crucial for buffering the negative outcomes it entails. In this study, we validated The Perceived Occupational Stress (POS) scale for the Spanish population. The POS is a self-report measure of four items designed for assessing work-related stress as perceived by an individual (Marcatto et al. 2022). It aims to bridge the gap in the evaluation of occupational stress, between the objective and subjective appraisal of it. Until recently, the objective appraisal has been the preferred approach but since stress depends more on the perception of a stressor than on the stressor itself (Min, Kim, and Lee 2015), the best alternative is to combine both approaches. Therefore, we translated and back-translated the English version to Spanish and administered it to 1107 Spanish individuals (only 675 were complete). We tested its internal reliability, nomological network, factorial structure, and distributional overlap among subsets of the total population, emphasizing health workers. The Spanish POS has an internal consistency of  $\alpha = 0.903$ , and its confirmatory factor analysis of one dimension shows good adjustment indices (CFI = 0.946, RMSEA = 0.206, SRMR = 0.031). The distribution overlap between health workers and the rest of the sample is 0.83, showing that health workers ( $M = 3.24$ ,  $SD = 1.03$ ), as compared with another type of workers ( $M = 3$ ,  $SD = 1.11$ ), obtained higher scores,  $t(320) = 2.11$ ,  $p = .035$ . As per the concurrent validity, we gathered data from the same sample on other related psychological variables: work engagement ( Utrecht Work Engagement scale ) (Schaufeli, Bakker, and Salanova 2003), psychological distress ( Brief Symptoms Inventory 18 ) (Derogatis 2001), positive psychological capital ( Psychological Capital Questionnaire-12 ) (Martínez et al. 2021), and risk assessment ( PRIMA-EF ) (Organization et al. 2008).

No significant correlation was found between the POS and the BSI-18, which showed the best factorial solution at 2 factors instead of 3 as is commonly used. The UWES scales, on the other hand, showed a significant negative correlation (vigor: -0.27, dedication: -0.28, abstraction: -0.21). The PRIMA-EF was factor-analyzed prior to correlations and it was found to have two clearly defined factors which we called positive and negative elements of risk assessment. The correlations between these two factors and the POS were found to be positive with the negative factor (0.49) and negative with the positive factor (-0.32) as predicted by the theory. The positive psychological capital showed a better factorial solution with 3 factors instead of 4 as is commonly used. The PCQ-12, however, did not show any significant or strong correlations. The findings indicate the Spanish POS scale is a valid and reliable measure of perceived work stress with psychometric properties similar to the original version.

The study has two limitations: the sample size is not as big as needed and it lacks independent replication which should be pursued in future studies.

This scale, which complies with EU regulatory instructions, can be used in Spain as an effective short tool for assessing perceived occupational stress as a necessary complement for risk assessment evaluations. Furthermore, we validated all the rest of the used scales because, though used a lot in current research no one has worked on their validity.

*Keywords: Perceived Occupational Stress, Health Workers, Psychometric validation*

## Oral presentation OP577

### On the Current Implementation of Open Science Practices in Industrial and Organizational Psychology and Management

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science

#### Research goals

The goal of this research was to describe and explain the implementation gap regarding open science practices (OSPs) in industrial and organizational psychology (IOP) and management research (i.e., low adoption rates despite high information levels). Therefore, we first examined the extent to which IOP/Management journals encourage, support, and implement OSPs on their websites (Study 1). Second, we asked all journals' editors about their main reasons not to add a statement about OSPs on their websites (Study 2). Together, our work provides a description of the extent to which these journals currently refer to OSPs on their websites and deeper insights into their reasons (not) to do so.

#### Theoretical background

In recent years, various empirical findings in IOP/Management could not be replicated and questionable research practices (QRPs) were found to be common. To address such problems, OSPs have been developed. Yet, OSPs are only helpful if actually used, and currently there appears to be an implementation gap: Although the knowledge about OSPs increases, researchers often do not adopt such practices. Current journal practices may help to explain why researchers are reluctant to adopt OSPs and why, as a consequence, many types of QRPs may still be used. Aguinis et al. (2020a) for instance assume that researchers may perceive that the costs of implementing OSPs may outweigh the perceived benefits. This unfavorable relation of costs and benefits is most likely related to the communicated practices of scientific journals because journals "have the power to create and enforce policies regarding standards for published (...) research" (Aguinis et al., 2020a, p. 28). In other words, journals act as gatekeepers for scientific discoveries. If they do not support the use of OSPs, researchers have little incentives to use them.

#### Methodology

We pre-registered this project on the Open Science Framework. We based our content analysis on the websites of all journals that are listed in the 2019 Journal Citation Reports for the journal category "Management". Our key coded variables mirror the standards in the Transparency and Openness Promotion (TOP) guidelines. Specifically, we coded the following characteristics: data transparency, method and code transparency, material transparency, preregistrations, registered reports, open science badges, open access publishing, and whether and how replications are mentioned. In Study 2, we sent out standardized letters to the editors in chief of all IOP/Management journals from Study 1 via email and asked them about the journals' reasons not to add a statement about OSPs on their websites.

#### Results

The final sample includes N = 202 journals and N = 279 editors. In summary, most IOP/Management journals did not mention OSPs at all. For example, only two, five, and 14 IOP/Management journals

mentioned pre-registration, registered reports, and explicitly invited replications, respectively. Study 2 revealed that most editors are sympathetic to OSPs in general. Among the responding editors, 35%, 25%, and 12.5% attributed the lack of incentives for OSPs to a lesser suitability of OSPs for qualitative research, missing authority, and missing familiarity with OSPs, respectively.

#### Limitations

As a possible limitation, contrary to our dichotomous coding of all practices (except for replications), the Top Guidelines specify three levels of implementation for each practice. However, as most journals simply do not mention OSPs at all, it appears more adequate to maintain the dichotomous coding of our variables (i.e., mentioned vs. not mentioned).

#### Conclusions

In a field like IOP/Management research, where publications in A journals are seen as the “new bottom line” (Aguinis et al., 2020b, p. 136), the extremely low implementation rate of OSPs is likely to result in problems because the current practice may well be associated with the prevalence of QRPs. As journals have the power to initiate or at least contribute to a change towards a greater usage of OSPs and, thereby, more reliable discoveries, there is a need for a top-down movement where journals encourage OSPs and replication efforts to support the development of an open and transparent research culture in IOP/Management. This research provides novel insights into the currently rather low adoption rates of OSPs in the IOP/Management domain and is, at least to our knowledge, the first to directly ask journals about their attitude towards OSPs.

#### Relevance to the Congress Theme

Our research contributes to the congress theme “The Future is Now: the changing world of work”, because our insights can support the mitigation of the current implementation gap regarding open science practices. It is a call to action for publishers and journals to change the communication on their websites.

*Keywords: open science practices, academic reward system*

## Oral presentation OP355

### One or many roads to innovation? - A sequence analysis of career trajectories in agriculture and their relation to individual innovativeness

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science

The research goal is to take a biographical view on farmers as central actors in sustainable agricultural transition and investigate: what characterizes career paths in agriculture and how do they differ from each other (RQ1)? Which career paths show the strongest correlation with individual innovativeness (RQ2)? In a final step, we test whether similarity of career trajectories affects innovativeness that goes beyond the effect of personality characteristics (e.g., regulatory focus, openness to experience; RQ3). The work is worth doing because the agricultural sector needs innovation facing complex challenges due to climatical, political and societal changes. We contribute by studying the individual perspective and connecting careers and innovativeness.

In theory, innovation starts at the individual level. Innovation potentials can only unfold if the farmer, as innovator and early adopter, has the required abilities for and attitudes towards innovation (Rogers, 1962). These abilities and attitudes are accumulated on the career trajectory (Bird 1994). The Career Construction Theory (Savickas, 2002) says that career is a core for constructing the own self. The self gains meaning from career and therefore spends importance to it. We assume that individual innovativeness is part of the vocational self-concept, which people assimilate to their work roles across their careers (Savickas, 2002). Consequently, individuals with similar personality dispositions, education, abilities, or interests have similar career patterns (Huang & Sverke, 2007). Biemann et al. (2020) followed that similarity in career sequences can predict vocational outcomes.

Methodological, to answer RQ1 we conducted study 1 with N=18 farmers and collected their career trajectories by interviewing them. We extracted the distinctiveness of career paths in agriculture (content analysis; Mayring, 2010). Second, we asked N=16 experts from the agricultural sector which characteristics in careers are crucial for innovativeness in later situations. Building on this in- and outside view on agricultural careers we assembled a quantitative online survey (study 2) and asked farmers retrospectively about their educational and vocational career stages and their self-rated personal innovativeness. So far N=105 farmers answered the whole questionnaire. The data collection is still ongoing and will be finalized in early spring 2023. We then conduct sequence analysis to identify patterns and (dis)similarities among farmers career sequences throughout a period of 12.5 years starting after school graduation and group them by cluster analysis (see Studer & Ritschard, 2016). The clusters will be used in logistic regression analysis to predict innovation outcomes (RQ2). The methodological extension from Biemann et al. (2020) allows us to use the similarity of sequences as a predictor, too (RQ3).

Preliminary results from study 1 revealed that the career trajectories of farmers differ in the following characteristics: educational stages (e.g. diploma, job training), vocational stages (inside and outside of agriculture/ the "home farm"), and the amount of job changes and side-jobs. The experts named experience abroad, experience with sustainability, many transitions in work sector, location or occupation during career, a well-grounded education and the agricultural family background as factors that positively influence innovativeness. Results from study 2 will be presented on congress.

To limit the findings, we will discuss the representativeness of the sample (e.g. age, location of farms and farm size) as well as the fact that basic technology affinity was precondition to participate in the

online study. Furthermore, methodological limits will be discussed concerning the missing structure of sequence data and the cross-sectional design.

As conclusion, this research is one of the first to use the similarity predictor and test the effect of similarity in careers on vocational outcomes (innovation). Sequence data build on curriculae vitae are a easy-to-derive data source. The data is comparable free from biases e.g., social desirability and therefore could complement vocational research. On the practical side, the information about innovator careers can be used for qualification in agriculture.

This work contributes to the congress themes Careers and the Labour Market , as it investigates career trajectories of farmers. Moreover, we add knowledge to how innovativeness develops on the career pathway, which fits to the congress theme Creativity, Innovation and Risk-taking . The work is related to the SDG 8: Decent work and economic growth , as we study the input of individual career experiences to a transformation in agricultural sector and translate the findings into learnings for the qualification system. Furthermore, facing climate change it is worthy to study how innovativeness can be fostered in agriculture (SDG 9).

*Keywords: Sequence analysis, career, innovativeness*

## Oral presentation OP654

### **One ring to rule them all! Need for power and adult attachment as antecedents of knowledge hiding in organizations**

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science&practice

Research goals and why the work was worth doing

An increasing number of organizations strive to sustain knowledge transfer among employees via knowledge management interventions. That is because knowledge is considered a strategic resource for both individuals and organizations. Knowledge sharing is associated with individual performance, innovation and organizational growth (Pereira and Mohiya, 2021, Connely et al., 2019, Garg and Anand, 2020 etc.), whereas knowledge hiding is associated with reduced productivity and companies' loss of revenue among other detrimental effect (Xiong et al., 2019, Arrain et al., 2019).

However, despite organizational efforts strive to promote knowledge sharing, the employees' intentional concealment of knowledge when requested by others (i.e. knowledge hiding behaviors/ KH) remains a frequent behavior. Thus, understanding its antecedents becomes key for designing effective interventions and successfully managing this issue within organizations.

In particular, the study focuses on individual factors and explores the role of need for power (i.e., an individual's desire to influence others, change people or events, and make a difference, McClelland, 1975) as antecedent of KH, and the role of avoidant (i.e., individuals who declare they dislike when others open up to them emotionally, Harms, 2011) and anxiety attachment styles (i.e., individuals who have an unfavorable view of the self and experience anxiety in their relationships, Richards & Schat, 2011) as boundary conditions of this relation.

Theoretical background

The paper is grounded in the Resource Control Theory (Hawley, 1999) and argues that need for power is a hallmark of social dominance (i.e. one's competitive ability relative to others in the social group). Based on this theory, we hypothesize that individuals with high levels of power, who enjoy influencing others and defeating their competitors, will engage more frequently in KH behaviors, as a coercive strategy of resource control and a way of attaining a position of greater authority (i.e., "getting ahead"). In addition, the paper builds on Attachment theory (Bowlby, 1973, 1988) and argues that the different attachment styles as internal working models (i.e., internalized cognitive, emotional, and behavioral schemas) of interpersonal relationship will also influence organizational behavior such as KH. In particular, we argue that anxious attachment will reduce the positive association between need for power and KH, whereas avoidant attachment will have the opposite effect.

Design/Methodology/Approach/Intervention

In order to test the hypotheses, I used a time lagged correlational design (preliminary N = 178 employees, data collection is expected to end in February 2023) with need for power, avoidant and anxiety attachment styles measured at time 1 and KH measured at time 2. Additionally, I used a vignette study where the level of need for power and type of attachment styles were manipulated (data collection is expected to end in February 2022) and KH behaviors were measured.

Results obtained or expected (if not available, it must be made clear when they will be)

Preliminary results from the field study (Study 1) show that need for power (measured in Time 1) increases employees KH (measured in Time 2) and anxious attachment moderates the relation. The data collection for both Study 1 and 2 are expected to end in February 2023

#### Limitations

Data in the time-lagged design are self-reported.

#### Conclusions – research and or practical implications/Originality/Value

Our findings will clarify (some of) the individual antecedents of KH behaviors in organizations and will extend the application of attachment theory to organizational setting, thus answering the calls for more research on the matter (e.g., Yip et al., 2017). These findings will also inform managerial and HR practices into designing interventions directed at managing the impact of such individual factors on KH behaviors, thus reducing its occurrence.

*Keywords: knowledge hiding behaviors, need for power, attachment style*

## Oral presentation OP604

### Ongoing research: Phone snubbing and its links to psychosocial factors at work among Swedish electricians – development of a co-worker phubbing scale

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science

#### Aim

The present study addresses the question of whether smartphone habits during traditionally social situations at work, such as breaks and collaborative work, are connected to psychosocial work environment factors. Phubbing, from the words “phone” and “snubbing”, indicates prioritizing one’s phone over present individuals. This study aims to develop a new co-worker phubbing scale, adapted from previous scales by Roberts and David (2016, 2017) and Chotpitayasunondh and Douglas (2018). As such, it is a development and adaptation to a new context rather than a replication study. Further, the study seeks to propose a tentative model for associations between co-worker phubbing behaviors and psychosocial factors at work.

This study is part of the research project Phubbing at work – mobile phone behavior in social contexts at the workplace and associations with the psychosocial work environment.

#### Background

Smartphones are a tool for communication, but may also impede relationships with those around us, including our co-workers. Research on phubbing has shown that feeling neglected due to others’ smartphone use is linked to a range of negative outcomes, including lower quality of communication, social exclusion, and decreased relationship satisfaction. Though many spend as much or more time with their co-workers as with family and friends, little is yet known about how phubbing affects collegial relationships. Positive relationships at work are instrumental for establishment of support networks, well-being, and job satisfaction. If smartphone use in social situations at work gets in the way of socialization and relationship formation, it is thus possible that important psychosocial work environment factors could be negatively impacted.

#### Method

Members of the Swedish Electrical work union responded to a survey, N = 808. Data is analyzed using confirmatory factor analysis (CFA) for scale validation of co-worker phubbing constructs, and structural equation modelling (SEM) for testing a theoretical model of relationships between co-worker phubbing, psychosocial work environment factors, and demographic variables. Included psychosocial work environment factors are social support from colleagues, sense of community, commitment to the workplace, and horizontal trust.

As the research topic is novel and lacks established theoretical frameworks, a combination of exploratory and confirmatory approaches are utilized in model specification and assessment.

#### Preliminary results

Analyses are ongoing. Preliminary assessments indicate satisfactory psychometric properties of the co-worker phubbing scale. Phubbing as measured by the scale has two latent factors, indicating a possible difference between exposure to “low-grade” and “high-grade” phubbing. Finally, phubbing

appears to be significantly and negatively linked to psychosocial factors at work. Associations are weak to moderate in strength.

Further and more detailed results are pending and expected to be finalized during the first half of 2023, in time for the conference.

#### Limitations

The current study includes responses from Swedish electricians, and while the specific working arrangements of this sample make it suitable for exploring co-worker phubbing (e.g. typically working and taking communal breaks alongside others), it is a largely homogenous group, limiting generalizability. Further, the present study is cross-sectional, disallowing causal inferences. Future planned studies will address these issues by including a more representative sample of the working population and a cross-lagged panel design with two time points.

#### Conclusions

Preliminary analyses indicate that the co-worker phubbing scale is psychometrically sound and able to measure perceived phubbing behaviors at work. Further, co-worker phubbing appears to be negatively linked to psychosocial factors at work, indicating that those who experience more phubbing also report slightly less satisfying psychosocial conditions. These preliminary results indicate that the role of co-worker phubbing for psychosocial work environment factors warrants further consideration and examination.

#### Relevance to the congress theme

The smartphone arguably constitutes a fundamental shift in how we relate to the world and other people. While its advantages are obvious and manifold, understanding how it affects interpersonal dynamics at work is of importance for shaping work arrangements so that we can utilize the power of the technology while promoting the positive relationships and interactions that are central to both well-being and performance of individuals, groups, and organizations.

*Keywords: phubbing, smartphone, psychosocial factors*

## Oral presentation OP630

### Online, Offline, or Both? Does Coaching Format Matter for Side Effects in Business Coaching?

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science&practice

Accelerated by the COVID-19 pandemic, face-to-face coaching has largely shifted to online coaching in recent years, a practice that has grown tremendously. We examined the side effects of and success in face-to-face coaching, blended coaching, and online coaching from both coaches' and clients' perspectives. Thus, to further enhance our understanding of side effects in coaching and to integrate current trends, we compare different coaching formats and explore the following research questions:

1. Do side effects differ among the different coaching formats (i.e., face-to-face, blended, or online coaching)?
2. Is there a difference in perceived coaching success among different coaching formats?

Side effects are defined as harmful and undesirable effects directly caused by coaching and occur quite frequently with a low intensity regardless of coaching outcome. To date, quantitative coaching research examining side effects has focused on coaching that occurred in traditional face-to-face settings. However, in recent years, accelerated by the COVID-19 pandemic, coaching practice has undergone tremendous changes, with a substantial global increase in online coaching. The trend towards online coaching can bring several benefits, such as greater convenience, location independence, and thus time and cost savings for both coach and client. Nevertheless, online coaching can also bring new challenges, such as limited eye contact due to uneven positioning of the camera, delays in recording, or lack of body language due to a limited camera frame. In addition, coaches have reported that their online work is less intimate and requires greater effort to build rapport and is less fun overall. Given the increasing prevalence and interest in online coaching and potential concerns about the side effects of the online coaching format, exploring the side effects of different coaching formats (i.e., face-to-face, online, or blended) may be a promising starting point to identify theoretical and practical implications for researchers and practitioners.

We conducted two independent studies to examine differences in the side effects of face-to-face, blended, and online coaching. In Study 1 (N = 119), we compared the side effects of these formats using a quasi-experimental design and tested differences in perceived coaching success from the coaches' perspective. In Study 2 (N = 104), we incorporated clients' perspectives on the side effects of the different coaching formats into the design.

Coaches in the face-to-face format experienced a significantly lower percentage of side effects with their clients than coaches in the blended and online coaching formats. From the clients' perspective, the number of side effects was highest in the blended coaching format. Both studies showed no differences in perceived coaching success between coaching formats.

All measurements were based on self-report, so common method variance may be a potential problem. To minimize this effect, we also included clients' perspectives in Study 2. However, future research should address this issue by using data from multiple sources (e.g., matching coach and client). In addition, in Study 1, we used a quasi-experimental design that simply mimicked experimental conditions, making the study particularly vulnerable to compromising internal validity.

This work is the first to extend knowledge about coaching side effects across different coaching formats from the perspective of coaches and clients. Our findings provide guidance to help practitioners choose the most appropriate coaching format for them. Knowledge of coaching side effects can help both coaches and clients take appropriate action to mitigate their effects.

We contribute to the congress theme by considering latest developments of the coaching practice and investigating on it.

*Keywords: coaching, digital coaching, side effects*

## Oral presentation OP407

### Online training on psychosocial risk assessment as primary prevention approach

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science&practice

#### 1. Research goals and why the work was worth doing

Although required by EU law, less than 30% of European organisations have implemented psychosocial risk assessment (PRA) procedures in their occupational safety and health (OSH) management (Eurofound and EU-OSHA, 2014). The main reason for this gap between practice and policy and research is a lack of expertise (Beck, 2019). Therefore, the aim of the project "PsyHealth worXs!" was to develop and evaluate a user-friendly, practical and easily accessible training tool that teaches managers and OSH practitioners the PRA process as preventive approach. The project was funded by EIT Health and strives to create and promote healthy work places.

#### 2. Theoretical background

Training evaluation of the Massive Open Online Course (MOOC) is based on the evaluation models of Kirkpatrick (1996), and Moore (2009). Success criteria for the evaluation models is participants' reaction and knowledge gain. Data on intentions for action, attitudes, motivation and expectations were collected according to Francis (2004) who constructed scales for health research according to the Theory of Planned behaviour (Ajzen, 1988).

#### 3. Design/Methodology/Approach/Intervention

The participants of the MOOC runs in 2020 and 2021 (N=985) were invited to participate in an evaluation survey at the beginning and after voluntary completion of the MOOC on edX. In total, N=225 participants responded to the first questionnaire and N=87 responded to the second questionnaire. Descriptive statistics are provided for rating the training and assessing the level of knowledge. For comparison of the two measurement times, t-tests were used. Participants were all kinds of stakeholders of OSH management, mostly in consultative roles.

#### 4. Results obtained or expected

Overall, the participants' reaction to the training was highly satisfactory. 82% of respondents felt more competent in conducting PRA after participating in the training. After the training, participants' knowledge of the process was significantly greater ( $t(258.965) = -11.701, p = .000, d = 1.112$ ), and the proportion of those who felt competent to derive occupational health and safety measures increased from 33% to 88% ( $t(240.298) = -10.891, p = .000, d = 1.043$ ). Additionally to the increased knowledge, the participants' expectations regarding behavioural control to conduct PRA are perceived significantly easier after completion of the training ( $t(290) = 6.365, p = .000, d = .843$ ). For the intention to conduct PRA in the future, no significant training effect was detected which was probably due to high initial levels of intention. Greater awareness of the topics on psychosocial risks and mental health was achieved with the training.

#### 5. Limitations

Intentions and motivation are self-reported here; a follow-up survey of actual behaviour change has yet to be collected. High drop-out rates in the evaluation process could be due to the generally low

completion rates of MOOCs and limit the generalisability of results. However, retention rate for this MOOC was high with regard to edX criteria.

#### 6. Conclusions – research and or practical implications/Originality/Value

PsyHealth worXs! is successful in teaching PRA and in this way is tackling the biggest obstacles that hinder the implementation of PRA strategies. The remaining questions are how to convince decision-makers to address PRA in their organisations and if a different type of training needs to be offered here. In the long term, the MOOC can help OSH stakeholders to close the gap between legal requirements and practical application. To further contribute to this goal, PsyHealth worXs! is currently expanding and developing further materials and subtitles in eleven languages and a new serious game that converts the gained knowledge into skills.

#### 7. Relevance to the Congress Theme

The submission contributes to the themes safety and work (13) and training and development (17) by presenting a user-friendly, practical and easily accessible training to teach professionals in a primary preventive approach to tackle work stressors before they become a risk for employee health.

#### 8. Relevant UN SDGs

In providing a successful training for identifying job stressors, this evaluation contributes important insights to provide good (employee) health and wellbeing as well as implications for quality education.

*Keywords: Psychosocial risk assessment, training evaluation, online training*

## Oral presentation OP70

### **Only together we are strong? Revisiting the linkages between Human Resource Management and Leadership for employee well-being**

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#### Research goals

Employee well-being (WB) refers to the overall quality of an employee's experience and functioning at work (Warr, 1987). There is a strong ethical case for focusing on employee well-being, particularly in times of increasing pressure at work. Leaders devote considerable organizational resources to enhancing employee well-being (Grant et al., 2007). Similarly, there is strong evidence that Human Resource Management (HRM) practices affect employee well-being (Van De Voorde et al., 2012, Peccei and Van De Voorde, 2019). The streams of literature focusing on the leadership-WB and HRM-WB relationship developed largely independently from each other. Concurrently, we know that HRM and leadership interact in various ways, ranging from independence to a synergistic fit (Leroy et al., 2018). Therefore, this paper aims to provide a systematic literature overview of what we know about the combined effects of HRM and leadership on employee well-being.

#### Theoretical background

Existing research provides evidence that leadership influences employee well-being (e.g. Inceoglu et al., 2018), and similarly that HRM impacts employee well-being (e.g. Peccei and Van De Voorde, 2019). However, in reality, employees do not experience leadership and HR practices separate from each other and their well-being at work is impacted by both factors at the same time.

#### Research design

We searched for papers that included in their abstract terms linked to leadership and HRM and well-being in relevant online databases (e.g. Business Source Complete, Web of Science). We limited the search results to papers that were published in English in peer-reviewed journals from 2000 onwards.

Our search provided 28.667 potentially relevant articles. After removing duplicates, the final dataset comprised 4.924 papers. For the screening of abstracts, we defined the following inclusion criteria: (1) the paper is an empirical study. (2.1) It includes a dimension of leadership (e.g. a certain type of leadership style, behavior, trait/personality), and a dimension of HRM (e.g. bundle of practices), and a dimension of employees' psychological or physical well-being. (2.2) alternatively, the paper refers to people management, in the sense of LS and HRM, and well-being. (3) Studies must be conducted among a working population.

#### Results

We identified a total of 65 relevant papers for which the coding process is in progress. Various approaches to HRM and leadership are taken across the studies. The most dominating HRM approach is the High-Performance Work System approach (20 studies) and in terms of leadership, transformational leadership (14 studies). Following the coding, we investigate how existing studies model the HRM and Leadership interact in co-determining well-being. Findings will be presented at the conference.

#### Limitations

Literature reviews always bear the risk of not identifying all existing and relevant studies. Furthermore, our review is not free from reproducing a positive publication bias where “positive studies”, i.e. significant ones, are predominantly published.

#### Conclusions

This review provides insight into the different ways how leadership and HRM jointly influence employee well-being. Thereby we contribute to a better understanding of how HRM and Leadership work together in influencing well-being. Our research presents avenues for future research by spotting important gaps.

#### Relevance to the Congress Theme

Securing well-being is a competitive parameter for organizations in the future. Therefore, it is relevant to broaden our view of employee well-being by considering the complex relationships between HRM and leadership for employee well-being.

#### Relevant UN SDGs

This study promotes the SDG of ‘Good health and wellbeing’.

*Keywords: Leadership, HRM, Well-being*

## Oral presentation OP809

### **On-The-Spot Mindfulness as a Well-Being Intervention Improves Performance and Civility: A Meditation Field Experiment at a Construction Company**

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science&practice

Over the past 15 years, mindfulness meditation has become a popular practice in organizations throughout the world (Gelles, 2015), with most large organizations in the US having provided a mindfulness program for their employees (Tan, 2012). Management scholars have predicted for over a decade that mindfulness could enhance work performance, yet supporting evidence has been elusive (we only know of three articles and they all were cross-sectional in nature: Dane and Brummel, 2014; Lyddy et al., 2021; Reb, Narayanan, & Chaturvedi, 2014). While mindfulness is generally practiced in people's personal time before or after work in a time and place removed from workplace stressors, mindfulness was initially theorized as a functional response to stress (Kabat-Zinn, 1990). Revisiting and extending that logic further may be informative as to when and why mindfulness could improve performance. We are the first to test the idea of on-the-spot mindfulness (Hafenbrack, 2017) – meditating in the specific situations in the workplace in which people are highly stressed for 8-15 minutes to change their psychological state, approximately twice per week. We build a theory of on-the-spot mindfulness and how it can improve how employees perform (work performance and customer service quality) and treat others (helping behaviors and less counterproductive work behaviors). We expected it to do so by reducing stress, and thus cuing an internal locus of control. We tested our hypotheses in an 8-week field experiment among 466 employee-supervisor dyads using multiple meditation conditions (focused breathing and loving kindness), control conditions (no treatment and therapeutic writing), well-being manipulation checks (anxiety, stress, and depression), and supervisor-rated measures of the dependent variables. Our setting was a large construction company in China, due to the moderate level of stress that ebbs and flows in that company and industry. Our hypotheses were supported in 75%-93% of the contrasts of interest between treatment and control conditions. Theoretically, we show that mindfulness can be used to causally enhance work performance if mindfulness is used in this novel way – as a targeted micro break (Trougakos & Hideg, 2009) state induction applied on-the-spot during people's most stressful moments, improving their overall well-being and making their locus of control more internal. We draw on and extend Expectancy Theory (Porter & Lawler, 1968; Vroom 1964) by showing that on-the-spot mindfulness is a novel means of raising employees' positive expectancies that their efforts will lead to high performance and rewards, as those expectancies are well known to become self-fulfilling. Our study revives the importance of thinking about mindfulness as a state rather than as primarily a trait or long term daily practice. We provide further support for the emerging consensus is that mindfulness can increase prosocial behavior (Donald et al., 2019; cf. Poulin et al., 2021), including in the workplace (Hafenbrack et al., 2020; Sawyer et al., 2022), as well as reduce counterproductive, aggressive, or retaliatory workplace behaviors (Hülshager et al., 2021; Krishnakumar & Robinson, 2015; Long & Christian, 2015; Yu & Zellmer-Bruhn, 2018). We show a way that one's locus of control can change to become more internal. This is notable because locus of control is generally thought to be a fairly stable personality variable (Spector, 1982) and if anything it can be easier for people to shift in the direction opposite to what we found (from internal to external). We also contribute to the literature on expressive writing by drawing into question how effective it is, given that both meditation conditions led to better outcomes than it. Practically, we show mindfulness can be cultivated on-the-spot in specific situations in the workplace to improve

employee well-being, performance, and civility. Metaphorically, on-the-spot mindfulness is similar to a person taking an aspirin when they have a headache. This has the potential to change the way mindfulness is presented, taught, and used. We found that the content of the meditation did not matter as much as whether people meditated. The focused breathing and loving kindness conditions led to very similar results (akin to Hafenbrack et al., 2020) that were more similar to each other than they were to either of the control conditions. If one were trying to optimize the workplace benefits of mindfulness less the time spent engaging in meditation, on-the-spot mindfulness is a valuable option. People who don't meditate at all might be able to feel and perform substantially better by engaging in the occasional on-the-spot meditation when they are feeling their worst. Likewise, people who are engaging in secular meditation for an hour each day or more, primarily to feel good and perform well, may reduce the time they spend meditating if they meditate on-the-spot when they are feeling their worst.

*Keywords: Mindfulness and meditation, Organizational citizenship, Counterproductive work*

## Oral presentation OP226

### **Optimistic is more responsible and pessimistic is more neurotic! Attribution styles at work and their relationships with affectivity and personality**

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science

#### Research goals

The process of making sense at work varies among workers. Going beyond some existing measures based on hypothetical situations or developed in non-work contexts, we propose a scale to measure the main attribution dimensions (i.e., controllability and stability) and styles (i.e., optimistic and pessimistic). We were also interested in studying the relationships of these cognitions with affectivity dimensions and personality traits to better understand these individual differences as relevant in posterior selection or assessment processes.

#### Theoretical background

Workers do not interpret experiences of success and failure at work similarly. Attribution theory (e.g., Weiner, 1986) proposed that workers differ in attributional styles (i.e., optimistic or pessimistic). Attributions are causal explanations for events or behaviours (Harvey & Martinko, 2021). The literature considers different dimensions to characterize these explanations such as controllability (i.e., internal or external cause) and stability (i.e., the temporal recurrence of the cause).

Different scales of attribution dimensions and styles have been proposed. However, the majority were originated in clinical contexts (e.g., to understand learned helplessness; e.g., the ASQ by Peterson et al., 1982), or proposed hypothetical situations (without considering their relevance) in which workers have to imagine themselves (e.g., the OASQ by Furnham et al, 1992 ). Hence, the development of a tool to measure attributions especially adapted to real situations at work becomes necessary. It is then important to consider some recent advances about frequent work events or situations most relevant in triggering cognitive and affective reactions (e.g., Ohly & Schmitt, 2015).

#### Methodology

To that end, we conducted a systematic literature search to find studies that identify categories of relevant affective work events to explore as sources of posterior attributions. 21 studies were chosen after a search in the PsycINFO, PsycARTICLES, and PsyCRITIQUES databases. Full agreement among the researchers was reached after several rounds to propose 16 frequent and relevant work situations to be considered in assessing attributional styles (e.g., “You receive inappropriate comments (from a colleague, from your boss, etc.) about the quality of your work”, “You successfully complete a task”, “You are assigned to tasks and projects that you do not want”).

The 16 situations were used as items for the new scale. Participants rated the 1) relevance of the situation (Not at all–Very relevant), 2) controllability (Totally due to me–Totally due to others or circumstances) and 3) stability (Unlikely–Very likely to be repeated).

262 workers (77% women, average age 29 years old, and 36,5 hours worked weekly) answered the questionnaire jointly with PANAS and NEO-FFI.

#### Results

All 16 situations were considered highly relevant (average range 3,5-4,4, in a scale 1-5). Controllability and stability dimensions showed appropriate reliability values (omegas values of 0,78 and 0,75). Factorial analysis grouped the items in positive and negative situations with a general factor as the best solution. Following previous works (e.g., Miralles et al., 2015), we calculated a score of optimism: workers with high controllability-stability in positive situations and low controllability-stability in negative situations, and vice versa for pessimism.

Regarding the correlations with affectivity and personality, the results followed our expectations: Optimistic showed higher positive affect ( $r=0,27^{**}$ ), extroversion ( $r=0,23^*$ ) and conscientiousness ( $r=0,23^*$ ), while pessimistic showed higher negative affect ( $r=0,21^{**}$ ) and neuroticism ( $r=0,29^{**}$ ).

#### Limitations

Sample size and gender proportion bias are the main limitations of the research, making it necessary to recruit new participants.

#### Conclusions

The tool created has the strength of being focused on work by presenting common situations in that context. Attributional styles have shown to be useful in understanding individual differences to explain other phenomena of interest in work behaviour such as the affectivity (positive or negative) of employees. These individual differences can be incorporated into selection and assessment procedures, as they likely correlate with motivation or performance.

#### Relevance to the Congress Theme

Incorporate the assessment of attributional styles in selection and assessment procedure could contribute to the attraction and attrition of talented workers in our current contexts with high instabilities and uncertainties.

*Keywords: attributional styles, affectivity, personality*

## Oral presentation OP789

### Organisational correlatation of workplace bullying in Hungary

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science

Workplace bullying is a situation in which an individual is exposed to insults and harassment at their workplace constantly and over a long period of time (Leymann, 1996; Matthiesen and Einarsen, 2007). Bullying usually starts with a conflict escalating later into psycho-terror, with victims being exposed to attacks such as being talked about behind their backs, criticism, or the creation of a threatening atmosphere. At the system level, mobbing negatively influences work effectiveness and efficiency, reduces job satisfaction and motivation, as well as contributes to higher levels of intention to leave work (Martino, Hoel, and Cooper, 2003).

Although workplace bullying is being intensively researched internationally, very few studies on mobbing have been conducted in Hungary. Over the past 25 years, hardly any studies have been published on the subject, despite the fact that, in addition to its numerous negative correlates (e.g. stress, anxiety, health consequences, and even PTSD) appearing at several levels, mobbing has been shown to have a correlation with job satisfaction, effectiveness, and the intention to leave. Furthermore, there is presently no methodically reliable questionnaire that measures mobbing in Hungarian. Therefore, during our research, we are adapting the Negative Actions Questionnaire (NAQ-R), which has been developed by Einarsen and his colleagues (NAQ-R, Enarsen, Hoel, and Notelaers, 2009), and is the most commonly used measuring tool internationally.

The employees taking part in the adaptation of the questionnaire are over 18 years old and have been working for a minimum of 4 hours a day for at least half a year. In the first part of the adaptation, more than 200 people filled in the questionnaire, which rose to over 300 during validation. The validity of the questionnaire has been examined with the help of several questionnaires concerning system wellbeing and system output, such as the relevant scales of the Copenhagen Questionnaire (COPSOQ II; Pejtersen, Kristensen, Borg, and Bjorner, 2010), the Intention to Leave Questionnaire (Mobley, Horner, and Hollingsworth, 1978), the Workplace Stress Questionnaire (Coping and Stress Profile, Kissné Visket and Hunyady, 2001), as well as the WHO Wellbeing Questionnaire (WHO Well-Being Questionnaire — WBI5; Bech, Gudey, and Johansen, 1996).

According to our initial analyses, the Hungarian version of the NAQ-R questionnaire has the required reliability. We have also received conceptually expected correlations with the scales used for testing validity. However, the long-term goal of our study is not only to adapt the NAQ-R questionnaire to Hungarian but also to explore how the system, as a community, influences workplace bullying in Hungary. Furthermore, we aspire to understand the average employee's attitude towards mobbing and to what extent they consider it acceptable.

*Keywords: workplace bullying, adaptation, turnover intention*

## Oral presentation OP178

### Organizational culture impacts the effects of Design Thinking practices on novice users

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science

Organizational culture is defined as the underlying norms, values, and assumptions that define the "right way" to behave in an organization (Schein, 2010). Therefore, this culture, as perceived by collaborators influences the perception and adoption of tools from Design Thinking (Canato et al., 2013; Elsbach & Stigliani, 2018). A culture advocating collaboration, and proximity to consumers or users favors the integration of Design Thinking tools (e.g., Chen & Venkatesh, 2013; Kolko, 2015; Stigliani & Ravasi, 2012; Wilkie et al., 2010) while a culture focused on performance or productivity may inhibit the use of these tools (e.g., Berk, 2009; Chang et al., 2013; Goffin & Micheli, 2010)(e.g. Berk, 2009; Chang, Kim, & Joo, 2013; Goffin & Micheli, 2010). This obstacle does not only come from a reluctance on the part of managers, as one might think, but may result from a failure to implement these tools and to reap the theoretical benefits because the gap between usual practices and Design Thinking practices would be too large (Chang et al., 2013).

In order to define such potential gap between culture types and design thinking tools and practices, the study focuses on how novice participants in a Design Thinking process form attitudes and perceive the novelty and utility of Design Thinking tools over time. Moreover, we hypothesize that culture influence participants' general attitudes towards Design Thinking practices, the evolution of such attitudes and the specific practices they perceived as novel and useful.

Data were collected from 46 participants grouped in 15 cases of novice multidisciplinary product development teams using design methods across phases of product development and implementation. A hybrid qualitative and quantitative analysis indicate the impacts of culture on perception of Design Thinking practices: First, culture influenced the evolution of participants' attitudes and engagement in the process. Culture oriented toward competitiveness and security show opposite effects compared to culture oriented toward relationship and improvements. Second, participants reported different practices or tools that they retained as new and useful and wish to implement. Such differences were partially influenced by participants' perception of the culture of their organizations. Thus, what is retained and highlighted from a discovery of a Design Thinking process depend on how participants perceive their actual environment and the practices already in place. And third, a sample of participants showed an important evolution from passively resistant to the Design Thinking Process to actively promoting its use and development in the organization. Interviews analyses showed the evolution of attitudes during the different steps of the process.

The present study aims to be applied in more organizations in order to identify significant and replicable effects. Moreover, as limitations, the longitudinal and cross-organizational design led to numerous potential biases such as variances in communication about the Design Thinking program, the length of the program and time between the different steps, the importance of the product for the organization strategy. Such aspects might have influenced attitudes toward Design Thinking.

Implications from this study include that organizations benefit differently from the implementation of Design Thinking program and participants find interest and seek to replicate different tools and practices depending on their organizational context. Finally, participants refractory to Design Thinking were found to benefit more from it, as they changed their views along the process in a greater way than neutral participants.

*Keywords: Culture, Innovation, Design*

## Oral presentation OP506

### Organizational factors and work engagement: study among contractual teachers of regional academies

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science&practice

#### 1. Research goals

Teaching has been considered a very demanding job and high-stress occupation (Bakker et al., 2005; Newberry & Allsop, 2017; Travers & Cooper, 1996). In the same way, Moroccan teachers face a lot of constraints and demands (e.g., overcrowded classrooms, work overload, lack of pedagogical resources, student misbehaviours) that impact their motivation, well-being and engagement (Azouaghe, 2018, 2019; CSEFRS, 2014). Given these conditions, the Moroccan government, launched in 2016, a new status namely “contractual teachers of the Regional Academies of Education and Training” to fill the teacher gap (decision, N° 7259, 2016). This decision has led to strikes and protest stops by teachers of regional academics during each school year. The situation has changed from “public job stability” to employment on a group contract basis which means “unstable job” what created the difference between “us and them”; “us” refers to the contractual teachers and “them” refers to the public sector teachers. Despite the fact that they have the same role/work, it should be noted that they have not the same status and rights. However, authors emphasized that not all teachers are anxious and stressed (Hakanen et al., 2006). This study focuses on the impact of organizational factors (i.e., job insecurity, social support and procedural justice) on work engagement among the contractual teachers of regional academies in Morocco.

#### 2. Theoretical background

Work engagement is “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002, p. 74). Based on the job demands-resources (JD-R) theory (Bakker and Demerouti, 2014, 2017), the combination of job characteristics and personal resources makes it possible to predict job performance through employee engagement. Consequently, engagement at work appears more likely when workers face high challenges and have sufficient professional and personal resources to meet those challenges (e.g., Bakker and Sanz-Vergel, 2013; Tadic et al., 2015). Schaufeli et al. (2009) show that social support is among the predictors of work engagement.

#### 3. Methodology

**Participants.** The sample consisted of 99 teachers: 38 teachers in primary school and 61 teachers in secondary school. It included 41 male and 55 female. For 3 teachers, information about gender was missing. The age range of the participants was between 22 to 50 years. Furthermore, the number of years of working experience was between 1 year to 6 years.

**Measures.** Data was collected using a questionnaire. Job insecurity was measured by job Insecurity Scale (De Witte, 2000). It contains 4 items are scored on a 5-point scale, ranging from 1= totally disagree to 5 = totally agree . Social support was based on a scale using the results of the exploratory study and the job content questionnaire (Karasek & Theorell, 1990). It includes six items measured on a 5-point scale (1= strongly disagree , 5= strongly agree ). Procedural justice was assessed using an

adaptation of Brashear et al.'s (2004) organizational justice scale. The scale includes nine items, ranging from 1 = strongly disagree to 6 = strongly agree . Work engagement was measured with a short version of Utrecht Work Engagement Scale (Schaufeli & Bakker, 2006). It includes nine items are scored on a 6-point scale (0= never , 6= always ).

#### 4. Results

Results show consistency of all measurement scales is satisfactory. Cronbach's alpha coefficient higher than .70. They indicate a positive and significant relationships between social support and work engagement (  $b = .41$ ,  $p < .01$ ). However, there is no significant effect of job insecurity (  $b = .11$ ,  $p = .26$ ) and procedural justice (  $b = .06$ ,  $p = .50$ ) on work engagement.

#### 5. Limitations

The sample size is small. The results are preliminary. A large sample study is in progress which results will be presented at the 21 st EAWOP Congress.

#### 6. Research/Practical Implications & Originality/Value

Our study reveals the importance of taking into account the social support as a key variable in promotion of well-being and engagement among Moroccan contractual teachers. To the best of our knowledge, no such study has yet been conducted in the field of work psychology in the Moroccan context. In order to address this gap, the overall goal of this study is to explore the impact of organizational factors on work engagement among Moroccan contractual teachers.

#### 7. Relevance

The study is fully in line with the theme of the congress and UN SDGs in that it focuses on organizational factors (job stability, feeling of precariousness, role of the entourage) which have a positive or negative impact on well-being, engagement and motivation at work, especially in the education system.

*Keywords: Contractual teachers, Work engagement, Organizational factors*

## Oral presentation OP414

### **Paths to team performance: a configurational analysis using fuzzy-set qualitative comparative analysis**

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science&practice

#### Research goals/Theoretical background

Work environments are increasingly volatile, uncertain, complex and ambiguous (VUCA). In these turbulent contexts, the use of teams as a way of organizing and managing work gives organizations flexibility, maximizing the value of their human capital. As the main purpose of creating teams is always generating value for the organization, acknowledging what drives team performance has been one of the main concerns of both research and practice.

Much of the recent research developed in team performance was guided by the input-mediator-output-input model, in which outcomes of team activity are conceptualized as the result of antecedent factors (inputs) that influence member's interactions (processes) and emergent states (e.g., affect and cognitions). In the present research, adopting a configurational approach, we intend to explore how two processes – team learning and team conflict – and two emergent states – team trust and team psychological safety – combine to generate (or undermine) team performance.

Although the literature considers that a group is a complex adaptive system where causal relationships are not necessarily linear, most of the research in this area has adopted symmetrical approaches. In this paper, we intend to advance on previous studies, by using fuzzy set Qualitative Comparative Analysis (fsQCA), an approach that takes into account the possible asymmetric effects of the variables on the outcomes. Specifically, this approach allows the conditions that lead to a given result to be identified, considering that in some configurations the presence of a given condition may contribute to reaching the outcome whereas, in others, it may be its absence that leads to the result.

#### Methodology

A field survey study was conducted with 82 teams (353 team members and 82 team leaders) from 57 Portuguese organizations. Most companies are from the services sector (73%) and the majority are small and medium-sized companies (80%).

A multisource approach was implemented in this study: team members were surveyed about team trust, intragroup conflict, and team psychological safety, whereas leaders were surveyed about team learning and team performance. The convergent and discriminant validities of measurement scales were analyzed through two confirmatory factor analyses (CFA) using the maximum likelihood method of estimation, conducted with AMOS Software (Version 25). FsQCA was used to test the configurations (i.e., a combination of antecedent conditions) that reflect the necessary and sufficient conditions for high and low team performance. FsQCA 3.0 was used to perform this analysis.

#### Results

The results obtained suggest that three alternative paths can lead to high levels of team performance, which explain together about 53% of this outcome. Team learning and cognitive trust

are the core conditions in these models, but contributing conditions vary. The most frequent configuration (with a raw coverage of .443 and a unique coverage of .441) includes the presence of team learning, cognitive trust, affective trust, and the absence of both socio-affective conflict and task conflict. Regarding the paths that lead to low levels of team performance, five configurations were obtained, which account for 57.8%. The absence of psychological safety is always a core condition, and the absence of team learning, or the presence of socio-affective conflict, are also core conditions, alternatively. The absence of team learning is a core condition in three of the obtained configurations, while the presence of socio-affective conflict is only present in two configurations.

#### Limitations

The cross-sectional nature of data may lead to the role of team learning, team conflict, team trust, and team psychological safety as antecedent conditions of team performance being questioned.

#### Conclusions

A higher number of configurations was obtained for low levels of team performance than for high levels, which suggests that there are more paths to failure than to success. The centrality of team learning as a fundamental process to achieve success and avoid failure is clearly highlighted, emphasizing the importance of developing this process among teams.

To the best of our knowledge, this is one of the first studies to explore the asymmetrical effects of team processes and emergent states on team performance. Due to the complex nature of teams, adopting this kind of approach may lead to an enhanced understanding of the conditions that lead teams to succeed.

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*Keywords: team performance; FsQCA*

## Oral presentation OP552

### PATIENT EXPERIENCES AND HOSPITAL-ASSOCIATED INFECTIONS: A GROWTH MODEL

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science&practice

**Research goals:** For decades, calls have been made for studies linking different types of patient outcomes. Patient outcomes have taken two main forms: subjective (based on the perceptions of patients) such as patient experience, and objective (independent of the perceptions of patients) such as injuries and hospital acquired conditions. The health sector is a highly volatile one with several dynamic factors. Considering that patient experiences have gained traction in health research over the years, a relevant question to ask is if patient-reported experiences are reliable sources for improving healthcare quality in such a volatile sector. This paper argues that if patient-reported experiences are significantly linked to objective patient outcomes over time, then subjective outcomes are a solid basis for assessing healthcare quality and improvement. The aim of this paper is to develop a growth model of hospitals on patient-reported experiences to assess trends together with trends in hospital-associated infections.

**Theoretical background:** This paper draws on the existing theories on quality healthcare such as the Donabedian framework.

**Methodology/Approach:** The study will obtain data for both patient experiences and hospital-associated infections from the website of the Norwegian Health Directorate on quality indicators between 2012-2021. The unit of analysis will be the hospitals. A latent growth model will be developed with the aid of Mplus to assess the concurrent changes and relations between the two variables over time.

**Expected results:** It is expected that the intercept and slope of hospital-associated infections will relate negatively with the intercept and slope of patient-reported experiences. Thus, hospitals that start high and continue scoring high on hospital-associated infections will start low and continue scoring low on patient-reported experience. The final results of this will be ready by January, 2023.

**Limitations:** This study will be limited by the measurement of the two variables as there may be variations of this at the hospital level due to factors such as length of stay, hospital size, preferred treatment by patient, and type of illness. Nonetheless, the study will control for some of these factors to generate reliable results.

**Conclusions/Implications:** The study will buttress the relevance of patient-reported experiences as reliable basis for quality improvement as well as a reflection of existing conditions in hospitals. Hospitals will take patient experience scores into consideration when making decisions to improve healthcare quality. The study will also contribute to filling the dearth in literature regarding relationships between different forms of patient outcomes.

**Originality:** This study will be one of few that links subjective patient outcomes to objective patient outcomes over time, especially in Norway.

*Keywords: patient experiences, hospital-associated infections, latent growth*

## Oral presentation OP800

### **Perceived age discrimination misfit in employee-supervisor dyads and objective employability ratings: The buffering effect of motivation to continue work**

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science&practice

Employability is one of the key indicators of sustainable careers (Van der Heijden, 2015). In a novel approach, we move beyond the traditional agentic view of employability and account for an unexplored contextual and relational factor that impacts on employability, thereby bringing a fresh multi-source and multi-level approach to employability studies (Forrier et al., 2017).

Drawing on Conservation of Resources theory (Hobfoll, 1989), we test whether the negative impact of the perceived age discrimination misfit in employee-supervisor dyads (an adverse contextual and relational factor) on objective employability ratings (resource loss) will be buffered by employees' motivation to continue working (optimal functioning). We tested our multi-level moderated polynomial model of dyadic age discrimination misfit in a sample of 190 employee-supervisor dyads drawn from corporate organisations operating in Europe. Using Response Surface Methodology, we found that objective employability ratings suffer most when the misfit between the employee and supervisor perceptions of age discrimination is greatest in both directions under lower levels of employee motivation to continue working. However, we do not observe a similar decline in objective employability ratings under higher levels of employee motivation to continue working – suggesting a buffering effect to achieve optimal functioning in the face of an adverse contextual and relational factor.

This is the first empirical study introducing dyadic age discrimination perceptions as an adverse contextual and relational antecedent of objective employability and testing this hypothesis by using polynomial regression and response surface methodology, thereby offering new conceptual and methodological insights into employability and sustainable careers literature.

*Keywords: age discrimination, misfit, employability*

## Oral presentation OP802

### Perceived similarity and change reactions' endurance and valence: The mediating role of trust in dyads

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science

Research Goals and why the work was worth doing

Much of the interaction among group members and leaders happens within dyads. Amongst the other individuals, the employees' supervisor is potentially the most important (Vecchio & Bullis, 2001). As a result, employee-supervisor interactions can influence how the change is perceived and assessed (Lines, 2005). These dyadic interactions between employees and their supervisors are described as more positive when people engaged in these interactions perceived the others as similar which increases trust (Liden et al., 2016). Trust can influence both the valence (positive or negative) and the strength/endurance of reactions to change.

Previous research has scarcely examined the strength/endurance of reactions to change which are more durable and impact the associated work and change outcomes. This research contributes to collective change research and practice by examining both the valence and the endurance of a reaction to change through a relational perspective, which is an important missing element in our understanding of employees' reactions to change. Examining whether perceived similarities of reactions between employees and their immediate supervisors increase interpersonal trust and whether trust can increase the valence and the durability of an employee's reaction to change, may reveal important contingencies that can add to our understanding of collective reactions.

Theoretical background

Collective reactions to organizational change are driven by interactions between change recipients. Employee-supervisor interactions can influence employees' reactions to change which are important for change success. These dyadic interactions are described as more positive when employees engaged in these interactions perceived their supervisor as similar. When similarities in attitudes exist in a dyad, employees report greater trust. The similarity in reactions to change can assure the employees about the 'correctness' of their reaction to change but we hypothesise that trust can make them feel safe to develop endured and shared reactions to change. Trust can make employees feel safe to keep the same reaction because their immediate supervisors have all the necessary abilities to guide them through change, they demonstrate consistency between words and actions, and they show concern for their welfare. As a result, employees not only realize their common aspects of cognitive processing and therefore a common way of interpreting events but they feel safe that the trusting relationship with their immediate supervisors will reduce any risk associated with keeping or shifting reactions to change.

Design/Methodology/Approach/Intervention

We conducted a study of 168 dyads and a total of 336 participants. Hypotheses were tested as a structural equation model in Mplus version 8 (Muthén & Muthén, 2017).

Results obtained or expected (if not available, it must be made clear when they will be)

We found support for the mediating role of trust in the relationship between perceived similarity and the endurance and shared valence of reactions to organizational change. In an atmosphere of trustful dyadic exchanges and interactions in a changing context characterized by uncertainty, speculation, and fears, perceived similarities in reactions validate an employee's reaction more, making it more enduring. Perceived similarities in reactions to change is a valuable source of information that signal the right valence and the 'correctness' of these reactions. But, to adopt a favorable reaction to change and keep the same reaction to change, facing the possible risk associated with this decision requires more than a common way of interpreting the change. It requires trust.

#### Limitations

Although supervisory reactions were assessed by their employees, and employees' reactions were assessed by their supervisors in our research, data was collected in Greece, a country categorized as high on power distance (Hofstede, 2001). As a result, employees may be particularly perceptive to their immediate supervisors' reactions to change.

#### Conclusions

Organizations can no longer rely on dyadic attitudinal similarity to generate positive and effective reactions to change. Building trust in an organizational change context is essential because it creates conditions for favorable and endured reactions to change. The nature of the interpersonal relationships between employees and their supervisors can have a great effect on the valence and on endurance of employees' reactions.

#### Relevance to the Congress Theme

Understanding reactions to change on a dyadic level contribute to our understanding of the changing nature of work and its dynamics. Failing to examine the valence and the endurance of reactions to change reduces the accuracy and validity of the results and can mislead decision-makers.

*Keywords: trust, reactions to change, perceived similarity*

## Oral presentation OP51

### Performance management effectiveness in SME's – evidence from Belgium

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science&practice

Both academic research and practice have been highlighting the challenge to design and implement effective Performance Management (PM) in organisations, making it potentially one of the bigger challenges in Human Resources. In the present study the goal is to get a view on those factors that impact the effectiveness of performance management systems. We aimed at getting a better view on how organisations, more specifically Belgian SME's (Small and medium-sized enterprises), currently shape performance management and we investigated how these characteristics explain the effectiveness of performance management.

Existing research is not clear about the effect of frequency of an appraisal talk. Recurring feedback can be helpful, but this doesn't always need to take the form of a formal talk (Casas-Arce, Lourenco & Martinez-Jerez, 2017; Wood, Pichler & Beenen, 2017). In our study, we investigate if the frequency of an appraisal talk is linked to PM effectiveness. Furthermore, research suggests that the content of an appraisal is a determining factor for performance management. Researchers indicate that it should focus on skills and competencies, training needs and personal development in the company (Armstrong, 2006; Lawler & McDermott, 2003). Our research takes a closer look at topics that are discussed during an appraisal talk and their effect on performance management. These topics include skills, attitudes, company values, individual and team goals, salary, ...

Additionally, scholars argue that the supervisor plays a vital role in performance management and therefore they should get training and support in the performance management of their team members (Armstrong, 2006; Botha, Blom & Modipane, 2019; CIPD, 2022; Kondrasuk, 2011). We investigate if training and supporting supervisors in performance management is correlated with PM effectiveness. Other variables were included in our study as well: automatization, appraisal scoring, ... (Armstrong, 2006).

Data collection was done in the beginning of 2021 through an online survey directed towards Belgian SMEs. 156 organisations from different industries filled out the survey. Our regression analysis shows that supervisor training and content of performance conversation are important drivers of PM effectiveness than conversation frequency. More specifically, organisations that report to train their supervisors more heavily and that focus on skills development and training and development needs during the conversations report higher PM effectiveness. Together these variables explain 39% of performance effectiveness, as measured in our survey.

Contributing to the UN Sustainable Development Goal 'Decent work and economic growth', our findings shed new and interesting light on how to make performance management effective in organizations where the main conclusion is that quality of performance management is more important than quantity. There are however a few limitations to our study. First, our survey includes cross-sectional data at an organisational level. Second, PM effectiveness is a self-reported measurement and gives an idea of how effective the performance management system is considered by the participants. Further research could use multi-source and longitudinal data on an employee level. Furthermore, it could look into the effect of performance management practices on the actual performance of employees.

During the EAWOP conference we want to present the findings from our study and give insights into how practitioners can improve the effectiveness of their performance management approach. We also want to inspire academics for future research.

*Keywords: performance management, effectiveness, appraisal*

## Oral presentation OP725

### Personal and Work-related Factors in Workplace Stress and Physical Health Outcomes: Scoping Review

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science

Chronic work stress is consistently associated with the development of poor health, most commonly cardiometabolic diseases. Although research into the work stress-health relationship is widespread, differences exist in how this problem is conceptualised and researched. The two main approaches are a work context perspective and a health perspective. The work perspective conceptualises the path from work context to perceived stress and well-being, often based on conservation of resources theory. The health perspective considers the pathway from chronic stress to clinical outcomes, based on allostatic load theory. Therefore, knowledge gaps exist in the integration of the various predictors of physical health.

Interdisciplinary research is necessary to consolidate current knowledge existing in the two perspectives. Within each perspective, literature reviews are common, although there is little cross-over spanning the knowledge of the two. Therefore, a hybrid scoping review has been conducted to examine and map the workplace-related personal and work context factors that influence employees' stress-related physical health outcomes, and the underlying mechanisms of this pathway. The consolidative nature of this review will provide a framework from which research gaps can be identified, and tailored, evidence-based interventions may be constructed; this will be beneficial to both researchers and practitioners.

We are currently conducting a scoping review, following Arksey & O'Malley's (2005) framework. Scoping reviews are beneficial in interdisciplinary research, facilitating the identification of overlaps in concepts that may use different terminology across the two fields. The databases WebOfScience, PubMed, and PsycINFO were searched using terms focused on physical health, personal factors, work-related factors, and workplaces. The scoping review utilises multiple search strategies to capture research from both perspectives. For example, targeting the health perspective, the search terms "coronary artery disease" or "diabetes" were used, whilst for the work context perspective, the terms "physical health" or "health and wellbeing" were used.

17 reviews and 269 empirical papers were included in the scoping review, and the most relevant information was extracted and summarised. Analysis of the papers is still ongoing and is expected to be completed by December 2022.

The most common outcome reported in the included studies is 'subjective health', closely followed by diabetes and cardiovascular disease incidence.

Risk factors have been categorised by the authors into four levels of work factors (organisational, team, job, and individual level), and four levels of personal factors (sociodemographic, psychological resources, personality, and behaviour). The organisational level includes policies, culture, and structure, and the team level incorporates leadership, interpersonal relationships, and team perceptions. At the job level, the categories of job characteristics were identified, for example, salary and contract type, as well as working conditions and work demands. Personal factors included sociodemographic variables, such as age, gender, and education level. Psychological resources were identified, such as psychological flexibility, self-efficacy, and resilience. Personality emerged as a large category of personal factors, including traits such as neuroticism, cynicism, proactive, and type

D personality. The final category of personal factors identified was behaviour, such as physical activity, nutrition, and smoking.

A limitation of this review is the large number of included papers limits the depth of analysis that can be reached. This review aims to provide an overarching view of the two perspectives, although this may lead to a loss of detail in explaining the relationships.

Conclusions that can be made about the results are preliminary, but some areas that were highlighted as gaps to be investigated deeper include psychosocial safety climate and psychological capital as predictors of health, and heart rate variability as an indicator of health.

Due to the interdisciplinary nature of the topic, there was extreme heterogeneity in the conduct of the studies. Much of the research from the health perspective investigated objective physiological measurements, whilst research from the work context perspective measured subjective health. Therefore, it is hard to link the contextual predictors (the focus of the work context perspective) to a specific disease outcome (the focus of the health perspective). Hence, more research is needed to link the work context with objective health measures.

In line with the UN's SDG target 3.4, this scoping review focused on the outcome of non-communicable diseases, specifically, stress-related cardiometabolic diseases. By understanding the work contexts related to such diseases, multilevel interventions can be developed within organisations to prevent the development of these diseases.

*Keywords: Stress and burnout, job characteristics, job demands*

## Oral presentation OP546

### Personality Metatraits and Managerial Competencies in Assessment Center Performance: The Moderating Effect of Age

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science

The article examines the relationship between personality and managerial competencies with the moderating effect of age. A group of 327 managers partook in this study. Managerial competencies related to social skills, problem-solving, management and goal striving, openness to change, and employee development were evaluated via the Assessment Center (AC) method with the application of strong and weak simulations of VUCA, an acronym for “volatility, uncertainty, complexity, ambiguity.” Personality metatraits were assessed via a self-report questionnaire conceptually based on the Circumplex Model of Personality Metatraits (CPM; Strus et al., 2014), which consists of four bipolar personality metatraits. The results confirmed that two personality metatraits – Passiveness and Disharmony – are negatively linked to all managerial competencies, and the regression models showed that Passiveness was a significant negative predictor of social skills and problem-solving. Moreover, the results showed that the managers’ age can be considered a significant moderator in the relationship between personality metatraits and managerial competencies, albeit in specific simulations only. Our research findings help to better understand this relationship by including a moderating variable. For example, age as the moderator of the personality-overall assessment rating (OAR) could be considered a predictor of managerial performance differently for younger and older managers.

The article aimed to assess the relationship between personality metatraits and managerial competencies demonstrated in AC simulations while taking into consideration managers’ age, which was used as a moderator variable. According to our hypotheses, positive personality metatraits should be linked with a higher level of managerial competencies, while negative personality metatraits should be related to a lower level of managerial competencies. The results showed that Plasticity (Beta-plus) was positively related to openness to change, problem-solving, and employee development. Integration (Gamma-plus) correlated positively with problem-solving, openness to change, and employee development. On the other hand, Passiveness (Beta-minus) and Disharmony (Gamma-minus) had a negative relationship with all managerial competencies. Thus, we could conclude that only three out of the eight measured personality metatraits played an important role in this relationship. We should highlight that although these correlations were significant, they were not very strong, so the results should be interpreted with caution, albeit similar findings were reported in other studies that measured these constructs (e.g. Meriac et al., 2008; Klehe et al., 2012; Simonenko et al., 2013).

A person’s performance in the AC may be influenced by the level of individual characteristics and context. Managerial competencies were assessed by observing behavior in four AC simulations grouped into strong and weak VUCA, so in the second step, we wanted to check whether personality metatraits predicted AC performance in strong and weak VUCA simulations. We found that Passiveness (Beta-minus) was a negative predictor of (1) social skills in strong but not in weak VUCA, (2) problem-solving in strong and weak VUCA. Summarizing, the dark characteristics of personality like apathy and submissiveness in interpersonal relations can be perceived as individual barriers to demonstrating social skills (e.g. effective communication, assertiveness, and teamwork) and problem-solving (e.g. ability to analyze a situation and seek the best solution to these problems), which are crucial in managers’ work environment. Interestingly, no relationships were found

between positive personality metatraits and managerial competencies, so we could conclude that the bright sides of our personality are neutral in this relationship and only the dark sides can disturb the demonstration of managerial competencies.

The performance of a person during the AC may be influenced by the level of individual characteristics, the context, and managers' age; so in the next step, we wanted to check whether personality metatraits predicted AC performance in various age groups. The results showed that Disharmony (Gamma-minus) was a negative predictor of AC performance in the youngest group of managers, while Passiveness (Beta-minus) was a negative predictor of AC performance in the middle-aged group of managers. No significant regression coefficients were observed in the oldest group of managers, so we could conclude that dark personality metatraits could be considered blockers in demonstrating managerial competencies among the youngest and middle-aged managers. A possible explanation of our results could be that personality plays a more important role among younger managers than among older ones, whereas older managers' performance relies more on their competencies.

*Keywords: AC, personality, competencies, Circumplex Model of Personality Metatraits*

## Oral presentation OP30

### **Perspectives™ PsyCap Potential - The critical psychological capabilities underpinning leadership potential in a VUCA world**

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science&practice

#### Research goals

PeopleWise sought to understand what differentiates successful leaders, and the critical psychological variables that predict leadership potential to enable organisations to identify, develop & retain their critical talent to build robust leadership pipelines for the future.

#### Theoretical background

Grounding the model in positive psychology, PeopleWise drew on existing literature, including the work of Judge et al. (1997) on core self-evaluations, the psychology of performance, motivation, leadership & interpersonal effectiveness, as well as research conducted by PeopleWise practitioners in leadership, organisational behaviour & psychological capabilities. Insights were also drawn from the research on corporate psychopathy & disordered personalities in the workplace (Board and Fritzon, 2005) and the extensive experience working with many organisations and thousands of leaders globally over the last two decades.

#### Methodology

The model was first conceptualised in the early 2000s, with a global client to profile & develop high potential leaders within their organisation. The client wanted to use psychometrics with strong predictive validity for leadership potential, but that also could be developed through micro-interventions such as development centres & programmes. A substantial gap in the literature and the market was identified, with a lack of an integrative theory of state-like measures that could also predict performance & potential at work. This project was the springboard for the development of the Perspectives™ PsyCap Potential model.

PeopleWise identified criteria for sifting through leadership theory to produce an integrative taxonomy of psychological capabilities in the workplace. PeopleWise reviewed the literature using key criteria and constructed the first draft of the PsyCap model, known as the Potential Evaluation Profile (PEP). Initially, as three higher-order capabilities, which later expanded to become the PsyCap Potential assessment of five critical psychological capabilities. Extensive reliability and validity studies were conducted with focus on criterion-referenced validity, to ensure the constructs were associated with key organisational outcomes linked to leadership potential and performance. This was key to defining its utility for selection and development.

#### Results

In pursuing which capabilities define leadership potential, PeopleWise identified five higher-order psychological capabilities defining the Perspectives™ PsyCap Potential model: Mental Agility, Emotional Agility, Confidence, Resilience & Drive. Within each of the five capabilities are three lower-order sub-capabilities. This has resulted in the development of a single comprehensive, rigorous assessment measuring the five critical psychological capabilities consistently shown to be associated with leadership performance, leadership potential & marginal risk. This is demonstrated through significant relationships established with job performance, success on work-related training courses,

180 performance ratings, assessment centre performance ratings (and 12 month post-centre potential rating), annual performance ratings, leadership success, academic performance, number of promotions, organisational Citizenship Behaviours (OCBs).

#### Limitations

May be beneficial to conduct a global longitudinal study, to validate the psychological capabilities against other organisational outcomes.

#### Implications

The model provides organisations and practitioners with an assessment tool for selection and development to not only know their talent but also grow their talent based on a well-researched and globally validated model of potential. PeopleWise has received strong client and candidate feedback on the assessment tool as a number of clients have applied the model within their organisations. The tool has been described as revolutionary and an essential part of the HR toolkit providing new and useful insights into top talent. Clients have integrated the assessment into several different leadership development programmes, both as part of the entry process as well as a tool to inform development across the programmes. The tool has also been integrated into selection processes to aid in recruitment decisions at various different leadership levels across the business from individual contributors to senior leaders.

In addition to the Perspectives TM PsyCap Potential model, the behavioural capabilities linked to each psychological capability have also been developed. This provides organisations with a single, comprehensive & integrated model to assess and develop both leadership potential (through psychological capabilities) but also leadership performance (through behavioural capabilities).

#### Value

Researching a less traditional methodology of assessing personality through a holistic approach to defining, measuring and developing state-based personality through capabilities which are developable and positively associated with organisational outcomes.

*Keywords: Perspectives, PsyCap Potential, Psychometric*

## Oral presentation OP84

### Physical absence makes the heart grow fonder? The motivational implications of digital communication during a work-at-home day

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science

Ever since the pandemic, we have witnessed a major shift in how jobs are conducted, with a significant increase of telecommuting in a range of organizations and occupations. A rising practice in this respect has been telework from home (TWFH; Vleeshouwers et al., 2022) in which the employee adheres to telecommunication technologies for performing their work-related tasks from home (Rudolph et al., 2021). The subject of TWFH had already fueled scholarly interest before, with researchers investigating its effects on both the employee and the work environment (e.g., organizational culture and turnover intention; Bloom, Liang, Roberts & Ying, 2013). Their studies were predominantly conducted along the lines of work stress theory (Ingusci et al., 2021) and social identity theory (Thatcher & Zhu, 2006; Fonner & Roloff, 2012). Applying these perspectives specifically, they found that TWFH caused feelings of professional isolation, an increase in working hours (i.e., working overtime), blurred work-family boundaries, and work to home conflict (Delanoëje, Verbruggen & Germeys, 2019). Alternatively, some studies also pointed at higher focus and productivity from TWFH (Vleeshouwers et al., 2022); indicating that TWFH does not seem to be “all that bad”. However, to date, there is little insight of the more positive effects of TWFH. Therefore, in this study, we aim to adopt a more positive angle towards TWFH by looking at how this practice may contribute to the employee’s motivation. More specifically, we investigate to what extent and how TWFH relates to the employee’s basic needs satisfaction – i.e., frustration versus fulfillment of the needs of autonomy, relatedness and competence - as defined in Self Determination Theory (SDT; Van den Broeck et al., 2016). Indeed, abundant research has attested the importance of the fulfilment of these needs for desired outcomes such as well-being (Peters, Calvo & Ryan, 2018). The frustration of these needs is associated with higher levels of work-related stress and leads to ill-being (Olafsen, Niemiec, Halvari, Deci & Williams, 2017).

In applying a motivational lens to TWFH, we orient ourselves towards a highly important feature of TWFH days as we have seen from the more recent approaches to such days ever since the pandemic: we specifically look at computer mediated communication (CMC) when teleworking from home. That is, employees are now increasingly using CMC to do their work and socially connect to their supervisor and co-workers. In this study we want to investigate why such CMC during a working day at home could fuel versus challenge needs satisfaction. CMC is approached as a scale, measuring the extent of work related communication via e-mail, audioconference, videoconference and instant messaging during the work hours.

Next, drawing on the literature, we identified three features of CMC important for a work setting specifically: techno-workload (Liu, Du, Choi & Li, 2022), social support (Barnett, Martin & Garza, 2019), and interruptions (Sonnetag, Reinecke, Mata & Vorderer, 2018). We expect the use of CMC to fulfill the need for autonomy. Additionally, CMC will fulfill the need for relatedness and immediate CMC is likely to lead to the satisfaction for the need for competence, in contrast to delayed communication which likely is frustrating. So we expect CMC with colleagues during a day TWFH to have an impact on the daily motivation through different topics. In all, this study contributes to science by being the first to explicitly investigate TWFH, and more precisely CMC during a TWFH day, from a motivational perspective.

To test our hypotheses, we used an event-based diary study in which we examined the impact of CMC during a TWFH day on employee basic needs satisfaction through techno-workload, social support and interruptions. Data were collected over two periods of 10 consecutive workdays (in May and September 2022), and participants were invited to complete a survey at the end of each TWFH day. We collected a total of 591 TWFH observations. We are now in the process of analyzing the data using multilevel analysis, which will be completed by the beginning of 2023. We will discuss our findings and their implications during our oral presentation.

*Keywords: Computer-mediated communication, basic psychological needs, motivation*

## **Oral presentation OP87**

### **Placing data analytics into the HRM tool kit: A view to improve organizational effectiveness**

Vincent Cassar, University of Malta; Frank Bezzina, University of Malta; Suzanne Rank , Mainz University of Applied Science, Germany; Stephanie Fabri, University of Malta; Sylwia Przytula, Wroclaw University of Science and Technology

science&practice

This study evaluates how HRM practitioners make sense of the strategic relevance of HRM Data Analytics (HRMDA). We conducted in-depth interviews amongst 48 HRM practitioners from three European countries working in diverse organizations with the aim of highlighting their concerns, beliefs and expectations associated to the use and adoption of data analytics. We utilised Diffusion of Innovation Theory to inform our thinking and focused on the contextualisation of data analytics, their potential role in HRM practice, the required skills needed to support their adoption and the degree of trust associated with accepting HRMDAs. Overall, participants acknowledged the importance of HRMDAs but were still generally sceptical whether it can substitute traditional HRM and tended to rate it as reinforcing HRM rather than substituting it. Research on HRMDAs, from the point of view of practitioners, is scarce and research is required to explore how analytics will re-shape the professional landscape of HRM in a changing world of work.

*Keywords: HRM, data analytics, organizational development, diffusion of innovation*

## Oral presentation OP138

### Positive team climate and emotional intelligence of both team leaders and followers as resources for high job flourishing and performance

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science

#### Research goals and rationale

How can workers' well-being and productivity be promoted at the same time? Answering this age-old question has been a focus in positive occupational health psychology. To help reach the optimal level of both desirable outcomes, scholars and practitioners alike must better understand their dynamic antecedents. Despite a few controversial issues inherent to measuring emotional intelligence (EI), empirical findings have consistently demonstrated the positive impact of a leader's EI on followers' well-being and job performance. However, little is known about why and how these effects occur and what the added value is of the predominantly positive (contagious) emotions within their team. Our empirical study aims to find out how a leader's EI can enhance his/her followers' job flourishing and performance, and how a positive emotional climate within the team may moderate these links.

#### Theoretical background

According to the multi-level model of emotion at work (Ashkanasy, 2003), effective team leaders are expected to have a high level of EI since they are required to co-manage their followers' emotions well. These leaders' emotions are likely to be communicated and reflected by their EI, which is an important job resource that can influence followers' EI levels through emotional contagion. We argue that this interactive process particularly occurs when the emotional climate within the team is positive. Indeed, according to the job demands-resources (JD-R) theory (Bakker & Demerouti, 2017), EI is a personal resource that might affect job flourishing and performance. Furthermore, despite the generally known positive influence of a leader's EI on followers' work outcomes, not every team member may display a high level of EI as a result of a high level of leader EI. Thus, a contextual factor such as team climate can be another resource for team members (or followers) EI. When developing our multilevel research model, we expected that the perceived leader's EI would help to promote individual follower's job flourishing and performance via an enhanced level of follower EI, particularly when there is a high positive team climate.

#### Design

To test our hypothesized multilevel model, a two-wave survey design was invoked while collecting data from 1,227 primary school teachers in Indonesia and their 169 leaders.

#### Results

The results suggest that a team leader's EI plays a key role in promoting job flourishing directly ( $B = 0.17, p < 0.001$ ), or indirectly via enhanced EI ( $B = 0.11, p < 0.001$ ), particularly when the positive team emotional climate is high ( $B = 0.17, p < 0.01$ ). Moreover, the leader's EI also has a direct effect on job performance (leader-rated  $B = 0.046, p < 0.05$ ; self-rated  $B = 0.180, p < 0.001$ ). It is evident, thus, that a team leader's EI contributes to followers' job flourishing and performance. This dynamic is likely to occur due to emotional contagion processes from the leaders to followers, which appears to be also facilitated by a positive emotional climate within the team. Meanwhile, individual follower

EI serves prominently as a crucial mediating mechanism or personal resource for promoting self-rated job performance ( $B = 0.34, p < 0.001$ ).

#### Limitations

Despite the multiple waves of multilevel data collection, we did not control for common method variance or bias which is also prone to reverse causation in the relationships among the variables in our model. Additionally, the follower and leader ratings of job performance differed significantly, implying a need to take more objective and multi-stakeholder performance measures over time.

#### Conclusions

After implementing the conceptual assumptions of the JD-R and the multi-level emotions model in an organization, we shed light on the supervisory, team and non-managerial worker dynamics associated with high follower job flourishing and performance. As a theoretical implication, we highlight the role of a leader's EI as a job resource to promote individual follower EI, thereby ultimately affecting both followers' job flourishing and performance. In addition, team positive emotional climate serves as an extra resource to facilitate the contagion process of positive emotions and to enhance the levels of job flourishing and performance. These results illuminate the multi-level perspectives of the two theories which we used to hypothesize and examine the dynamics of high job flourishing and performance.

#### Relevance to the Congress Theme

The changing world of work has posed emotionally demanding situations for work-floor personnel in which, one would assume, emotional stability is required; this study examined a set of related factors. To stay agile and mentally healthy in current day organizations, certain personal and job resources are needed. High leader emotional intelligence and a positive emotional team climate are suggested to bring out latently available personal resources from the workers for both their own wellbeing and their job performance.

*Keywords: Leader/Follower emotional intelligence, team climate, job flourishing/performance*

## Oral presentation OP338

### **Pragmatic solutions for implementing stress prevention in small enterprises? Process evaluation of a combined web-based intervention 'System P'**

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science&practice

#### Research goals

Micro and small-sized enterprises (MSE) often lack of resources for occupational stress prevention. The goal of this work was to evaluate the implementation of a pragmatic web-based intervention for stress prevention in MSE.

#### Background

Despite evidence regarding the effectiveness of workplace-based interventions in preventing work stress, the implementation of respective interventions in micro and small-sized enterprises (MSE) remains scarce [1]. Addressing common barriers for implementation of such interventions (e.g. high costs and complex procedures), we adapted existing web-based interventions at individual and organizational level (online stress management training and psychosocial risk assessment) and integrated them into one platform specifically developed for MSE – called System P. The study aims to evaluate the implementation of System P in terms of acceptance, usage and effectiveness in the target group.

#### Methodology

The implementation of System P is evaluated in a pragmatic mixed methods pre-post design with outcome measurements at baseline (T1) and 6-months follow-up (T2). Indicators for a successful implementation process include acceptability, adoption, feasibility, reach, dose, and fidelity [2] which are measured with repeated questionnaires and semi-structured interviews (n=10). We also track and analyse usage data collected directly within the web-based platform between T1 and T2. Effectiveness of the intervention is analysed by comparing individual mental health outcomes like depressive symptoms and perceived stress as well as organizational health outcomes like psychosocial safety climate at T1 und T2.

#### Results

Recruitment for the study started in November 2021 and ended in September 2022, with 40 participating MSE. So far, 75 participants filled out the questionnaire at T1 (25 owners and 50 employees) and 2 participants have completed data collection at T2. Despite of high acceptability in terms of self-ratings and interviews answers, the process outcomes for adoption, reach, dose and fidelity were below expectations. Preliminary analysis show that the majority of active users of System P tend to have prior experience with stress prevention and a high psychosocial safety climate. At the conference, we will present the final results for the implementation process and effectiveness outcomes.

#### Limitations

Due to the heterogeneity of MSE, the study was set up without a control group and limited information about non-adopters and their reasons is available. Although multiple communication strategies were used (via intercorporate stakeholders, social media, conference presentations), recruitment was slower than expected.

### Conclusions

Preliminary results indicate that implementation via a web-based platform can only reach a small part of the target group. The sample in this study was highly informed about and showed high engagement in occupational stress prevention actions. Different strategies have to be tested in order to reach those with less knowledge and experience with occupational stress prevention. Furthermore, interviews underline that MSE often have limited time and resources to implement interventions. One possible way to address these barriers in the future may be to involve third party disseminators with more expertise to deliver System P to multiple MSE.

Relevance to the Congress Theme „The Future is Now: the changing world of work”

This study aimed to test innovative approaches of occupational stress prevention strategies by using a purely digital intervention approach that fit to the increasingly digitalized life of micro and small enterprises and their workforce.

### Relevant UN SDGs

This study primarily contributes to the UN Sustainable Development Goal of Good health and well-being as the workplace displays a promising setting for health prevention.

### Acknowledgement

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*Keywords: MSE, web-based intervention, stress prevention*

## Oral presentation OP83

### Preferential Differences for Transactional vs. Transformational Leadership in a Student and Working Population

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science&practice

Research Questions: Do Preferences for Transformational vs Transactional Leadership change with experience and age i.e., differ between students and the working population? Can differential preferences be predicted by Big-5 Personality, business-focused personality and/ or work orientation? (Exploratory)

Background: According to Path Goal Theory (House, 1971) followers' responses to leadership (styles) are dependent on individual needs, goals and preferences and should thus differ between individuals. In a similar vein, Shamir et al.'s (1993) Self-Concept based theory of charismatic leadership postulates, that in order for a charismatic relationship between leader and follower to develop, the leader's message must be congruent with followers' values and identity, indicating that individuals' reactions to one and the same leader might be dependent on personal attributes such as work orientation and personality. Since individual (job related) needs and goals as well work-orientations and values are prone to change with experience and age, I postulate that preferences for different types of leadership might differ between individuals at different stages of their career.

Following the process-view of leadership, I am interested in examining which leadership style followers prefer: The transformational leadership style which is said to raise the level of motivation and morality of followers by engaging with them and creating a connection, or the transactional leadership style, which is more concerned with the clarification of roles and task-requirements? And further, to examine whether the distribution of preferences differs between individuals at different stages of their career.

Methodology: In the proposed study, I examine preference distributions for transactional and transformational leadership in two different samples: University students and a working population. In an online-experiment using vignettes of leaders scoring high on either transformational or transactional leadership, I will measure individual preferences for either leadership style. Leader gender and order of presentation of the vignettes will be balanced between subjects. Measured variables are leader preference (transformational vs transactional leader) as well as Big-Five Personality as measured by the Big-5 Inventory (BFI-2; Danner et al., 2016); Business-focused Personality as measured by the Business-focused Personality inventory (BIP-6F; Hossiep, 2022) and work orientation as measured by the Work Orientation Questionnaire (Willner et al., 2020).

Expected Results: I expect students to strive for ideals, team-work and self-actualization and thus prefer the transformational leader, while the working population should strive for clarity regarding requirements and goals and thus prefer the transactional leader. In an exploratory analysis I want to further investigate whether leader preferences can be predicted by Big-5 and business-focused personality factors as well as work orientation.

Current state of the project: So far, using a mixed sample (university students and working population) I have validated the transactional and transformational leader vignettes using the German version of the Multifactor Leadership Questionnaire (MLQ; Felfe, 2006), while also obtaining a first assessment of the distribution of preferences for the transformational compared to the

transactional leader. I found that subjects' preferences for the transformational or transactional leadership style did not differ significantly, indicating that within the mixed population, preferences for either style are distributed evenly. I am currently in the process of Preregistering the proposed study and hope to start data collection at the beginning of October.

Limitations: While the use of vignettes offers a clean and easy research design, it is unclear whether follower responses are applicable to the real world. Further, the question of differential effects of leadership style on productivity remains unanswered and should be examined in future research.

Conclusions: So far, I have found that subjects differ in their preferences for transactional vs transformational leadership, indicating that "one-size" does not fit all. Under the assumption that attraction to a leader affects satisfaction as well as performance under that leader, leaders should consider individual needs and preferences when deciding on how to approach prospective followers. Knowledge of differential leadership style preferences in early and late career stage employees can help leaders adapt their leadership style accordingly.

Relevance to the Congress theme: In order to change the future for the better, we need effective leaders that engage their followers by adapting their style to individual needs and preferences. Knowledge about preferential differences between early and late career stage employees might help leaders adapt accordingly, providing a more satisfactory and productive environment for all.

*Keywords: Transformational Leadership, Follower Preference, Personality*

## Oral presentation OP292

### Preliminary data from VASSIP: A gamified assessment for personnel selection

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science

Recent reviews point out that technology is the future of personnel selection. Game-related assessments (GRA) are one of the topics related to this issue. GRA has the potential to become an additional valid method among those used in personnel selection, but further evidence is needed regarding the different kinds of GRA and their actual functioning. The present study introduces VASSIP, a theory-driven gamified assessment tool (i.e., a traditional assessment which includes game elements) developed to assess cognitive ability and Big Five personality in the organizational context. VASSIP incorporates three elements from games: (1) a game fiction situated in the far future; (2) immersion, incorporating multimedia resources; (3) conflict, because the player must make decisions and solve problems throughout the story. Our research goals are to investigate its content and predictive validity, its applicant reactions compared with traditional assessments, and the possible existence of gender differences. A sample of 100 students (57.7% are women, 44% are at least part-time workers) was part of the study. Participants answered an online questionnaire with the original forms of the cognitive ability and personality measures, and a self-reported job performance scale. Then they played VASSIP. Analyses (reliability, descriptive statistics, correlations, hierarchical regression, mean comparisons) were performed with SPSS. Results have shown that original and gamified versions of the assessment are highly associated ( $r = 0.76$ ), as expected. Hierarchical models have shown that personality measured with VASSIP is able to predict task performance ( $R^2 = .31$ ), contextual performance ( $R^2 = .25$ ), and counterproductive behaviors ( $R^2 = .21$ ). Regarding applicant behaviors, original assessment has significantly higher scores regarding organizational fit ( $M_{\text{original}} = 17.60$ ;  $M_{\text{VASSIP}} = 17.40$ ), whilst the gamified assessment has higher scores in organizational attractiveness ( $M_{\text{original}} = 18.41$ ;  $M_{\text{VASSIP}} = 21.45$ ). Lastly, we found differences in VASSIP scores and applicant reactions related to gender: women achieve higher scores in neuroticism ( $M_{\text{men}} = 14.30$ ;  $M_{\text{women}} = 16.59$ ) and conscientiousness ( $M_{\text{men}} = 24.07$ ;  $M_{\text{women}} = 25.42$ ), an expected result according to previous literature, but also a better applicant reaction in terms of perception of predictive validity ( $M_{\text{men}} = 7.94$ ;  $M_{\text{women}} = 8.79$ ) and organizational fit ( $M_{\text{men}} = 16.37$ ;  $M_{\text{women}} = 18.00$ ). Together, these results provide promising initial support for the use of VASSIP, and additional evidence for the use of gamified assessments in general. The results regarding gender differences contradict the stereotype regarding games, suggesting that women have higher positive reactions to gamified evaluations. Besides that, the present study is, to the best of our knowledge, the first study that considered counterproductive work behaviors in the GRA literature. Nevertheless, our study has significant limitations that should be noted, namely the use of students as participants and self-reports of job performance. However, given that the study of GRA is still in its infancy, our results may be useful to guide further research.

*Keywords: game-based assessment; personnel selection; job performance*

## Oral presentation OP213

### Preventing turnover intentions: the role of meaningful work and basic psychological need satisfaction

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science

Positive psychological approaches in the workplace are becoming more and more popular, due to the fact that well-being in the workplace affects work engagement and productivity not only at the level of the employee but also at the level of the employer. Our research investigated possible preventive factors for turnover intentions. We explored the relationship between the fulfillment of basic psychological needs (autonomy, competence and relatedness), meaningful work and job satisfaction in connection with turnover intention among Hungarian white-collar workers. The aim of the study is to develop a theoretical model in which basic psychological needs contribute to both meaningful work and job satisfaction, which in turn leads to lower turnover intentions. The analysis was conducted using path modelling on a sample of 1,842 white collar workers from different fields (eg. education, administration, finance). To assess the previously mentioned constructs we used the Basic Psychological Needs Scale (La Guardia et al., 2000; Kardos et al., 2020), the Work and Meaning Inventory (Steger et al., 2021; Csordás et al., 2020) and the Satisfaction With Work Scale (Fényszárosi et al., 2018; Csordás et al., 2020). According to our path model, the fulfilment of all three basic psychological needs in the workplace affects work satisfaction ( $\beta$  ranged from .088 to .454), while autonomy ( $\beta = .231$ ) and competence ( $\beta = .413$ ) predicted meaningful work. The perceived higher sense of meaningful work ( $\beta = -.124$ ) and work satisfaction ( $\beta = -.481$ ) predicted lower turnover intentions overall ( $R^2 = .310$ ). The fit indices of the final model predicted good fit (RMSEA = .048, SRMR = .01, CFI = .995). These findings confirm the relevance of meaningful work as a potential factor in preventing turnover intentions, and also the vital role of the fulfilment of basic psychological needs in the workplace in relation to work satisfaction. Strengthening these factors in the workplace can be an affordable yet very effective way of improving employee well-being.

*Keywords: meaningful work, turnover intentions, work satisfaction*

## Oral presentation OP155

### Proactive behaviors towards a sustainable career across the school-to-work transition

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**Theoretical Background & Research goals and why the work was worth doing:** In today's school-to-work transition (STWT), young professionals must adapt to continuous change and complexity, making their careers less defined and predictable than ever before (Akkermans et al., 2021; De Vos et al., 2019). However, despite this change to continuous learning, research in this area has predominantly focused on the STWT as a major one-off transition moment that emerging adults need to adapt to and navigate effectively (Hirschi, 2010; Johnston, 2016; Koen et al., 2012).

However, adaptability is only one piece of the puzzle. Recent research suggests that emerging adults should be proactive in their careers (Akkermans et al., 2013; Akkermans & Tims, 2017; Blokker et al., 2019) to enhance their career success (Akkermans & Tims, 2017). As such, proactive behaviors might be the key for them to lay the foundation for a sustainable career (De Vos et al., 2020; Van der Heijden et al., 2020) characterized by happiness, health, and productivity (Van der Heijden, 2005). With this study, we aim to understand how emerging adults' proactive behaviors may help them to achieve career sustainability during the STWT, and what hinders and enables those behaviors.

**Methodology:** To capture how the behaviors of emerging adults develop during the STWT, we employed a longitudinal qualitative design. We interviewed 44 graduating students at a Dutch University of Applied Sciences twice, interviewing them six months before (T1, N = 44) and six months (T2, N = 36) after graduation. Additionally, we triangulated these data with nine focus groups (N = 56) and four interviews (N = 6) with stakeholders (i.e., parents, faculty/staff, potential employers, the ministry of education, etc.) to include a broader life context.

The interviews at T1 tapped into the students' proactive behaviors and career aspirations and explored the potential enabling and hindering factors toward a sustainable career. The T2 interviews focused on the development of health, happiness, and productivity during the STWT and what behaviors, motivations, and influences played an enabling or hindering role. The stakeholder focus groups and interviews allowed for a more nuanced and holistic understanding of the data that emerged from the T1 and T2 interviews. At this point, we have completed the data collection, transcribing, and coding. We aim to finish the analyses before the end of 2022.

**Results obtained and expected:** Preliminary results suggest that, next to proactive behaviors, career competencies (Akkermans & Tims, 2017) seem to play an important role during emerging adults' STWT. Interestingly, these competencies are not solely applied to their work and careers, but also to their private lives in general. This adds a broader perspective to the usage of career competencies. Concerning proactive behavior, we find that emerging adults report an increase in change-oriented behavior over time. Regarding the enabling and hindering factors, we see how family, the university itself, job/society pressure, and Covid-19 all influence emerging adults' proactive behavior. For example, the university and its educational structures are considered one of the biggest hindrances toward proactive behavior due to its rigidity and the inherent (job)pressures it provides for emerging adults.

Limitations: Due to research taking place within an Applied Sciences University, the findings might limit themselves to this specific population. That said, an effort has been made to use purposive sampling to have a qualitative representative sample herewith trying to maximize its generalizability. We consider the qualitative nature and in-depth approach a strength and are already eyeing possible quantitative future research possibilities.

Research/practical implications: This study will provide new insights into how proactive behaviors can help emerging adults to lay a foundation for a sustainable career, and the role of key enablers and barriers in this process. Until now, STWT research has primarily focused on how competencies and behaviors influence one's work and career. However, our results encourage a broader life perspective that includes one's private life as well. These insights can be used to develop interventions to help students develop proactive behaviors toward a career in which they can remain happy, healthy, and productive.

Originality/Value: This study is among the first to provide empirical evidence based on the conceptual model of sustainable careers described by De Vos et al. (2020). Moreover, we do so at a crucial career stage: the initial transition into work. Our findings will shed light on the interaction between individual and contextual factors that can shape school-to-work transitions in the contemporary career.

Relevance to congress theme: As this research focuses on the abilities of the future labor force, it is critical they start their careers in a sustainable manner.

*Keywords: Sustainable careers, proactive behaviors, school-to-work transition.*

## Oral presentation OP28

### **Probing Leader Resource-Seeking: The Differential Effect of Asking for Advice versus Help on Perceived Leader Humility and Leadership Effectiveness**

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Given the frequently attested potency of leader humility for leadership effectiveness, we focus on a key behavioural antecedent of perceived leader humility: leaders' question asking (also referred to as inquiry). With the present paper, we provide critical nuance to the questions-as-information research that suggests that, in general, genuine leader inquiry for resources leads to a humility premium. Extending the general theoretical notion, we argue that two forms of seemingly similar resource inquiry—namely, asking for advice and asking for help—send very different signals regarding self-orientation versus other-orientation; as a result, they differentially influence perceptions of leaders' humility and, ultimately, effectiveness. The results of a behavioural experiment, a vignette study, and a two-wave field survey support our theorising that asking for advice is considered humbler than asking for help because of the comparatively higher other-orientation that is signalled, with downstream positive consequences for leadership effectiveness.

*Keywords: resource-seeking, questions, leadership*

## Oral presentation OP37

### Productivity of communication in organization: approach and application

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science&practice

**Problem:** The significance of communication rises simultaneously with the increase in the level of environment uncertainty. Organizations constantly reduce uncertainty, make efforts for sensemaking. Communication problems are caused by growing complexity, significance of social/economic results. It demands creation of special structure of communication on different hierarchical levels of complexity. **Objectives:** To analyze the structure of productive communication "man-text" in situation of uncertainty, to research sensemaking structure, elements, results in communication process. **Method:** method of intertextual questions for collecting data, and semantic classification of sensemaking reactions for processing data (in summary, 1500 sensemaking questions to 3 texts consisting of 15-50 sentences). **Results:** we discovered hierarchical structure of sensemaking: formal level (associated not with content but with its expression form); static (aimed at participants, objects, their attribution); dynamic (aimed at action dimensions); logical questions (establish connection between objects, participants, actions); inferences (synthesizing conclusions, fix content parts comprehension). Regularity of hierarchical level appropriateness is discovered between level of content and level of sensemaking as the requirement of openness and adequacy of communication, it is needed for quality of sensemaking. Connection between sensemaking levels is discovered: interaction on lower level blocks it on higher ones. Personifying effect (subjective involvedness) mediates sensemaking quality. The higher the demands to sensemaking, the more personifying effect attributes are required: novelty, reference in reality, utterances' explanatory power, target function in sentence, elements' validity and conditionality.

*Keywords: communication, uncertainty, hierarchy, separated values*

## Oral presentation OP490

### Professionalisation of the occupational clinician: towards a competence profil

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science&practice

In 2020, Belgian figures show 470,000 people were on long-term incapacity. This is twice as much long-term incapacity as 15 years ago. Moreover, considering also short-term incapacities, the cost, estimated in 2010 at 4.7 billion euros, rose to 8.6 billion euros in 2019, i.e. an increase of 7% each year. Indeed, a survey conducted by a Belgian mutual insurance company (2021) [1] among 5 602 people shows 56% of respondents consider their work is (partially) responsible for their incapacity. Among those, 36.8% attribute their incapacity to burnout or mental illness, such as depression or anxiety. These figures highlight work-mental disorders constitute a major issue. This is confirmed by health professionals who reported more patients expressing work suffering. They are facing new disorders requiring new skills.

We aim to explore an innovative competence profile in the area of occupational health psychology, and especially in the diagnosis and follow-up of burnout or other work-related psychological disorders. This Belgian project launched in 2019 [2] was funded by the Minister of Social Affairs and Public Health as part of the new burnout initiatives, more particularly that related to the creation of a training program and networking device in occupational clinic.

The competence profile was developed according to the needs identified among health professionals:

The first need is being able, as occupational clinicians, to self-evaluate and identify the necessary relevant training for their own formation. The second one is checking if their practices are appropriate in the area of occupational health psychology. The next one refers to having a guide to create a training program for both first-line prevention actors (i.e. occupational physicians, general practitioners, prevention counsellors) and second-line health professionals (i.e. occupational clinicians). The fourth need was enhancing recognition of the role of the occupational clinician and to protect the activities involved in occupational clinic.

Regarding the methodology, 12 focus groups were conducted by 2 animators and transcribed by 2 observers. 19 practitioners were divided into 3 groups of 6-7 practitioners and each group took part in 4 sessions. The objective was to highlight the behaviours implemented in critical situations (e.g. through a clinical case). In order to collect the behaviours, we chose different methods as the nominal group, the SPC (Sens-Process-Content) method and the focus group method with the critical incident technique.

Concerning the results, we first realized a qualitative analysis, based on the SPC method, which give us 521 behaviours. Secondly, a categorization of these behaviours was carried out with a group of 5-6 occupational clinicians. Finally, based on this categorization, a coordinator and a researcher realized the competence profile. The validation of the profile was based on an iteration process of reviews conducted by all the experts including in this project (project coordinators, psycho-pedagogue, occupational clinicians, scientific committee with representatives of different Belgian universities, pilot committee).

This competence profile includes seven skills: therapeutic setting (e.g. legitimacy, professional confidentiality), communication (e.g. with the worker, the health professionals, the prevention

actors), network (e.g. how to develop and mobilise the network), diagnosis (e.g. anamnesis, tools, differential diagnosis), follow-up (e.g. work on resources, on demands), return-to-work (e.g. preparation for the return-to-work or for a professional transition) and sensitization (e.g. of the worker, of the hierarchical line). Furthermore, according to the competence profile for occupational psychologists (Wopsy, 2019), these skills are divided into some objectives that include behaviours and abilities. Then, the competence profile was linked to a variety of resources.

We also focus on the reflections in terms of practical and pedagogical scopes, the ethical and deontic position of occupational clinicians and the relevance of our competence profile as a guideline for health professionals practising or not yet as occupational clinicians.

This presentation will be relevant for the congress due to its contributions concerning the continuing professional development, skills training, the mental health at work and therapeutic interventions, among other things.

[1] Mutualité Chrétienne. (2021). Le travail est trop souvent responsable de l'incapacité de travail. Retrieved from: <https://www.mc.be/actualite/communiqu-presse/2021/travail-incapacite>

[2] SPF Sécurité Sociale. (2020). Espace-réseau de prévention des affections mentales liées au travail (ISoSL). Retrieved from: <https://socialsecurity.belgium.be/fr/projets-pilote-prevention-integree-contre-le-burn-out/espace-reseau-de-prevention-des-affections>

*Keywords: burnout ; occupational clinician ; competences*

## Oral presentation OP230

### Profiles of Career Self-Management Behaviours and Their Motivational Correlates

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science

**Research Goals.** Career self-management (CSM) is a multidimensional construct involving the utilization of various CSM behaviours. The most common way to examine CSM and its associated career behaviours is to take a variable-centred perspective and examine the relation of one or multiple CSM behaviours to correlates across an entire sample. However, according to theory, persons selectively use various CSM behaviours in accordance with their motivation and resources. This suggests that subgroups of individuals exhibit distinct combinations of CSM behaviours. These subgroups may deviate from the findings of variable-centred studies, which focus on average behaviours across an entire sample. Therefore, we aimed to give a profile-centred perspective on CSM by uncovering different theorized combinations of CSM behaviours and validating these combinations through examination of their relation to motivational resources (i.e., self-efficacy, boundaryless career orientation, and career motives).

**Theoretical background.** Drawing on career development theories that acknowledge that different career capitals, such as human capital and social capital, may be of varying importance to different persons and preceding qualitative studies, we identified different plausible combinations of CSM behaviours. We expected that CSM behaviour combinations differ among three axes: (a) the general extent of CSM, (b) the focus on building human or social capital, and (c) the extent of career exploration and mobility-oriented behaviours. Furthermore, we expected that profiles differ in their motivational correlates. Because self-efficacy is a motivator of behaviour in general, we hypothesized that it is related to the general extent of CSM. A boundaryless career orientation includes the willingness to be mobile, and we hypothesized that it related to profiles focused on career exploration and mobility-oriented behaviour. As growth career motives entail the motive to develop knowledge and skills, we hypothesized that they are related to human capital-focused profiles. Self-enhancement motives entail motives to attain traditional markers of career success and we hypothesized that they are related to a focus on social capital as a crucial capital for 'getting ahead'.

**Approach.** Self-report data was collected from a sample of N = 529 German employees. CSM behaviours were measured at Time 1, and, to reduce common method variance, motivational correlates were measured two weeks later at Time 2. CSM behaviours were assessed using a multidimensional scale that measures eight different CSM behaviours. We operationalized the combinations of CSM behaviour as profiles in a latent profile analysis. The profiles were based on the factor scores derived from a bifactor confirmatory factor analysis model to disentangle shape and level differences among profiles better. Differences in profile correlates were examined using the BCH procedure.

**Results .** A five-profile solution was selected based on good fit and theoretical parsimony. The profiles were partially in line with our expected three axes and were labelled: 1. Disengaged, 2. Self-exploring, 3. Medium social focus, 4. High social focus, 5. Mobility-oriented. Supporting our hypotheses regarding the motivational correlates of profiles, CSM self-efficacy distinguished between profiles high or low in CSM. Boundaryless career orientation was highest in the mobility-oriented profile. Self-enhancement strivings were highest in the high social focus profile. Contrary to our hypotheses, there was no profile focusing on human capital; hence we did not find support for a relation between growth strivings and such a profile.

Limitations . We focused only on three motivational correlates. It is likely that more correlates proposed by models of proactive motivation are relevant for CSM behaviour, such as career affect. Furthermore, our findings are based on a single sample of German employees. Future studies should validate our profile solution and its correlates in new samples, possibly from multiple cultural contexts.

Conclusions . Our study shows that CSM behaviours can be validly understood from a person-centred lens as multiple distinct combinations of CSM behaviours which are related to different motivational resources and motives.

Relevance to the Congress Theme. Today's workforce increasingly needs to engage in complex and multi-faceted responses to navigate the changing world of work. A better understanding of the different typical combinations of CSM behaviours and their motivational basis that employees use will allow researchers and practitioners to get a better understanding of how individuals develop their careers and their underlying motivations.

Relevant UN SDGs. Addressing these issues may enable practitioners in fields such as career counselling and HRM to better support their client's careers and working lives, including their capability to attain UN SDG goals of 'Quality education' and 'Decent work'.

*Keywords: career management, latent profile analysis, boundaryless career*

## Oral presentation OP183

### Promoting Collaborative Innovation Through Multiculturalism: A Longitudinal Experimental Intervention

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science

#### Research goals and rationale

The process of globalization is causing organizations to become increasingly diverse and virtual. Now COVID-19 has further caused a sudden urgency to rely on virtual communication, which has worsened issues of social equity (Pikoos et al., 2021; Wang et al., 2019). For example, women of color receive less speaking time during team meetings and are more likely to be interrupted (Karpowitz et al., 2012). In addition, virtual teams are not likely immune to members' subjective categorizations (Garrison et al., 2010). Multicultural virtual teams are less likely to focus on potential gains at the task when experiencing micro-conflicts (Paletz & Miron-Spektor, 2018).

Globalization has also increased diversity in educational institutions. Today's college graduates are expected to learn not only the content of a discipline but also to develop 'generic' abilities suitable for a wide range of work and life contexts (Pithers & Soden, 2000). A common practice at schools is that students of different cultural backgrounds should assimilate to be accepted by the dominant culture (Daniel, 2008). As opposed to this superordinate identity approach of intergroup contact focusing on commonalities and ignoring differences (commonality approach), a focus on the uniqueness of cultures, simultaneously considering the contradictory thoughts processes, placing them in juxtaposition (paradoxical approach) to enhance critical thinking is a more viable approach (Leung & Chiu, 2010; Miron-Spektor et al., 2011).

The current research aims to develop an intervention that would allow elaboration and evaluation of the problems using the uniqueness of multicultural groups, which can result in enhanced critical thinking and collaborative innovation. We predict that groups trained with paradoxical frames will demonstrate higher creativity and ethnocentric empathy than groups with common identity frames or control groups.

#### Theoretical background

A multicultural setting often gives rise to contradictory thought processes due to the occurrence of conflicting ideas. The mental templates that encourage individuals to recognize and embrace contradictory viewpoints are termed paradoxical frames (Smith & Tushman, 2005). The presence of paradoxical frames triggers a sense of cognitive conflict due to contradicting thought processes. To adapt, one is likely to become more sensitive to complementary relationships between contradicting thought processes (Fong, 2006; Schwartz & Bless, 1991). Studies report that recognizing and embracing contradictory thoughts is particularly conducive to creative thinking in individuals (Leung et al., 2018; Patil & Tetlock, 2014), although no studies have used this approach as an intervention using a longitudinal study.

#### Methodology

In this 3-week longitudinal experimental intervention, 23 groups of 3 to 4 participants (n = 72) completed the pretest, experimental intervention, and post-test session. The pretest included a demographic survey and a creativity task for baseline measure (3 days). In the intervention (2 weeks) session, groups engaged in collaborative problem-solving, group discussions, and intergroup contact

exercises focused on either paradoxical (9 groups) or commonality (9 groups) interventions. In the posttest period (4 days), all groups completed posttest surveys measuring creativity and ethnocentric empathy. A control group with no intervention served as a baseline condition for the whole period.

A 2(Sessions) x 3(Intervention type) mixed factorial ANOVA revealed a significant main effect of the type of training,  $F(1, 19) = 7.145, p = 0.005$ . The contrast test revealed that the paradoxical training groups generated more original ideas than the control group ( $p < .005$ ), but the difference was marginally significant between the commonality and the control group ( $p = .06$ ). Moreover, the paradoxical perspective groups generated the most original ideas in the posttest session,  $F(2, 19) = 5.69, p < 0.01$ .

The ethnocultural empathy at the post-test session was higher for all groups compared to the pretest session,  $F(1, 19) = 24.95, p < 0.001, \eta^2 = .27$ . However, the paradoxical perspective groups demonstrated the highest ethnocultural empathy in the posttest session,  $F(2, 19) = 4.40, p = 0.02$  followed by commonality and the control groups.

### Conclusion

research proposes an innovative pedagogical strategy to optimize critical thinking in the college curriculum, which prepares students for future work. This intervention provides ways to apply the differences and contradictions of multicultural groups in a meaningful way, thereby enhancing collaborative creativity. A limitation of the study was that, due to attrition, the control group had a small sample of 5 groups. A novel contribution of this study is that it offers a virtual intervention that will help employers facilitate creative thinking by exploiting inequalities in diverse workgroups,

*Keywords: creativity, multiculturalism, diversity-training*

## Oral presentation OP133

### Promoting Pro-environmental Engagement through Social Identification: An Investigation of Multiple Social Identities

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science&practice

There is not much time left to limit global warming to 1.5°C. However, greenhouse gas emissions continue to rise. One promising psychological approach to answering the question of how to reduce this "public inactivity" is the Social Identity Approach (SIA) (e.g., Fielding & Hornsey, 2016). Growing research is studying the auspicious impact of global identification on pro-environmental intentions and behaviors (e.g., Loy et al., 2021; Loy & Spence, 2020; Reese, 2016). However, most of these studies don't consider the variety of social identities in people's everyday life (Gaither, 2018) and examine the influence of a global identity in isolation. This research doesn't take into account that people identify themselves with many groups and that closer social identities are more likely to be salient and influential when it comes to behavior change than abstract group identities (Masson & Fritsche, 2021). Thus, looking only at people's global identification gives us a limited understanding of its relevance vis-à-vis closer social identities. In the present research, we investigate the impact of global identification in a multiple-identity-setting by analyzing whether a salient global identity still guides pro-environmental commitment when a regional identity is salient at the same time. Our goal is to identify the group (level) that can best influence people's behavior.

Our hypotheses are the following:

People whose regional identity is salient or whose regional identity is salient in combination with a salient global identity, show more support for regional than global environmental commitment than people with only a salient global identity.

People whose regional identity is salient or whose regional identity is salient in combination with a salient global identity, significantly more often decide to donate money to an organization that is committed to regional climate protection than people with a salient global identity.

People whose regional identity is salient or whose regional identity is salient in combination with a salient global identity, decide significantly more often not to receive information on how they can contribute to global climate protection than people with a salient global identity.

In an experimental design with three groups (1. primed regional identity, 2. primed global identity, 3. primed global and regional identity) we measure pro-environmental intentions as well as concrete behaviors (donations and information seeking behavior) as indicators for environmental commitment. We prime social identification by asking participants to imagine looking the earth from above and to describe what unites all people, what we all have in common and / or to describe what unites the people who live in the region of the participants.

Data collection is ongoing and is expected to be completed in January 2023. Our study is pre-registered on the OSF: [https://osf.io/dapwm/?view\\_only=c5d9a3fdc1ae4c2f9cf0621f2f5540e6](https://osf.io/dapwm/?view_only=c5d9a3fdc1ae4c2f9cf0621f2f5540e6)

The biggest crises we are currently facing are collective crisis and require cooperation. Research shows that a shared social identity can motivate people to engage in collective action (e.g., Van Zomeren et al., 2008). It is therefore all the more important to consider people's everyday lives and to identify the groups that can best motivate people's behavior.

*Keywords: Climate Crisis, Social Identity, Global Identity*

## Oral presentation OP217

### Promoting reflection and new understanding in online clinical group supervision

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science&practice

Clinical group supervision is a common practice in social and health services. In clinical group supervision, the participating professionals reflect on their practice together. Such exchange enables creation of new understanding and development of participants' professional skills.

In recent reviews on clinical supervision research, scholars have called for research on the components of supervision. Our study contributes to bridging this gap by exploring supervisor's interactional practices in trying to promote the ideals of supervision.

While the goals of online supervision are same as in face-to-face supervision, the participants must adapt their communication to differences and challenges related to online environment. In our study, by analysing authentic video-recordings of online supervision conversations, we aim to illustrate what kind of interactional practices the supervisors use to promote shared reflection in the face of these challenges.

In our study, we have following specific research questions: 1) What kinds of interactional practices supervisors use to promote shared reflection and creation of new understanding in online supervision meetings, 2) how the supervisees answer to these interactional practices? and 3) what kind of new understanding supervisees display in episodes under study?

We approach supervision meetings from a social constructionist perspective, which entails that social realities and meanings are co-constructed by interlocutors in conversations. By using methods and concepts from discursive approaches and conversation analysis we have focused specifically on how new meanings are generated through social interaction that unfolds turn-by-turn.

Our study is part of the project Reducing strain and increasing gain of remote work group meetings with physiological indicators (PhInGain) that is funded by the Finnish Work Environment Fund. The study data comprise video recordings of 24 authentic supervision sessions and their written transcripts, questionnaires on working alliance and the useful and the stressful moments in the sessions, and participants' physiological activation (HR) measured with a finger pulse oximeter To answer our research questions we focused our analysis on two (of the total 70) topical episodes. We selected these two episodes for detailed analyses because in the questionnaire, supervisees had named these as particularly useful for them and reported that during those episodes they had gained learning on their work.

In our analysis, we identified five supervisor's interactional practices that contributed to promotion of shared reflection and to creation of new meanings. These were 1) inviting the supervisees to orient toward each other, 2) inviting the supervisees to share their own experiences and ideas, 3) using his own expertise as discursive resource and 4) challenging the supervisee to look at the problem from different viewpoint by shifting the focus of conversation and 5) giving feedback.

In the studied episodes, the supervisees answered to the abovementioned supervisor's interactional practices by joining shared reflection. They displayed new understanding on their everyday working experience, on the possible reasons for their clients' behavior and on their challenges in working with some of their clients.

By focusing solely on the episodes where new understanding was generated, we may have missed other possible instances where the supervisor used the similar kinds of interactional practices to invite supervisees into reflexive space without success. In this study, we focused mainly on verbal exchange. In the future, we will include nonverbal interactions, which could be important in the creation of reflexive space, as well as psychophysiological responses into our analyses.

To our knowledge, there is no previous research that has identified interactional practices that the supervisors use in promoting reflection and new understanding in online clinical group supervision. By identifying some of these practices our study contributes to the practices and development of online clinical group supervision. By adding to understanding on online learning and work group dynamics our study is also relevant for other fields such as education and organization development.

*Keywords: clinical supervision, videoconferencing, learning*

## Oral presentation OP772

### PsyCap and Mindfulness as Mediators, not Antecedents, in the Job Demands-Resources Model

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science

#### Research Goals

Workplaces are the most commonly reported individual stressor (American Psychological Association, 2019, 2021). Notably, some individuals thrive amidst high demands while others burn out. The prevalent job demands-resources model (JD-R) does not consider the role of individual differences. This study answers recent calls for further elucidation (Bakker & Demerouti, 2017; Schaufeli & Taris, 2014) by examining whether personal resources play an antecedent or mediating role in the relationship between job characteristics and employee burnout, engagement, and flourishing.

#### Theory

According to the JD-R (Demerouti et al., 2001; Schaufeli & Bakker, 2004) job demands lead to burnout, and job resources lead to engagement and reduce the development of burnout. Yet, different individuals are affected differently by the same environment, which can be explained by differences in personal resources (Hobfoll, 1989; Hobfoll et al., 2003). One such resource is psychological capital (PsyCap), an individual's "positive appraisal of circumstances and probability for success based on motivated effort and perseverance" (Luthans, Avolio, Avey, et al., 2007, p. 550). Another such resource is mindfulness, an individual's likelihood of being non-judgmentally aware of present-moment experiences (Baer, 2003; Kabat-Zinn, 1990). Meta-analytic findings attest to desirable workplace-related outcomes for both PsyCap (see Avey et al., 2011) and mindfulness (see Mesmer-Magnus et al., 2017). Highly demanding workplaces depleted employees' personal resources (Xanthopoulou et al., 2007). Lower job demands may facilitate PsyCap by enabling expectations of successful outcomes. Further, environmental characteristics like on-task attentional pull or off-task attentional demands can facilitate or impede mindfulness (Reina & Kudesia, 2020). Hypothesis 1: Personal resources mediate the relationship between job demands and well-being. Inversely, resourceful employees may be able to create a resourceful work environment. PsyCap refers to an individual's belief in their abilities to surmount obstacles. Therefore, individuals high in PsyCap may perceive their workplace to be less demanding (e.g., Grover et al., 2018). Further, mindfulness entails a non-judgmental attitude, which may enable more mindful individuals to be less fixated on the difficult characteristics of their workplace. Hypothesis 2: Job demands mediate the relationship between personal resources and well-being.

#### Methodology

The study was conducted on a sample of N = 138 employees (76% female) at a non-profit organization providing child protection and care. Data was collected via an internet survey using the following measures: personal resources included mindfulness (Brown & Ryan, 2003) and psychological capital (Luthans, Avolio, & Avey, 2007); job demands included quantitative, cognitive, and emotional demands (Burr et al., 2019); well-being included burnout (Schaufeli et al., 2020), engagement (Schaufeli & Bakker, 2010) and flourishing (Butler & Kern, 2016).

#### Results

Path models were computed using R and the lavaan package. The model on an antecedent role of personal resources included direct relationships between two personal resources and three job demands, and between three job demands and three outcome variables; it displayed unsatisfactory fit ( $\chi^2 = 124.631$ ,  $df = 6$ ,  $p < .001$ ,  $CFI = .628$ ,  $SRMR = .168$ ,  $RMSEA = .379$ ). In the model on a mediating role, the positions of personal resources and job demands were switched; it displayed better and satisfactory fit ( $\chi^2 = 43.763$ ,  $df = 9$ ,  $p < .001$ ,  $CFI = .891$ ,  $SRMR = .089$ ,  $RMSEA = .167$ ), lending support for Hypothesis 1.

#### Limitations

The study was conducted inside a single organization to ensure that actual job demands are comparable across participants, which may have impeded external validity. Besides, data was obtained via self-report questionnaires, subjecting the findings to single-source and common-method bias (see Baumeister et al., 2007).

#### Conclusions

Theoretically, findings on the role of personal resources in the JD R diverge substantially. This study was conducted within a stable environment, ensuring consistency in objective job demands across participants. Practically, by focusing on developable personal resources, this study aimed to equip employees with tools that help them thrive, enabling them to surmount their demands instead of being surmounted by them; further, it aims to inform human resource management to consider investments in training employees' personal resources.

#### Relevance to Congress Theme

While workplaces are required to safeguard the health of their employees, stress-related diseases are on the rise. Until more effective policies and practices related to mental health education, supervision, and prevention are in place, individuals must assume agency over their experience and develop their mental fitness to be able to create a future worth living in.

*Keywords: Mindfulness, Psychological Capital, Job Demands*

## Oral presentation OP186

### PSYCHOLOGICAL PREDICTORS OF INTERPERSONAL CONFLICT MANAGEMENT AT WORK

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science

#### Introduction

Interpersonal conflict is inherent to human beings. Conflicts occur when one person or group tries to maximize their advantage at the expense of others or when incompatible activities take place. Since people differ in personality, values, beliefs, and needs, sooner or later conflict will arise.

This study focuses on identifying psychosocial predictors of the strategies that employees use to deal with conflicts in the organizational context. Rahim and Bonoma's (1979) model includes two dimensions that condition employee behavior in a conflict: self-interest (the degree to which a person attempts to satisfy his or her own interests) and concern for others (the degree to which a person facilitates that others satisfy their interests). It is assumed that these dimensions reflect the motivational structure of the person to face conflicts. Five conflict management strategies emerge from the combination of these two dimensions: integrating (high self, high others), obliging (low self, high others), dominating (high self, low others), avoiding (low self, low others), and compromising (medium self, medium others).

Personal values operate as motivational guides and can explain behaviors and attitudes. Values will be explored as predictors of a person's behavior in the face of conflict. Schwartz's (2001) model of values establishes two bipolar dimensions: a) transcending personal interests in favour of a collective good and treating others as equals ("Self-transcendence") versus the "Self-promotion" of those who put their own interests, success and personal mastery first. b) The "Conservation" dimension reflects why some people value tradition, security and order versus the "Openness to Change" dimension, which explains the behavior of those who value freedom of action and thought and independence .

Personality has a considerable impact on our thoughts, emotions and behaviors. The "Big Five" model was used (Extraversion, Agreeableness, Openness to experience, Conscientiousness and Stability).

#### Method

In this correlational and cross-sectional study, questionnaire data from a sample of 958 employed workers (454 men, 500 women and 4 did not provide this information) with an average age of 35.23 years (range between 18 and 65) were used. . The measurement instruments were the ROCI-II for conflict management styles, the PVQ for personal values and the TIPI for the measurement of the Big Five personality traits. Correlation analyses between conflict management styles, values and personality factors were performed, followed by regression analysis.

#### Results

As hypothesized, employees' values and personality are good predictors of conflict management styles at work. The Integrating style can be predicted in 23.1% by the values of self-transcendence, self-promotion and openness to change and by the personality traits of conscientiousness and affability. The Compromise style can be predicted in 19.2% by the same variables and with a different weight. The Dominating style is predicted in 16.2% by values of self-promotion and conservation, and personality traits as openness to experience and (negatively) with agreeableness. The Avoiding style

is predicted by values of conservation and openness to experience, and agreeableness as personality traits. The Obliging style is predicted by the values of conservation, self-promotion, self-transcendence and the personality trait of conscientiousness.

#### Discussion

In the integrating style, open-mindedness stands out both in values and in personality, the sense of transcending oneself while seeking personal gain, as well as affability and awareness or responsibility to reach agreements.

It is worth mentioning that the values are more important than personality traits to predict one's behaviour in a conflict situation. The values with the higher weight to predict all five conflict management styles are those hypothesized: Self-transcendence for Integrating and Compromise; Self-promotion for Dominating, and Conservation for Avoiding and Obliging.

*Keywords: Conflict, values, personality*

## Oral presentation OP281

### Psychological Safety at Work - Tales From the Field

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science

This study exposes results from five small studies regarding psychological safety and work. The data consists of semi-structured interviews, focus groups interviews and questionnaires with people working as Human resource (HR) managers, schoolteachers, hospital staff, care assistants and firefighters in rescue service. One sub study also consists quantitative data. Each partial study penetrates different aspects of psychological safety.

Previous research has revealed psychological safety as an important factor for individuals to perform well together with others at workplaces. A psychological safe condition is defined as a condition when one feels included, safe to learn, safe to contribute and safe to challenge the status quo without fear of being embarrassed, marginalized or punished in some way (Edmondson, 1999). Previous research has also revealed that psychological safety affects learning and efficiency at a workplace positively, (Edmondson & Lei, 2014). Psychological safety as also been found to have positive correlations with work engagement (May et al., 2004; Nembhard & Edmondson, 2006; Chinelato et al., 2020; Lee & Ok, 2014). Other studies have revealed that psychological safety indirectly has effects for workplace conditions. Rothmann and Rothmann, 2010, revealed that psychological safety might be seen as a mediator as it has a positive effect on supervisor relations as in turn has a positive effect on work engagement.

Research on psychological safety has been predominantly quantitative. There is a pent-up need for qualitative research with the aim of studying how people in different contexts experience psychological safety. This study consists of five different sub studies that has explored psychological safety in different contexts. Four of them has a qualitative design.

#### Methodology

Four studies with a qualitative design were conducted. Each included persons with different occupational categories and had slightly different framing of questions. The Fifth (study II, had a quantitative approach. However, all of them had an overall focus on psychological safety, (Edmondson, 1999).

Thirty-six interviews with human resource managers, fire fighters, hospital health care staff and elder care staff was conducted. Furthermore, 63 teachers answered a questionnaire with questions concerning psychological safety, work engagement and hope.

Each sub study had its own design and data were collected through in-depth interviews, semi-structured interviews or focus group interviews or questionnaires. The meta-analysis was conducted with a qualitative approach and aimed to find common denominators linked to psychological safety in the five sub studies.

Study I, Semi-structured interviews with six Human Resource managers. The purpose of this sub-study was to gain an in-depth understanding of how HR strategists discuss the various components within psychological safety, how these are connected, and which are handled, and which need to be elucidated more deeply in the HR strategic work.

Study II, sixty-three secondary upper schoolteachers answered a questionnaire with questions of how they experienced psychological safety, work engagement and hope at work. The goal with the study was to explore how the three factors were related to each other.

Study III, semi structured interviews with medical doctors and nurses working at a hospital. The aim in this study was to explore how external factors such as working conditions, budget issues and leadership philosophies might have implications for psychological safety.

Study IV, focus group interviews and interviews with nurses and people working with elder care. The study also involved an interview with a first line manager. In this study, the theoretical starting point was linked to social psychological aspects such how, for example, stereotypes risk affecting the psychological safety in a work group.

Study V, semi-structured interviews with eight persons working as firefighters in rescue service teams. The purpose with his sub-study was to gain a deeper understanding of how firefighters experience psychological safety in critical and get a better understanding of how psychological safety emerge in groups and if affects perception of results, cooperation and risk-taking.

#### Preliminary results

The results will be finalized at latest in January 2023, when the analyse of the results for study III-V are finished. The results from the first two sub studies are done. The results of study I reveal that what is perceived as most central to create psychological safety rests on first-line managers. However, to achieve this requires strategies at central level (HR) and continues training of the managers. The results from study II revealed that hope had a significant positive correlation with work engagement while psychological safety did not have that. This indicates that interventions aimed at increasing teachers' hope could be associated with an improvement in their work engagement.

*Keywords: Psychological Safety, Work environment*

## Oral presentation OP207

### Psychometric Properties of Work-related Acceptance and Action Questionnaire (WAAQ) in Italian context

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science

Psychological flexibility – as a fundamental aspect of personal and social functioning (Kashdan & Rottenberg, 2010) – can help people to manage themselves in the uncertain and unpredictable world of work, where sudden or continuous change is the norm rather than the exception. Psychological flexibility is a construct that emerges from Acceptance and Commitment Therapy (ACT; Hayes, Strosahl & Wilson, 1999), a variant of third-generation cognitive behavioral therapy, and it refers to “the ability to contact the present moment more fully as a conscious human being, and to change or persist in behavior when doing so serves valued ends” (Hayes et al., 2006, p. 7). Psychological flexibility is both the core process of ACT and the mediational process of change in ACT (e.g., Ciarrochi et al., 2010) and has been largely demonstrated as a robust and complex set of skills that can improve well-being and performance in work settings (i.e., Flaxman et al., 2013; Moran et al., 2015; Bond et al., 2016).

ACT framework (Hayes et al., 1999, 2006) suggests that the process of psychological flexibility is contextually controlled so that it can vary across different contexts due to variations in levels of awareness, the relevance of one's values in a given context and interaction between the two. Therefore, measuring psychological flexibility with a specific tool for the work context can help to evaluate the personal resources of workers more accurately.

The present research aimed to develop and examine the psychometric properties of the Work-related Acceptance and Action Questionnaire (W-AAQ; Bond et al., 2013) in the Italian context. Four studies were conducted: (1) the exploratory factor analysis, which confirmed the one-factor structure of W-AAQ; (2) the confirmatory factor analysis, to test the fit of the one-factor W-AAQ; (3) concurrent validity, to test the relative associations of the W-AAQ to various criteria, such as to the most widely used measure of psychological inflexibility (AAQ-II), life satisfaction (SWLS), flourishing (FS) and work-engagement (UWES-9); and (4) the stability of W-AAQ using the test-retest method after a 3-weeks.

The study presented shows that the W-AAQ scale is a reliable and valid instrument for researchers and practitioners who wants to evaluate work-related psychological flexibility in the Italian context. This result must be considered with the main limitation of the research, e.g., the convenience sampling used in all four studies. This study contributes to the literature (e.g., Bond et al., 2013) that confirms that work-related psychological flexibility is more related to organizational variables - such as work engagement - than general psychological flexibility, suggesting that future research should use contextual measurement tools of psychological variables. Contextually measuring psychological processes can be an essential action in prevention and treatment paths that aim to ensure healthy lives and promote well-being for all at all ages (SDG3; Good Health and Well-Being; United Nations, 2015).

*Keywords: psychological flexibility, work-related psychological flexibility, well-being at work*

## Oral presentation OP367

### **Public promotion processes and ethical governance: An analysis of the competencies, gender and job performance**

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science&practice

**Objective:** To analyze the competencies (hard and soft) and job performance (task, contextual and counterproductive –in the form of pro-organizational unethical behaviours, UPOB–) of public managers in order to shed light on what are the criteria for promotion. Moreover, we want to know if promotion criteria are in line with the objectives of ethical governance.

**Theoretical background:** This analysis was carried out within the framework of organizational justice theory and competency-based assessment models and their relationship to job performance from a gender perspective.

**Design/Methodology/Approach/Intervention:** A quantitative cross-sectional post hoc study was conducted, using a questionnaire of 412 public incumbent managers at high and low levels of responsibility. Pearson and Point-Biserial correlations, hierarchical logistic regression, and comparison of means via t- tests were carried out using bootstrapping analyses.

**Results:** The likelihood of reaching the rank with greater responsibility increases with tenure and gender (being a man). Moreover, the competency of Innovation Orientation and the UPOB are the main factors determining promotion to positions of higher responsibility. In addition, when taking gender into account, UPOB may have a greater influence on the promotion of men. Innovation Orientation and Contextual Performance were found to be higher for women than for men in positions of greater responsibility.

**Limitations:** Besides the difficulties to establish causal relationships between the variables analyzed, the results may also be affected by common variance bias, given that managerial competencies and job performance were self-assessed.

**Conclusions – research and or practical implications/Originality/Value:** This study points to the need for a review of Spanish public administration promotion processes, and proposes the implementation of an alternative competency-based management model to achieve a fairer and more ethical promotion procedure. Specifically, results serve to reinforce the urgent need of Spanish public administration to modernize promotion processes by increasing the presence of competencies. The originality of the study is based on the fact that we carried out analyses of management levels in Spanish public administration that consider gender impact on management skills and the role of the relevant but scarcely studied topic of unethical counterproductive performance.

*Keywords: Public Management Competencies and Job Performance, Gender, Ethical Governance*

## Oral presentation OP47

### Purpose: From theory to practice

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science&practice

Research goals : While there is abundant discussion in business journals on the 'how to' of purpose to achieve social good beyond profitability, academic research addressing the theoretical and practical impact of purpose is limited. Some management scholars claim that organizations that are not purpose-driven and fail to consider the needs of their relevant stakeholders will not be able to create long term value for their companies. Purpose is a complex word lacking a concise definition and can be interpreted in many ways depending on the context in which it is used. The need for purpose can be considered a defining characteristic of human beings craved by individuals as a fundamental component of life. Organizations as well are experiencing a fundamental shift where purpose is considered a key factor driving how they relate to stakeholders and their ability to work beyond profitability to provide social benefit and long-term value creation for their shareholders. To determine whether purpose impacts the long-term value creation of organizations, this research examined a deeper understanding of the meaning of purpose from both individual and organizational perspectives.

Theoretical background: To understand purpose in an organizational context, there is a need to first clarify what purpose means and its importance to individuals. This research explored the various meanings of purpose and determined that it is generally agreed to be a human attribute which requires intention, consciousness, creativity, and expression. Academic scholars have related purpose to the wellness of individuals with links the occupational and spiritual dimensions as of human existence. With clarity on individual purpose as the ability for humans to consciously set their intentions to achieve good, organizational purpose can be considered as the conscious intentions of individuals to work towards social good beyond the singular goal of profitability. Given the current shift of organizations that previously sought to deliver solely on shareholder value maximization to a more inclusive stakeholder approach, purpose is considered by many academic scholars and business practitioners as the fundamental reason for organizations to exist and is a critical component for the creation of long-term value for shareholders.

Design/methodology: Building on the theoretical understanding of purpose, this research proposes a practical approach to measure the impact of purpose using a Stakeholder Purpose Framework which aims to demonstrate the link between purpose and long-term value creation. This framework aligns an organization's purpose with their stakeholders and measures the outcomes of relevant environmental, social, and governance (ESG) metrics. While there are various ESG metrics available to organizations today, the Stakeholder Purpose Framework proposes to utilize the World Economic Forum (WEF) Stakeholder Capitalism Metrics (SCM) which aligns around the four themes of Principles of Governance, People, Planet, and Prosperity. Future metrics, like the International Sustainability Standards Board (ISSB) will introduce globally standardized metrics that can also be considered within the framework. Activating this framework will provide analytical data supporting whether (or not) purpose does impact an organization's ability to create long-term value.

Limitations: Although metrics are available that allow for the reporting of an organization's ESG initiatives, limited empirical studies have considered the role of purpose in driving those initiatives and whether that purpose is contributing to the long-term value creation of the organization. There is also currently a lack of standardized metrics used globally which could challenge consistency in

academic research. In addition, although voluntary reporting on ESG metrics is increasing globally, the unregulated nature of these metrics could impact on reporting from one organization to another.

**Conclusions:** Purpose, a word full of complexity and meanings, is considered a driving force in the lives of individuals and organizations. While much literature focuses on the 'how to' of finding and implementing purpose, this research aims to find a deeper understanding of purpose and how it can be measured to show its impact on organizational long-term value creation.

**Relevance to Congress Theme/UN SDGs:** There is tremendous change happening in the world of work and the impact of that change is felt globally. Issues that were once considered the role of government are now considered achievable only with the cooperation of organizations. Organizations driven by purpose to work beyond profitability will play an active role in addressing the imminent issues of climate change, sustainability, and social justice. This research is looking not only at the role of purpose-driven entities to address these critical issues, but how working with purpose is vital for an organization's ability to create long-term value.

*Keywords: Purpose, stakeholders, long-term value creation*

## Oral presentation OP232

### **RADICAL IMPROVISATION VERSUS INCREMENTAL IMPROVISATION: AN ANALYSIS WITHIN AN AMATEUR CYCLISTS' TEAM**

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science&practice

Team improvisation is associated with intuition, spontaneity, creativity, and with coordination and communication (Vera & Crossan, 2005). It is characterized by the temporal convergence between the actions' planification and implementation.

An improvisation's process begins with an event – endogenous/exogenous - that disrupts the tasks, the strategy imagined, or the team members' roles. Some researchers try to identify the processes that lead to improvisation (Cunha, et al., 1999). For Adrot (2010), temporal compression is an important characteristic of improvisation explaining the spontaneity that action requires. For this author, it implies (1) a recombination of resources; (2) in a creative way; (3) in a short time between decision and action; (4) allowing an adaptation of a collective work; (5) through an innovation. For authors such as Moorman and Miner (1995), improvisation follows a continuum in which spontaneous and impulsive actions are found at its upper limit and thoughtful and planned actions at its lower limit. Weick (1998) establishes a four-level hierarchy to qualify the stages of improvisation as a function of temporal pressure and the environment uncertainty.

Research on this field enlighten the management situations that require improvisation but provide little information about the processes explaining the intensity and variety of improvisation situations. The objective of this paper is therefore to identify the factors that lead to improvisational situations and to highlight the interacting parameters leading either to incremental improvisation (slight transformation of the initial strategy) or to radical improvisation (total transformation of the initial strategy).

Improvisation is a phenomenon that can only be truly appreciated in motion, as close as possible to its implementation. We therefore used an autoethnography (Akehurst & Scott, 2021) to qualify the compositions of variables that explain the improvisation processes. The first author kept a diary describing ten cycling races in which he participated. He expresses his perceptions, his experience of the disruptive events and describes the events and the improvisational choices that he and his team made. Cycling race is a collective sport where we can find similarities with a traditional work team: collective objectives, strategies, roles, resources, competencies...

A reflexive analysis of these data allowed us to establish a chronology of events (timeline) and a qualification of the variables in interaction that explain incremental improvisation and radical improvisation situations. Our results reveal four configurations of interactions between variables to distinguish improvisation choice during the races. These variables are mainly: the nature, intensity and duration of the disturbing event, its impact on the initial strategy, the team members roles' change, the confidence, and beliefs on the competences of team members, the previous similar experiences, and the facility or difficulty of communication. We specifically find that the nature and intensity of the disturbing event can't only explain either the improvisation will be incremental or radical. Finally, our results demonstrate the importance of coordination and communication in order to create routines, mental patterns and decision heuristics that is common to team members and help them improvise successfully. Strengthening the links between team members and developing improvisational skills seem necessary in this context.

This research contributes to the literature as it identifies the main variables in interaction that explain the different situation of team improvisation: four variables interactions' configurations. This research contributes also to managerial literature as it highlights the processes leading to radical and/or incremental improvisation. Although many precautions were taken during data collection and analysis, this research could be improved by integrating the race's narratives of different team members to ensure better ecological validity.

*Keywords: Improvisation, team strategy, autoethnography*

## Oral presentation OP391

### Real Leaders Emerge from Crisis: A Study on Female and Male Governors' Charisma in Times of the COVID-19 Crisis

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science

#### Research Goals

Nowadays, one crisis chases the other, and that calls for strong leadership. But do leaders become more charismatic in times of crisis? Many scholars theorized crisis as an antecedent for leader charisma (e.g., Shamir, House, & Arthur, 1993; Shamir & Howell 1999). Bligh et al. (2004) demonstrated that U.S. President George W. Bush increased his charismatic rhetoric after 9/11, and classified it into eight “charismatic themes” (See Shamir et al., 1994).

Bastardo et al. (2022) expanded their results: They showed that a crisis does not only foster “charismatic themes” (Shamir et al., 1994), but also the amount of charismatic leadership tactics (CLTs) (Antonakis et al., 2011) in presidential speeches. They used a Regression Discontinuity in Time (RDIT) design to identify the causal effects. They extended generalizability, by examining the speeches of French President François Hollande after the 2015 Paris attacks. However, both studies focused on terrorist attacks, sampled few speakers and focused solely on male leaders.

Our study analyzes the rhetoric of 9 female and 9 male U.S. governors 3 months before and after the onset of the COVID-19 pandemic. We thereby extend previous insights of charisma and crises literature in at least three ways: Firstly, we explore leader gender as a moderator of the relationship between crisis and leader charisma. Secondly, we explore the nature of a different crises (e.g., terror attacks vs. pandemic). Thirdly, we sampled more speakers.

#### Theoretical Background

Antonakis et al. (2016, p. 304) defined charisma as “values-based, symbolic, and emotion-laden leader signaling”. We suggest: (H1) crisis will increase the amount of verbal CLTs used by political leaders.

According to role congruity theory (Eagly & Karau, 2002), we suggest that women (1) often do not fit the leader stereotype and (2) are criticized for not behaving like women when acting as agentic leaders. Consequently, female and male leaders could also craft their speeches to match gender stereotypes. Hence, we explore:

RQ1: Do female and male political leaders use different CLTs?

RQ2: Does the use of CLTs change as a function of politicians' gender and crisis?

Study Design (Data collection finished by April 2023)

We selected 9 female U.S. governors and utilized a propensity score matching to find 9 statistically identical male U.S. governors. Following Bastardo et al. (2022), we used a RDIT approach, and centered our assignment variable on 15 March 2020 where the “Declaration of a National Emergency” marked the onset of the crisis in the USA (measurement period: December 15, 2019 - June 15, 2020). We are collecting a sample of 14 speeches (7 before / 7 after the assignment variable) for each governor (n=252). Speeches are assigned to variable treatment based on time (i.e.,

assignment variable) and declaration of state of emergency (i.e., discontinuity). The sum of CLTs and the individual tactics within a speech represent the dependent variables. We examine the influence of gender as a moderator and control for both the total number of words and sentences within a speech (data analysis ongoing).

#### Results expected

We anticipate that the crisis will increase the use of CLTs. In addition, we do not expect significant gender differences in the frequency of CLT use, but for the type of CLTs used.

#### Limitations

Since more female governors are Democrats, our sample is unbalanced between the parties. Democratic states had stricter Corona regulations than Republican states, which has an impact on the rhetoric and perceptions of the Corona crisis.

Future research could conduct a more nuanced analysis of gender differences in the use of agency and community tactics with a more balanced sample.

#### Implications

Our research expands knowledge on how crises affect charisma signaling, which is crucial for responsible political leaders' communication in the face of rising global crises.

We also show whether women use the same amount and types of CLTs as men and examine the impact of gender stereotypes in crisis communication.

#### Congress Theme

Crises exist in all areas - both global crises (e.g., climate change) and organizational crises (e.g., corporate restructuring) - and will challenge future leaders. Analyzing the rhetoric of female and male leaders during crises can help to improve future crisis communication in all fields.

*Keywords: Charismatic leadership tactics, Crisis, Gender*

## Oral presentation OP462

### Recovery from interpersonal conflict at work: A stressor – detachment model approach

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science

Research goals and why the work was worth doing

This study explores the impact of psychological detachment on the relationship between interpersonal conflict as a stressor and emotional exhaustion as a strain based on the Stressor-Detachment model (Sonnentag, 2011). Interpersonal conflict is a well-studied stressor at work which has not been examined so far in association with SDM model, however it is worth studying this construct because as a stressor it has a great negative impact on the employee's emotional exhaustion. Recovering from work has been recognized as a mechanism that buffers the negative impact of interpersonal conflict on mental health, such as emotional exhaustion. Thus, this study aims to cover these gaps regarding the relationships among interpersonal conflict, psychological detachment and emotional exhaustion.

Theoretical background

This research will be based on the theoretical framework of the model „Stressor - Detachment“, which examines the effect of stressors on the mental health of employees through their detachment from work when they are off the job. Interpersonal conflicts are observed daily in the workplace and are represented by the degree to which employees have negative social interactions with their co-workers. Interpersonal conflict is positively related to burnout (DeDreu, 2002). Emotional exhaustion is the core of burnout and due to this fact it was selected in this study. Emotional exhaustion is an indicator of work-related strain, emotional tension and fatigue. It is suggested that on days that employees have an interpersonal conflict, they will feel increased emotional exhaustion. Psychological detachment, however, entails buffering of work-related thoughts and job stressors, allowing the employee to recover and to rebuild psychological resources (increasing well-being and reducing strain). There is extensive literature implying that recovery helps individuals to have reduced emotional exhaustion. The reason for this is that individuals who detach from work can refill their energy reservoir, which has been depleted during work (due to the expenditure of effort). Once the energy reservoir is replenished, people are more likely to feel energized at work. In addition, people who have refilled their energy tank through psychological detachment will be better equipped to cope with the daily stressors of work. Once the employee has recovered, the work stressor, in this case interpersonal conflict, will be perceived as a challenge through which an individual can learn and be developed. However, when individuals have not found opportunities to detach psychologically from work and reduce their normal energy, work pressure is likely to lead to psychological exhaustion. As a result, psychological detachment should weaken the positive relationship between job stressors and strain. It is suggested that psychological detachment from work is a useful strategy that prevents the negative effects of stressful situations at work, such as interpersonal conflict.

Methodology

A daily diary study was conducted with 67 employees from a multinational company in sales sector. Participants responded two times each day to questionnaires for five consecutive workdays. Data was collected after the end of work (a) and in the morning before work (b). After the end of the

work, they reported their level of interpersonal conflict and emotional exhaustion. In the morning before work, they reported their level of psychological detachment.

#### Results obtained

The analysis demonstrated that on days that employees that have an interpersonal conflict, feel emotional exhaustion. Moreover, psychological detachment negative moderates the positive relationship between employees' interpersonal conflict and emotional exhaustion.

#### Limitations

The researcher have used only self-reports (which increase the risk of common method bias), but we collected data at different time. Another limitation is that single-item measures were used, which are easier and take less time to complete (an important fact of diary studies), but are usually more sensitive to errors than multi-item measures.

#### Conclusions

Research will benefit from results to extend the stressor-detachment model regarding interpersonal conflict. Since psychological detachment from work during off-job time proved significant regarding the reduction of strain , employees should be encouraged to mentally switch off after work. To the best of our knowledge, this is the first empirical study on interpersonal conflict as a part of stressor – detachment model. This study seeks to fill this gap by adding interpersonal conflict as a stressor.

#### Relevance to the Congress Theme

Throughout Covid, many workplace interpersonal conflicts have increased, often fueled by pandemic-driven changes to working lives. Thus, it is important for the congress to examine all these issues of conflict, in order to overcome organizations obstacles associated with emotional exhaustion.

*Keywords: Interpersonal conflict, emotional exhaustion, psychological detachment*

## Oral presentation OP723

### Reducing Evaluative Bias in a Big Five Psychometric and the Impact on the Big Five Structure

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science&practice

#### Research Goals

The research to be presented was conducted as part of doctoral research at the University of Westminster (Desson, 2017), which involved the development of an integrated adaptive and maladaptive personality model for measuring the Big Five, termed Lumina Spark.

Two goals of this research will be presented:

- 1) How to reduce evaluative bias in personality psychometrics
- 2) How to measure adaptive and maladaptive personality traits in an integrated assessment

These goals address two issues existent in most traditional measures of the Big Five:

1) Inherent biases found where certain traits are valued more than others. For example, where Extraverted behaviours are conceptualised more positively than Introverted, thus contributing to negative connotations associated with Introversion. This research explores how to value diversity in terms of personality.

2) Many assessments of maladaptive personality tend to stand alone and have their roots in a subclinical form of the DSM framework. Their use in conjunction with measures of adaptive personality is, therefore, more complex, where an integrated measure would allow for a holistic understanding of an individual's personality in terms of preferences and behaviours, both adaptive and maladaptive.

If these issues are addressed, there is a potential improvement in user validity (Maclver et al. , 2014).

#### Theoretical Background

The research to be presented builds on previous research into the Big Five model of personality, informing the basic structure of the model including its factors and facets. Based on the five-factor model, Lumina Spark bifurcates each factor into their opposite polarities, treating each as an independently measurable scale, with facets sitting under each of the ten scales. These qualities are assessed in terms of adaptive and maladaptive manifestations of associated preferences and behaviours.

Lumina Spark also builds on research conducted by Backstrom, Bjorklund and Larsson (2014), who reported the existence of evaluative bias in many Big Five models, which was also researched by Peabody (1967). However, there has been limited application in practice of these important personality psychometric ideas.

Two questions informed the development with regards to reducing evaluative bias:

- 1) Has the construct been measured in a comprehensive and non-biased way?
- 2) How does the user feel about reading about aspects of their personality in a biased and unbalanced personalised report?

By developing a measure of personality with reduced bias and a balanced conceptualisation of the whole spectrum of personality, this research addresses a problem identified by Pettersson et al. (2014) regarding the initial development of the Big Five by Goldberg (1992):

“When an evaluatively unbalanced set of descriptors such as the Big Five adjectival markers (Goldberg, 1992) is subjected to a simple structure rotation algorithm, the resulting factors almost invariably end up contrasting positive versus negative descriptors (Goldberg, 1992).”

#### Design and Methodology

Participants were invited to complete a range of personality measures including Lumina Spark (n=2,506), the IPIP-NEO (Johnson, 2014) (n=234), the Trait Descriptive Adjectives (Goldberg, 1992) (n=420), and also measures of levels of social desirability of each.

The factor structure of Lumina Spark was established through confirmatory factor analysis; this was also achieved through the mapping of facets to the periodic table of personality (Woods and Anderson, 2016). Results from measures of social desirability and evaluative bias were compared in order to ascertain differential levels of bias inherent in each instrument.

#### Results

CFA highlighted the robust structure of Lumina Spark, with the structure of the Big Five evident, with further support from the placement of facets onto the periodic table of personality.

Analyses of social desirability showed a significant reduction in evaluative bias of Lumina Spark when compared to the IPIP-NEO (Johnson, 2014) and the TDA (Goldberg, 1992).

#### Limitations

Limitations include the use of a convenient sample, comprised mostly of western white-collar professionals, and the relatively small sample size for analyses of evaluative bias.

#### Practical and Research Implications

There is a need for cross-validation of findings on a separate and larger sample, and also exploration of the effects of maladaptive traits on performance.

Practically, the developed model allows for the use of a balanced and unbiased psychometric for use in developmental and recruitment contexts, with the benefits of reduced adverse impact and improved user experience and recognition of diversity.

#### Originality and Value

This research applies Peabody's (1967) methodology in new and innovative ways, with the benefit of valuing diversity of all personalities and supporting inclusivity interventions.

*Keywords: Lumina Spark, Evaluative Bias, Big Five*

## Oral Session OP693

### Reflections on the use of artificial intelligence in nursing from the perspective of humanistic psychology

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science

In this presentation, the significance of artificial intelligence (AI) for nursing will be examined from the perspective of humanistic psychology. A particular focus is placed on the seminal work of Erich Fromm.

By way of introduction, it will be shown why the topic of AI in nursing is relevant from both a nursing science and psychological perspective. The term artificial intelligence (AI) refers to applications in which patterns are recognized by means of algorithms and these recognition processes are intended to lead to the most optimized problem solution possible and to the formation of judgments and decisions linked to it. Technical assistance systems in care are already indispensable today. These include applications such as emergency recognition and notification, support in organizing everyday life, for example when it comes to the right time and the right amount of medication to take, but also assistance in rehabilitation processes, such as exercises to increase or regain one's own mobility.

This makes it all the more urgent to reflect on what significance AI can and should play in care and nursing from the perspective of humanistic ethics. After all, not everything that can be possible must also be good for people and society: Not everything that is technically feasible is ethically unobjectionable. This involves both a discussion of the possibilities and limits of technology, which are constantly changing with advances in research, and a reflection on the question of what actually constitutes and distinguishes what is human. Therefore, it is important to address the opportunities and risks of further development and to actively incorporate the insights gained into ongoing decision-making processes.

In the presentation, critical perspectives will first be elaborated that address the dangers of the increased use of AI for care, nursing and society. Possible negative consequences for nursing such as a change in normative standards and increasing de-humanization will be pointed out. The larger the scope of possible AI-supported activities in nursing, the higher the pressure could become to perform them within certain narrowly defined time frames. This could be associated with increasing de-humanization if the opportunities for time-consuming interpersonal encounters in care were increasingly reduced as a result. In Fromm's sense, it could lead to increasing bureaucratization in such a way that processes in care become more and more standardized so that they can be measured and potentially made more efficient. One risk, therefore, is that the parts of care associated with AI will become increasingly socially valorized at the expense of the purely interpersonal, bodily-mental part of care, ultimately also changing the character of the field of care in such a way that spontaneous encounters between people lose value.

However, AI can also be seen as a beacon of hope and provide support for people's lifelong identity work. Opportunities and risks for identity work are discussed in terms of the dimensions of authenticity, belonging and control in the model developed by Thomas Kühn, "the normative abc of identity". AI can support maintaining a sense of one's own personal integrity and dignity, provide feelings of participation in social change, lead to a reduction in feelings of loneliness, provide a basic sense of security, and counteract feelings of being at the mercy of others.

Finally, a short summary is drawn, emphasizing the importance of bringing social science-based knowledge into political discourses and technology development. For the discussion of technological progress, this means that it must not be a matter of primarily striving to contain possible dangers associated with technical innovations such as AI systems as best as possible out of a rather resigned basic attitude and a projective idealization of a world imagined as "natural," but rather of developing a vision that is linked to the hope of even better interpersonal interaction in societies.

At the same time, hope must not be associated with carelessness, naivety and closing one's eyes to fundamental dangers. In this sense, it would be illusory to understand the field of care in isolation from social development. However, the more societies are characterized by growing social inequalities, centralization of power, acceleration, and a one-sided glorification of technology and measurable data, the greater the dangers described in this presentation that the increasing use of AI can also lead to de-humanization, further bureaucratization in nursing, and seriously endanger the quality of interpersonal relationships in this field.

*Keywords: AI, Humanistic Psychology, Nursing*

## Oral presentation OP433

### Regulatory emotional self-efficacy and work self-efficacy as protective factors of stressful challenges

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science&practice

**Research goals.** This research aimed to explore to what extent and how regulatory emotional self-efficacy beliefs in managing negative emotions (RESE-NE) would predict changes in psychophysiological states related to the process of occupational stress. Specifically, this study investigated changes in the following three main cortisol parameters: the Cortisol Awakening Response (CAR); the Diurnal Cortisol Slope (DCS), and the Area Under the Curve with respect to the ground (AUCg). A further purpose of this study was to examine whether work self-efficacy (WSE) would mediate the relationship between RESE-NE and different cortisol parameters.

**Theoretical background.** RESE-NE at work refers to the perceived ability to effectively manage one's interpersonal relations in the workplace, recover from one's negative emotional states elicited by adversities and avoid being overwhelmed by one's negative emotions, which are all protective factors against stress (Alessandri et al., 2018). Workers who feel able to regulate their emotions can better manage and respond flexibly to stressful events at work, minimizing the impact of such events on their own functioning and environment. Thus, high RESE-NE promotes an individual's perception of control over work stressors (Bandura, 1997). WSE, instead, reflects workers' perceived ability to meet the requests of their job, cope with challenging job demands and adapt to demanding work contexts. As RESE-NE, high WSE promotes a sense of control over work stressors, while low WSE is related to maladjustment (Alessandri, 2018). Literature suggests that RESE-NE beliefs foster WSE beliefs over time (Alessandri et al., 2021). Individuals who perceive themselves as able to manage their emotions refer to be more confident in their work abilities and have more cognitive resources to devote to task performance. To extend this line of research, this study investigates the psychophysiological outcomes of RESE-NE and WSE. To this aim, we fitted a multilevel mediational model where RESE-NE was posited as an indirect predictor which impacted cortisol parameters through the mediation of WSE, specified as a proxy predictor of cortisol parameters.

**Design.** Intensive longitudinal data were collected on 162 workers during two consecutive workdays. Workers were assessed on their RESE-NE and WSE at the beginning of the study. Then, they provided saliva samples five times a day over two working days.

**Results .** We fitted three multilevel mediational models, each with one of the three cortisol parameters (i.e., CAR, DCS, or AUCg) modeled as level-1 indicators allowed to randomly change over the two study days. RESE-NE and WSE were included as level-2 variables. We controlled for important dynamic (i.e., caffeine and nicotine use, time since awakening) and static (Body Mass Index) covariates, usually related to cortisol changes all over the days. Results from these analyses revealed a significant direct prediction of AUCg by WSE, and a significant indirect prediction of AUCg by RESE-NE through WSE. No significant prediction of CAR or DCS was found by RESE-NE or WSE.

**Limitations.** RESE-NE and WSE were assessed as static, between-individual variables. Future studies could consider collecting dynamic measures of these constructs over days or weeks.

**Conclusions.** This research contributes to the existing literature on self-efficacy and well-being in the workplace by showing that RESE-NE and WSE represent protective factors warding off negative

physiological consequences of stress. These constructs were indeed associated with an index of the overall cortisol accumulation over two workdays. Most importantly, the relationships of RESE-NE and WSE with AUCg support our theoretical predictions (Alessandri et al., 2021). From a practical standpoint, organizations could provide their employees with emotion management and coping effectiveness training programs. Training techniques could embrace the use of case studies, role-playing, and simulation to allow employees to experiment with their capabilities in protected settings and then enhance their self-efficacy beliefs through mastery and modelling experiences. Moreover, managers could conduct sharing and debriefing sessions where employees are stimulated to openly share their emotional experiences with their colleagues to relieve negative emotions and build mutually supportive relationships. Supervisors could also support their collaborators through regular communication and mentoring sessions aimed at facilitating positive reappraisal of potentially stressful job-related situations.

Relevance to the Congress Theme. This study extends the wellbeing topic by establishing a firm link between workers' self-efficacy beliefs and daily physiological functioning, shedding new light on the distinctive roles of RESE-NE and WSE in protecting against psychological strain states.

Relevant UN SDGs . Personal beliefs at work and wellbeing

Audience . Both practitioners and academics

*Keywords: regulatory emotional self-efficacy, work self-efficacy, cortisol*

## Oral presentation OP745

### RESET Fitbit Study: Validation of The Caen Chronotype Questionnaire (CCQ)

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science&practice

#### BACKGROUND

Chronotype refers to an individual's preference to perform activities at certain times of the day. Circadian preference has an important role in a number of health-related outcomes; these include general wellbeing, mental health, risk of psychiatric disorder, sleep, metabolic function and cardiovascular risk (Partonen, 2015). Individuals with an evening chronotype ("owls"), for example, show increase incidence of obesity, type 2 diabetes, depression, sleep disturbances and irregular sleep-wake schedules (Taylor & Hasler, 2018; Kivelä et al. 2018; Jones et al., 2019; Fabbian et al., 2016). Chronotype also has implications for working time arrangements; employees with shift patterns and work schedules more closely aligned with their individual chronotype, demonstrate improved sleep (Vetter et al. 2015), task performance, job satisfaction, and function more effectively at work (Kühnel et al., 2018).

The Caen Chronotype Questionnaire (CCQ) is a self-reporting measure of circadian rhythms which captures both chronotype (i.e., morningness or eveningness, 'CCQ-ME') and an amplitude dimension known as 'distinctness' (i.e., variations in individual functioning across the day, 'CCQ-A') (Dosseville et al., 2013; Laborde et al., 2018).

The CCQ has been validated in six languages including Arabic, Dutch, German, Italian, Portuguese and Spanish. An English version of the CCQ has so far not been fully validated. This oral presentation reports findings from a UK validation study of the CCQ (N = 600) and a subsample (N=30) of participants who wore an actigraph device for 7 consecutive days.

#### METHODOLOGY

The sample (N = 600) was reflective of the demographic characteristics of the UK and included full-time workers (aged 18-65) who had English as their main language. Online questionnaires were completed on Qualtrics with detailed information on job characteristics, work schedules, demographics, sleep routine, mood, lifestyle items and two chronotype measures; the Caen Chronotype Questionnaire (CCQ) and Morningness-Eveningness Questionnaire (MEQ).

A subset of participants (N = 30) wore an 'actigraph' (Fitbit Charge 4 device) for one week. The Fitbit Charge 4 is a multi-sensor commercial device with a 3-axis accelerometer and altimeter (e.g. to collect movement and activity data) and optical heart-rate monitor (e.g. to record beats per minute signals). Various sleep parameters (e.g. sleep stage trends and total sleep time) are estimated using Fitbit propriety scoring algorithms (Haghighyegh et al. 2019; Nissen et al. 2022).

#### RESULTS

A confirmatory factor analysis (CFA) confirmed a two-factor model of the Caen Chronotype Questionnaire (CCQ) with dimensions of chronotype (morningness and eveningness; CCQ-ME) and amplitude (distinctiveness; CCQ-A). The convergent validity of both dimensions, CCQ construct validity, and discriminant validity were also evaluated. Full results will be available in January 2023,

including validation data of actigraphy markers against chronotype (CCQ-ME) and amplitude (CCQ-A) dimensions.

#### LIMITATIONS

The test-retest reliability of the English CCQ version was not evaluated, as in previous multilanguage validations of the questionnaire (Laborde et al., 2018). To better assess circadian typology and distinguish between work and non-work days, future research could extend wrist-worn actigraphy for  $\geq 2$ -weeks and record daily sleep logs or physiological markers (e.g. dim light melatonin) (Zucconi & Ferri, 2014).

#### CONCLUSIONS

This is the first study to (1) validate an English version of the Caen Chronotype Questionnaire (CCQ) and (2) incorporate actigraphy data to objectively assess self-reported sleep, activity, and CCQ chronotype estimation. This oral presentation will highlight the importance of studying the 'amplitude' of chronotype as proposed by the CCQ; organisations may better promote employee wellbeing, performance, and productivity, by adopting flexible work-hours that align with an individual's chronotype and circadian preference.

*Keywords: CHRONOTYPE ACTIGRAPHY WORK-SCHEDULES*

## Oral presentation OP461

### Resilience and supportive climate as determinants of the influence of supportive leadership on dedication at work

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science&practice

The World Health Organization -WHO- (2021) has recognized that the world is facing an unprecedented health crisis. For this reason, the Society of Industrial and Organizational Psychology -SIOP- (2022) has marked a research trend within this specialty, the study of mental health and employee engagement.

The engagement or emotional attachment of the employee is one of the factors that most affect their well-being and high levels of job success (Rich et al., 2010; Walumbwa et al., 2010). However, the results of the investigations have shown that its dimensions are not affected in the same way by the elements that make up the organizational context. Authors such as Rothmann and Jordaan (2006) and Abdelrazek (2016) showed that labor resources such as organization support and growth opportunities have a statistically significant positive relationship with the dimension of dedication above the rest of the elements that make up this variable.

But the impact of leadership on the employee's dedication is not a direct effect. This way must influence previously the employee's perception/assessment of their work context. Models such as the one developed by Bakker and Demerouti (2017) propose the existence of intermediate variables in this relationship of influence. In this sense, research has shown the importance of the perception of the organizational climate (Parry, 2002). From an individual level, personal resources such as psychological capital are decisive when the employee forms an image appropriate to the context (Parker et al., 2003).

The objective of this study is to analyze a model of individual development through increased dedication, starting from the influence the support of the leader has on this dimension of engagement. In this model, we suggest the mediating role of the supporting climate between the support of the leader and dedication and the participation of resilience as a moderating variable between the support of the leader and the perception of the supporting climate.

A total of 418 employees from 15 companies belonging to the VML holding, linked to the service sector, responded to the measurement protocol, although only 396 questionnaires were valid.

The results of the moderation model on the mediating variable (support climate) show the leader's support was a significant predictor of the supporting climate ( $B: .20$ ;  $p: .001$ ). At the same time, the interaction between leader support and resilience shows a significant impact index on the supporting climate ( $B: .10$ ;  $p: .001$ ). This result indicates that the sum of the effect of resilience to the support of the leader increases the capacity of the latter to influence the perception of the supporting climate of the employee, going from a positive and significant influence of  $.12$  ( $p: .001$ ) with low levels of resilience, to a positive influence of  $.33$  ( $p: .001$ ) when the employee has high levels of resilience.

On the other hand, the results of the moderate mediation model show how the total effect of the leader's support on work dedication was significant ( $t = 6.12$ ,  $SE = .03$ ,  $p .000$ ). This model shows that the supportive climate (mediator) was also a significant predictor of work dedication when this variable included in the regression analysis ( $B: .22$ ;  $p: .001$ ). The moderated mediation indices indicate

an increase in the indirect effect of leader support on dedication at work through the supportive climate that goes from .02 to .07 depending on the levels of the moderating variable (resilience), showing all of them a significant effect. Finally, the results showed an overall moderate mediation index, with a value of .024 (SE = .107 95% BC CI from .004 to .045).

In conclusion, the relevant role of resilience can be drawn as a determinant factor in the process that improves the perception of support due to the support of leaders. This finally up having a positive effect on employee dedication. The findings of this research help organizations and leaders in their efforts to develop and implement successful human resource strategies.

*Keywords: Engagement, supportive leadership, supportive climate, resilience, dedication*

## Oral presentation OP418

### **Revenge bedtime procrastination: Using text mining approach to explore why people choose to delay their bedtime**

Nanxi Yan, University of Groningen; Anne-Kathrin Kleine, Ludwig Maximilian University of Munich science

Revenge bedtime procrastination: Using text mining approach to explore why people choose to delay their bedtime

#### Research Goals and Why the Work was Worth Doing

In our achievement society (Han & Butler, 2015) we live and work under pressure of always aiming high and achieving our goals in a limited amount of time. The associated mixing of work and private life makes poor sleep a prevalent issue among working-age adults (Robbins et al., 2019; Watson et al., 2015). Insufficient sleep leads to poor job performance (Feddock et al., 2007) and impaired health (Kecklund & Axelsson, 2016). One phenomenon responsible for this sleep deprivation is called bedtime procrastination—people going to bed later than intended because of self-regulation failures (Kroese et al., 2014; Kroese et al., 2016).

A phenomenon that obtained increased attention in popular media is called “revenge bedtime procrastination”, which refers to deliberately giving up part of one’s sleeping time to engage in leisure activities (Liang, 2020). Although its name attributes this behavior to procrastination, this form of postponing bedtime may be more accurately characterized as purposeful bedtime delay (Nauts et al., 2019). This is because there is no intention-behavior gap in purposeful bedtime delay (as people simply want to sleep later) and this delay is not mainly caused by self-regulation failures, which are two key features of procrastination (Steel, 2007).

Following the conservation of resources theory (COR, Hobfoll, 1989, 2002), while bedtime procrastination is related to resource depletion/loss, purposeful bedtime delay might set a resource generation or resource gain process in motion, meaning that people invest resources (e.g., time) to obtain, retain, and protect resources reservoirs (Chen et al., 2015). Nevertheless, current research mainly focuses on the negative consequences of bedtime procrastination. However, it is possible that purposeful bedtime delay might represent a neglected adaptive side of this behavior (i.e., to gain resources). The current research aims to bridge the gap by exploring how people perceive revenge bedtime procrastination and the outcomes related to it. Based on COR, the results of our analyses offer starting points for a theory on individual motives for, and positive and negative consequences of revenge bedtime procrastination. We conducted preliminary analyses on the obtained data. The final results will be presented at the conference.

#### Method

The current study investigates the content of recently published newspaper articles uses through natural language processing (NLP) techniques (e.g., topic modeling, sentimental analysis) and thematic analysis (Braun & Clarke, 2006), with the goal of uncovering expressed positive and negative attitudes and experiences regarding revenge bedtime procrastination. We use online archival data (NexisUni and twitter) because revenge bedtime procrastination is a young phenomenon predominantly discussed in online blogposts and news articles rather than in scientific literature (Liang, 2020). Applying NLP on online sources discussing bedtime procrastination allows us

to throw an impartial and holistic view on this new phenomenon, thus providing a starting point for future theory development.

#### Expected Results

In preliminary analyses, we identified multiple different topics that are discussed in the context of revenge bedtime procrastination, namely “work and professional motives”, “the pandemic”, “health risks”, “gaining control”, and “bedtime habits”. Positive aspects of revenge bedtime procrastination pertain to gaining time for the family and leisure activities, gaining control and freedom, and following personal passions. Negative aspects of revenge bedtime procrastination mostly relate to physical and mental problems.

#### Limitations

The main limitation of the study pertains to the data selection process. The data used in the study was gathered from only two sources, necessarily limiting the generalization to individuals not falling into the user group of these news sources.

#### Implications and Relevance to the Conference Theme

Sleep deprivation is a relevant health risk. Based on COR, the current study highlights both positive and negative aspects of revenge bedtime procrastination to potentially enrich our understanding of how to foster healthy and limit unhealthy bedtime procrastination behavior.

SDG Goals : Studying the sleeping issue is relevant to the Goal 3 of UN SDG: Good health and well-being.

*Keywords: sleep, conservation of resources theory, topic modeling*

## Oral presentation OP565

### **Role of workplace telepressure on employees' commitment and job involvement in digitalised work culture**

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science&practice

The increased dependence on ICT devices (information and communication) has pressured employees to stay connected with work online. It has expanded the chances of immediate response expectations and permanent availability for work requests. The sudden imposition of work from home during the lockdown has digitalised the working style of the employees and evolved a new work culture. Although people are now moving towards hybrid or traditional working modes, digital communication has mostly taken the place of face-to-face interactions. It has led to a pressure known as workplace telepressure. Workplace telepressure (WT) is a preoccupation with thoughts and an urge to respond immediately to work-related messages during personal or working hours. Studies have reported that people have started giving importance to digital information over and above face-to-face interactions. According to the job-demand resource (JD-R) model, job demands are those aspects of work that need to be done and require physical, mental and emotional exertion. Now, along with job demands, work culture also includes social demands (maintaining social relationships via ICT communication), which is more stressful for employees. WT is a type of ICT demand. It encourages employees to stay connected with other members and work constantly. Messages at the right time can be helpful for task completion and reducing the ambiguity of the work, which has positive results. In contrast, unwanted messages work as an interruption in the task that leads to distractions. Some employees pretend to be constantly connected with work and use this to create an impression on their supervisor as they are hardworking and dedicated to work. Immediately reply to messages or emails late at night to show how hard they work. It may not always be accurate. Therefore, the present paper aims to study the relationship between WT, organisational commitment and employee job involvement. Furthermore, the researcher has studied this relationship in the presence of power distance as a mediator to study the cultural effect. Data collection was done using the online survey method with the help of structured questionnaires. A total of 250 employees were selected for the final study, of which 26.4 per cent are female, and 73.6 per cent are male. The mean age of the participant is 28.01, and S.D. is 4.574. All the participants are full-time employees working in private firms for at least one year. Statistical analysis was done using software SPSS and AMOS v. 25. The study's findings have shown a positive relationship between WT and job involvement but not organisational commitment. It shows that although employees are involved in their work, they lack commitment towards the organisation. Furthermore, there is no direct effect of WT on organizational commitment, but power distance acts as a mediator in their relationship. It shows that India's high power distance culture influences the employees' behaviour. It can be why employees immediately respond to emails or messages when they receive from their seniors or supervisors. They feel obliged and responsible for replying as soon as possible. However, there is a direct effect of WT on job involvement, but there is no mediating effect of power distance. Moreover, differences based on gender, age and marital status were not found in the study. In conclusion, WT can be suitable for employees for job involvement but not for increasing commitment towards the organisation. Therefore, management needs to realise that staying connected with work through ICT devices will not make their employees productive. They should not judge their employee based on online availability. Instead, management needs to prioritise increasing organisational commitment among employees. Lack of organisational commitment can lead to low job satisfaction and high turnover intention, which is not advantageous for any

organisation in the long run. The study's outcome would contribute to theoretical and application aspects for the organisation. The study's findings may be utilised by management as they can train their employees to use technological devices productively. WT is related to the use of mobile phones and computers. Findings would help understand the influence of the use of technology in the workplace and how to implement technology in such a way that can be helpful for work performance, organisational effectiveness and society so that there are fewer negative consequences of the use of technology. The organisation can make policies related to using mobile phones at the workplace. It is essential to provide proper breaks in between work if employees continuously work on computers. Also, employees need to understand the importance of maintaining the boundary between work and family space. It could be helpful for employees to increase work performance which would eventually lead to increased organisational performance and effectiveness.

*Keywords: Workplace telepressure, Organizational commitment, Job involvement, Power distance*

## Oral presentation OP767

### Romanian Version of the Career Crafting Assessment: Psychometric Properties

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science

The notion of career is no longer understood as a progressive advancement within the same organization, but rather as a lifelong dynamic transition between multiple jobs. Lee et al. (2021) developed Career Crafting Assessment (CCA) as a means of identifying the proactive behaviors that people engage in when transitioning from one job to another. Career crafting represents “a set of proactive behaviors that create or expand task, relational, and cognitive resources with the goal of supporting individuals’ efforts toward achieving congruence between their career and their needs, values, and interests” (Lee et al., 2021). The dimensions of career crafting were derived from the domains of job crafting: changing relational boundaries, utilizing relational resources, reflecting positive career meaning, and expanding task boundaries.

The objective of the current research was to analyze the psychometric properties of the Romanian version of the CCA. We achieved this goal through three studies. In the first study (N = 938), we conducted a confirmatory factor analysis on a sample of Romanian participants, we investigated the measurement invariance of the scale across gender and generations, and we evaluated the internal consistency of the scale and the correlations between career crafting factors. In the second study (N = 344), we tested the convergent validity of the scale by correlating career crafting scores with those obtained for similar constructs (organizational career management and job crafting). In the third study (N = 213), we tested the criterion validity of the scale by correlating its scores with a series of plausible consequences (work engagement, meaningfulness of work, and person-job fit).

Lee et al. (2021) developed the CCA on a sample of participants from both Canada and the USA. However, those two cultures might be fairly similar since they are both categorized as strongly individualistic according to Hofstede's model (Hofstede, 2011). This raises the question of whether the concept of career crafting can also be applied to predominantly collectivist cultures, such as Romania (Hofstede, 2011). The validation of the instrument for different languages can allow the assessment of measurement invariance across cultures. The validation of the instrument for several countries allows comparisons related to the way people craft their career in different cultures. Results obtained with the CCA could be used to improve both coaching and vocational counseling services in Romania. Also, the instrument can be used to test the effectiveness of career crafting interventions.

Participants completed an online questionnaire. Our data was collected from a convenience sample consisting of Romanian employees, who have been recruited using the snowball method. We selected participants based on a number of eligibility criteria similar to those imposed by Lee et al. (2021). In addition, freelancers and company owners have also been excluded from the final sample. The statistical analyses were conducted using SPSS Statistics Version 25 (2020) and Mplus version 7 (Muthén & Muthén, 1988-2012).

Overall, the results indicate adequate psychometric properties for the Romanian version of CCA. Results from the confirmatory factor analysis indicated a good fit between our data and the four-factor model proposed by Lee et al. (2021). Measurement invariance across genders was supported by data. However, measurement invariance across age groups was not supported and the data collected from Gen X participants presented only a marginal fit with the theoretical model. The instrument presents a good internal consistency. Our results supported both the convergent validity

and the criterion validity of the scale. In support of convergent validity, we found significant positive correlations between career crafting and two similar constructs (job crafting and organizational career management). Criterion validity was supported by significant positive correlations between career crafting and performance, work engagement, meaningfulness of work, and person-job fit.

Our study presents a number of limitations. First, our research design was cross-sectional, which means that it is impossible to draw any conclusions about the reliability of our results over time, as well as the predictive validity of the scale. Second, we have examined only a limited number of relationships between career crafting and other variables. A third limit of our study concerns the exclusion of freelancers and entrepreneurs from the final sample.

The psychometric properties of the Romanian version of CCA are similar to those of its American counterpart. Our results are in line with the findings of Lee et al. (2021) and suggest that the Romanian version of the instrument is valid.

Understanding career crafting is important because it offers us solutions through which employees can adapt to the changing world of work and through which they can have access to decent work.

*Keywords: career crafting, psychometric properties, scale validation*

## Oral presentation OP704

### See Something, Say Something: A Meta-Analytic Examination of Safety Voice

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science

Safety voice is defined as the change-oriented communication about workplace safety concerns or issues, and is a critical component of proactive safety models and successful safety systems. Given the (1) volume of research on safety voice, (2) the diversity of disciplines in which results have been published, and (3) the criticality of safety voice for successful workplace safety systems, this study aims to take stock of the current knowledge on safety voice in the workplace.

At its roots, safety voice can be thought of as a form of extra-role or organizational citizenship behavior (OCB), given that while engaging in voice behavior is beneficial, it is not usually a requirement of a job.

Sufficient research has accumulated to begin to understand the unique role of safety voice in safety performance, and despite the potential for other interfering influences, it is likely safety voice is at least somewhat positively predictive of safety behavior.

Hypothesis 1: Safety voice is positively associated with safety behavior. (Supported)

Given the natural similarity and probable reciprocity between the motivational bases of the safety voice and safety citizenship performance constructs, it is likely safety voice is more strongly predictive of safety citizenship performance than safety compliance performance.

Hypothesis 2: Safety voice is more strongly associated with a) safety citizenship behavior than with b) safety compliance behavior. (Supported)

Speaking up about safety issues requires a keen knowledge of safety regulations and policies as well as a motivation to protect the health and safety of the workplace. Research supports the notion that increasing workers' knowledge about safety policies and initiatives increases safe work behaviors and contributes to safety-supportive workplaces. Employees who are motivated to create safer workplaces are more likely to weigh in favor of voicing safety concerns rather than remaining silent, particularly when they feel safe and supported.

Hypothesis 3: Safety voice explains incremental variance in safety behavior above and beyond safety knowledge and safety motivation.

Models of workplace safety often depict safety knowledge and motivation as reciprocally-reinforcing constructs that are promoted by safety-supportive environments, and which together predict safety behavior. However, the mechanism by which knowledge and motivation result in safety behavior remains unclear. Some action must result from the knowledge and motivation in order to yield safety behavior. Could safety voice be a missing link?

Hypothesis 4: Safety motivation and safety knowledge indirectly affect safety behavior through the mechanism of safety voice.

Our meta-analytic database is composed of fifty independent studies reported in 45 manuscripts (total N 50,956) reporting 158 unique effect size relationships relevant to the nomological net of safety voice. To ensure a comprehensive search, we canvassed the relevant literature. Next, we

performed a reverse-citation search of articles that referenced foundational publications in the area of safety voice. Third, we conducted a reverse-citation search for articles that referenced scales commonly used to measure safety voice. Articles that met criteria for inclusion in the meta-analytic database were independently coded by two of this manuscript's authors. Inter-coder reliability was very high (99%) likely due to the objective nature of the coding content.

We ran a series of meta-analyses to test H1-H4. Significant results were obtained from the analyses, providing support for each of our hypotheses.

Proactive safety systems actively promote health and prioritize safety by preventing accidents and injuries before they occur. A critical component of such safety systems is safety voice. Results of this meta-analysis suggest that safety voice is related to critical individual safety factors such as safety motivation and knowledge and plays an important role in predicting safety behavior.

This paper contributes to the UN SDGs of good health and wellbeing, as well as peace, justice, and strong institutions. First, working in an environment in which workers feel comfortable about expressing their concerns about safety issues contributes to psychological health and wellbeing, as well as physical safety by preventing safety issues from resulting in adverse safety outcomes. Building such a climate also promotes strong institutions in which workers feel happy, healthy, and psychologically safe.

*Keywords: safety voice, safety citizenship behaviors, meta-analysis*

## Oral presentation OP145

### **Seeing the wood and the trees: A study to understand the office worker experience of well-being when taking their work outdoors**

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science&practice

We have seen a resurgence in people spending more time outdoors, we are also witnessing people choosing to take their work outdoors but with very little understanding of the experience of this for people. From prior research, we know that experiencing outdoor nature is an aid for mental recovery through passive undirected attention. Yet an uncertainty arises as people choose to work outdoors: do they still gain the associated restorative benefits of being outdoors while maintaining directed attention and focus for working? Currently, we understand very little about the mechanisms which may allow these two things to happen at once. We propose that the primary causal mechanism between a combination of nature and work lies within people's memories of previous nature awe experiences. By integrating the concepts of affordances of space from the workspace literature (e.g., Gibson, 1979), liminality from the architecture literature (e.g., Dale & Burrell, 2008) and awe from the positive psychology literature (e.g., Keltner & Haidt, 2003), we suggest that as people experience a heightened in the moment focus, they continually loop in and out of soft fascination related to nature and directed attention towards work focus.

To date, research has examined how nature provides restoration. Stress Reduction Theory (SRT; Ulrich et al., 1991) argues that nature can trigger a positive physiological response in humans (e.g., reduced heart rate). Attention Restoration Theory (ART; Kaplan & Kaplan, 1989) explains that the nature element of soft fascination is most likely to affect such well-being, in that we don't have to interact with nature resulting in depleted directed attention being restored.

Thus, currently we can understand how outdoor space at the workplace and at home is useful for short restorative breaks. However, this study looks to understand longer periods of time spent working outdoors. What happens when an employee takes their work outside? The theory of affordances of space (Gibson, 1979) understands that a workforce may require 'office items' (such as desks and chairs) in an outdoor space to legitimise its' use before employees can begin to explore how they may both work there and experience well-being. Can an outdoor workplace provide such legitimisation?

An in-depth inductive study was run from May–October 2022 using employees from the University of Leeds using a qualitative methodology of participant audio diaries and photo-elicitation, and unstructured and semi-structured interviews. This approach has been taken to reflect the philosophical stance of the researcher along with using Interpretative Phenomenological Analysis (Smith et al., 2009) to gain in-depth understanding of how people individually experience well-being while taking work outdoors. Participants recorded short audio diaries when they took their work outdoors on campus to a place of their choosing to capture details which may otherwise have been lost. Participants were also asked to take photographs of nature elements which they felt were important to them when working outside. Due to the duration of the study a mid-point unstructured interview took place followed by a final semi-structured interview.

Initial results suggest that the experience of taking work outdoors is related to well-being by way of feelings of awe, senses being activated, and memories of time spent in nature. The surprising result thus far has been the ability to focus on work tasks in the outdoor space where working in the outdoors allows for the ability to distance oneself from interruptions. A further 60 interviews are

taking place towards the end of 2022 using Prolific to recruit participants globally who have taken their office work outdoors, because of the sample size I will be bricolaging the data analysis by using thematic analysis to understand this cohort's experience of well-being.

One of the key limitations for this study has been participation. This has been led by both the potential participants but also a key area of concern has been with regards to managerial acceptance of people legitimately taking their work outdoors.

This research contributes to the conversation around third workspaces which includes being outside in nature. By integrating concepts across related literatures, we can provide a platform for future workplace research. Moreover, there are practical implications of an alternative outdoor workspace in an age of pandemics which adds to the research with regards to employee well-being.

This research is relevant to the congress theme of well-being at work and in particular well-being at work and thriving at work. Additionally, this research is also relevant to the UN SDGs of good health and well-being due to the primary research question of understanding how people experience well-being while taking work outdoors.

*Keywords: Outdoor, nature, workspace*

## Oral presentation OP749

### Self-Sacrifice at Work: A Synthesized Definition and A Social Identity-Based Framework

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science

Sacrifice at work made headlines across the world during the global pandemic. Healthcare employees sacrificed their health, or even their lives, due to higher risks of COVID-19 infection. More essential employees made personal sacrifices by continuing their work without adequate resources and support. Elsewhere, the issue of sacrifice increasingly lays bare in modern-day workplaces, with employees being encouraged and pressured to dedicate more of their lives to work and fit the 'ideal worker' image, even in times of a global pandemic. Particularly, when organizations enlarge employees' responsibilities by turning extra-role behaviors into in-role tasks, employees may be expected to routinely perform extra tasks at potentially steep personal and professional costs. As highlighted by the pandemic, these sacrifices, and the associated antecedents and ramifications, deserve more scholarly and practical attention. If we envision the future of work as more humane and meaningful for average employees, then we should have a deeper conversation about the role of sacrifice at work.

Scholarly inquiries into self-sacrifice, however, have been scattered across research streams which hindered its conceptualization. Moreover, sacrifice is also (implicitly) mentioned in related constructs, often without a clear conceptualization as to what sacrifice actually means. Despite the frequent reference to self-sacrifice, there has been no consensus on its definition as a standalone construct across research streams. This lack of agreement severely impedes the examination of fundamental research questions around self-sacrifice (e.g., its drivers, consequences, and boundary conditions).

Therefore, we first define self-sacrifice at work as a voluntary act of forgoing one's self-interest for others that carries a significant cost. We propose that voluntarily forgoing self-interest and significant cost are key defining features of sacrifice and help distinguish sacrifice from other related constructs such as OCB, workaholism, presenteeism, etc.

Then, we propose a framework (see Figure 1 below) using the lens of social identity. Following Social Identity Theory (SIT), it is possible to explain why employees would sacrifice their self-interests and bring (or risk bringing) harm to themselves and are willing to act in favor of a collective. When individuals see themselves as members of a social category and internalize the goals and values of that social category as their own (i.e., identification), their behavior is likely to be shaped by group membership. Because individuals are motivated to behave consistently with their self-concept and uphold and enhance their social identities, they may sacrifice themselves for those social entities they hold dear, such as their organization or profession.

We focus on employees' identification with different foci. We argue that individuals are motivated to make sacrifices at work when an entity becomes a significant part of their identity. We identify four such categories of identification foci: 1) relational, 2) organizational, 3) professional, and 4) societal causes (e.g., justice or climate change). Following previous work on the dynamic of identification (Kreiner & Ashforth, 2004), we propose four main identification outcomes out of the verification process: increased identification, decreased identification, disidentification, and ambivalent identification. Particularly, employees may feel two distinctly negative feelings toward the identification target, namely decreased identification and disidentification.

The implications of this paper are twofold. First, by defining self-sacrifice at work, we create a foundation for future systematic research on sacrifice in organizational psychology. Moreover, we synthesize these existing insights and highlight their uniqueness and similarities compared to related concepts in the nomological network. Second, in proposing a framework to examine self-sacrifice through the lens of SIT, we create a theoretical foundation upon which future research examining self-sacrifice can advance.

Finally, on the theme of the future of work, crystalizing the concept and examining it along the theoretical framework may also help address the ethical issues in promoting sacrifice at work. It is telling that, in management and organizational literature, attention seems to focus on how organizations can nudge or stimulate employees to go above and beyond their self-interest than how organizations also need to protect those who harm their self-interest. This is important because self-sacrificing behavior may not have an equal pay-off for individuals and organizations. Whereas organizations are able to predominately reap the benefits of this behavior, the focal person making the sacrifice is expected to bear the costs.

*Keywords: sacrifice; social identity; wellbeing*

## Oral presentation OP702

### **Sexual harassment prevention strategies of Nordic working life actors in tourism and hospitality workspaces**

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science&practice

The prevalence of sexual harassment in the tourism and hospitality sector is alarmingly high compared to other sectors and workers in tourism and hospitality are more exposed to workplace-related mistreatment and violence than in other sectors. Taking the tourism and hospitality sector as a lens, this interdisciplinary project initiates collaborative activities between working life actors (specifically unions, employer associations, and tripartite organizations representing employees, employers, and government) and researchers in Iceland, Norway, and Sweden. This research aims to contribute to trans-Nordic knowledge about issues of sexual harassment in tourism and hospitality workspaces. We ask three key questions:

How have working life actors worked on preventing sexual harassment in tourism and hospitality workplaces?

What are definitions of sexual harassment in the tourism and hospitality sector across different Nordic contexts and what impacts do these definitions have on the acceptance of behaviours that may be perceived or understood as forms of sexual harassment?

How can understanding past and current trans-Nordic approaches to sexual harassment provide opportunities for future collaboration, exchange of best practices, and other initiatives that lead to active prevention strategies for sexual harassment in tourism and hospitality workplaces?

#### Theoretical background

The UN Women (2021) recent report highlights concerns about what sexual harassment 'is' as well as difficulties in the definition that contribute to the under-reporting of this issue. Even as sexual harassment can be defined as "a situation where any form of unwanted verbal, non-verbal or physical conduct of a sexual nature occurs, with the purpose or effect of violating the dignity of a person, in particular when creating an intimidating, hostile, degrading, humiliating or offensive environment (Equal Treatment Amendment Directive 2002/73/EC), questions arise as to whether formal definitions of sexual harassment relate to how such harassment is experienced, perceived and understood in practice. Taking an intersectional approach addresses issues of discrimination and subservience connected to belonging to more than one identity category simultaneously. Here, we see that the intersection of gender and race, skin colour, ethnicity, nationality, class, sexuality, age, and impairment can capture the multiple and complex relationships that construct personal identity and hierarchical social locations. However, while research has pointed out the pervasive nature of sexual harassment in the workplace, intersectional approaches are largely lacking in the literature on work-life and sexual harassment (Brassel et al., 2020) and in hospitality research (Morgan & Pritchard, 2019).

#### Design/methodology

The study design consists of three stages: stocktaking activities (collating existing material, in-depth interviews with key working life actors, and a broad literature review), workshops (in-country and trans-Nordic), and knowledge consolidation and dissemination (trans-Nordic). The study adopts a qualitative approach to gain in-depth knowledge. The focus is on three main methods:

Content analysis of texts written in campaigns, information brochures, and on webpages connected to the stakeholders in the Nordic tourism and hospitality industry.

In-depth interviews with key stakeholders (unions, employer associations, and tripartite organizations representing employees, employers, and government).

Workshops with key stakeholders and researchers.

Results obtained or expected

This is an ongoing study where the data collection is still under process. The workshops are planned to be conducted in November 2022 and February 2023.

Limitations

The limited amount of participants makes it difficult to generalize the findings.

Conclusions

Using an intersectional lens when focusing on the key issues in our research questions of prevention, definition and future proactive strategies will allow this project to gather, collate and disseminate scientific evidence that will provide practice-based, relevant knowledge that will be useful across the Nordic countries and have wider application across service-based industry sectors.

Relevance to the Congress Theme

The hospitality and tourism industry has up until now largely neglected to focus on sustainable outcomes in relation to employment and workforce issues (Baum, 2018). Such topics are integral to the concepts of decent work and well-being in light of changing work conditions, and there is a need for more research that addresses sexual harassment prevention strategies in the context of the hospitality and tourism sector.

Relevant UN SDGs

This study is grounded in the UN's sustainability goal 8, which promotes inclusive and sustainable economic growth, employment, and decent work for all; and goal 17, which aims at strengthening the means of implementation and revitalizing the global partnership for the goals.

*Keywords: Sexual harassment, hospitality, tourism*

## Oral presentation OP274

### Shaping well-being at work through tailored physiotherapeutic training among employees working in a prolonged sitting position

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science&practice

Background As a result of the Covid-19 pandemic, many office workers had to change office workstations into remote or hybrid work. Only a small percentage of organisations equipped employees who switched to remote work with appropriate ergonomic tools (chairs, screens, desks), and even fewer took care of healthy habits at work, both physical and psychosocial. Additionally, numerous restrictions in the last years meant that employees stopped or significantly reduced their physical activity. It increased the risk of skeletal muscle ailments, which are already common among office workers, as well as a decrease in well-being and work efficiency. The problem of presentism may also get worse.

The aim of this project was to assess the effectiveness of tailored physiotherapeutic training among employees performing administrative work and spending their working time in a sitting position. The study consisted of an intervention study in which tailored physical activity training was conducted. It is assumed that physical activity might reduce musculoskeletal ailments and presenteeism and improve well-being and engagement.

Two hypotheses were stated:

H1: Tailored training will increase the level of well-being and engagement and reduce the level of presenteeism

H2: Tailored training will reduce musculoskeletal alignment and experienced level of pain

#### Methods

45 participants selected from the administrative staff were divided into intervention (N=22) and comparison (N=23) groups. The following inclusion criteria for the groups were considered: (1) age 30-50 years old; (2) minimum 2 years of work in a sitting position. The exclusion criteria were: (1) serious health problems; (2) certified degree of disability.

The intervention lasted 4 weeks; training was conducted 3 times a week, 45 minutes for each session, in groups of 11. The selected exercises were to reduce tension and fatigue of muscles used during a long-term sitting position (trapezius, back extensor in the thoracic and lumbar region). The subjects performed exercises under the supervision of a physiotherapist. They also received oral instruction on how to perform a given exercise and why it is important to perform it (how it affects a particular muscle).

Well-being at work, presenteeism and engagement at work were measured using standardised and tailored research questionnaires such as Well-BQ (NIOSH, 2021); SPS-6 (Koopman et al., 2002) and UWES (Schaufeli et al., 2006). The level of musculoskeletal complaints was assessed by NMQ (Kuorinka et al., 1987), specifying the location and the level of pain caused by the ailments.

All measurements were carried out two times – before the intervention (training), and after its completion. Participants received personalised links to fill in online questionnaires.

Statistical analyses were conducted using t-test for comparison between groups as well as between variables before and after the interventions. Correlation coefficients were also conducted.

## Results

Analyses didn't show differences in the level of engagement as well as most of the aspects of well-being. However, we found some changes in perceived safety in the organisation as a part of the well-being assessment. Participants in the intervention group experienced a decreased feeling of safety and being cared for by an organisation ( $t=2.73$ ;  $p<.01$ ). On the other hand, they assessed higher their physical health ( $t=3.07$ ;  $p<.01$ ) and lowered their concentration on work problems ( $t=-5.01$ ;  $p<.01$ ). They also experience fewer insomnia problems ( $t=2.22$ ;  $p<.05$ ).

Presenteeism was reduced significantly after the training ( $2.69$ ;  $p<.05$ ), while there were no changes in the comparison group between two-time measurements. Significant differences were also noted in the level of experienced pain resulting from musculoskeletal problems. They were related to the neck ( $2.77$ ;  $p<.01$ ), arms ( $2.76$ ;  $p<.01$ ), wrists ( $3.14$ ;  $p<.01$ ) and lower trunk ( $2.69$ ;  $p<.05$ ). Both hypotheses were partly confirmed.

## Conclusions

Even if many interventions were conducted to prove that physical activity positively affects well-being and the musculoskeletal system, there are still many gaps and ambiguities in this research area. Further and in-depth research is needed in the following areas: (1) relations between mental and physical health issues and different interventions at work (2) optimal frequency and duration of the exercises, the importance of their supervision (3) evidence-based examples with intervention and comparison groups etc.

This article meets these needs. The main findings of this study are that adequately selected, supervised physical exercise can effectively reduce musculoskeletal discomfort, especially neck, arms and lumbar pain. There are also links between the intervention and specific aspects of well-being and presenteeism. The obtained results can support work organisers and occupational health and safety specialists in developing MSD prevention programs in the office work environment.

*Keywords: well-being, MSD, intervention*

## Oral presentation OP254

### Sharing Mental Models: Helicopter Pilots' Communication Based Information Gathering

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science

The goal of the present study was to explore the ways in which internal communication was used by helicopter pilots to gather and share information within their environment in order to aid in their situation awareness. Specifically, we wished to explore the differences in types of communication and their perceived purpose in the sharing/gathering of relevant information, as well as identify the factors affecting the type of communication used.

Situation awareness is considered a core non-technical skill essential for the safe operation of an aircraft. Deficiencies in situational awareness have been noted as one of the foremost hazards to flight operations. While extensive research does exist on situation awareness within aviation, this research has predominantly focused on fixed wing operations. Due to a myriad of operational differences, helicopter specific research is essential for an accurate understanding of the contextual conditions and strategies employed by the crews facing these. With helicopter crews consisting of two pilots (pilot flying and pilot monitoring), as well as a rear/technical crew in some operations, effective communication is an essential non-technical skill which enhances situation awareness by extending an individual's perceptual field to include that of someone else. Clarity, efficiency, and adaptability of communication are therefore essential for the overall helicopter crews' situation awareness within such dynamic and information rich environments.

Semi-structured interviews were conducted with 21 helicopter pilots across 4 general operational backgrounds: Helicopter Emergency Medical Service (HEMS), Military, Offshore Transport (OT), and Search and Rescue (SAR). The focus of the interview was to explore the ways in which helicopter pilots gather information for the purposes of landing and to investigate the factors which may affect these strategies. Within the present paper we will focus specifically on the information gathering that was said to occur through the communication between the crew. Inductive content analysis was used to identify types of communication that the pilots engaged in throughout the flight, as well as the factors which were said to have affected this interaction.

The general aim of all communication within the cockpit was said to be the creation of a shared mental model. When information was shared by one pilot, this was seen to serve three general functions – 1) improving the situational awareness of the receiving pilot in situations when they were not aware of the information beforehand, 2) a confirmation to oneself that the other person is now aware of this information, and 3) a confirmation to the other person that you yourself are aware of this information, as well as that you are alert. In essence, the sharing of raw information serves the purpose of increasing the other pilot's awareness of the situation, while also acting as a tool for informing the communicators of one another's mental model – which in turn guides subsequent communications. The type and amount of communication used was said to be highly dependent on a number of both internal and external factors. The most notable of these were the experience of the crew, type of operations being flown, presence of rear crew, and the complexity of the landing being conducted. Significant individual differences between pilots and crews were also reported, particularly regarding the amount of communication deemed necessary.

The present data relies on self-reported experiences of communication and general information gathering rather than observations of real-world operations. While useful for understanding the

participants' reasoning for their reported actions, we are not able to confirm whether the types of communications are in fact used, or how often.

The reported individual differences between different crews on the amount and type of communication used warrant further investigation. Identification and classification of distinct communicator types (e.g. quiet, listener, talkative) may be carried out with subsequent enquiry into whether these affect the way that pilots approach general information gathering (e.g. do they substitute knowledge from one source with another?).

The helicopter sector within aviation has historically been lagging behind its fixed wing counterpart with respect to human factors research. Though notable differences exist between the two types of operations, findings from the latter were often used to inform procedures of the former. The present study represents another piece of data specifically relevant to that of helicopter operations and builds on the already established research on helicopter specific non-technical skills research.

*Keywords: situation awareness, communication, mental models*

## Oral presentation OP489

### Shift work: An analysis of the consequences on employees' health and wellbeing

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science

#### Introduction

Work (what it consists of, under what conditions it is carried out, etc.) as well as not having it or having a precarious job has repercussions on health, mood and interpersonal relationships. Thus, unemployment, under-employment, labour inactivity, changes in working conditions or even its temporary organization can produce certain physical and psychological disorders, as explained from the vitamin model of Warr (1987) or the deprivation model of Jahoda (1982).

Shift work is a potentially negative psychosocial factor due to the implications on the psychological well-being of those who perform it (INSHT, 2006). This shift work system requires an adaptive response from employees as it interferes with the biological rhythms of sleep and wakefulness, with their family and social life outside of working hours or with eating habits. Research has found significant associations between shift work and the negative impact on physical and mental health, the development of daily activities, family and social relationships, thus reducing the time available for domestic, cultural or leisure activities.

#### Method

A cross-sectional correlational study was carried out to identify the consequences of shift work on the physical and mental health of a sample of employees. An intentional sample of 137 workers (58.4% men) was used, 70 with conventional hours (age:  $M=45.58$  years,  $sd=10.94$ ) and 67 on rotating shifts (age:  $M=39.34$  years,  $sd=9.86$ ). The instruments used were, among others, the Survey Of Shiftworkers (SOS) by Barton et al. (1995), to measure the impact of shift work on the health and well-being of workers.

#### Results

Mean contrasts were made in the dimensions of SOS between the group with conventional hours and the group working in shifts, not finding statistically significant differences in flexibility in sleep habits or in circadian typology. Statistically significant differences were observed in Sleep Quality ( $t=2.474$ ,  $df=133$ ,  $p=0.015$ ), in the Interference with social activities ( $t=-3.525$ ,  $df=133$ ,  $p=0.001$ ), in the Interference with family and domestic life ( $t=-2.770$ ,  $df=135$ ,  $p=0.006$ ) and in musculoskeletal disorders ( $t=-2.253$ ,  $df=125$ ,  $p=0.026$ ). No differences were found between the conventional schedule group and the shift work group in Neuroticism, Digestive Disorders, Cardiovascular Disorders or Mental Health.

A multivariate linear regression analysis was run to predict the severity of musculoskeletal pain. This physical disorder can be predicted in 29.1% with the type of working schedule (conventional vs. rotating), sex, alterations in sleep quality and interference with their balance work-family life, and with a high pace of work and workload and length of service.

#### Limitations

The number of participants was limited and a convenience sample was used, and it is a cross-sectional study, what reduces the generalizability of these results. In addition, further developments

of this research would study the consequences in health and well-being for workers with conventional hours (e.g., weaker decrease in well-being) and workers on rotating shifts (e.g., stronger decrease in well-being), for instance, during the weeks following a vacation time.

#### Conclusions

The exposure of workers to this rotating schedule system manifests itself in the medium term in greater alterations in the rhythms of sleep and wakefulness, as well as in the balance of work and personal life and also in the frequency and severity of minor physical health disorders. In the longer term, the negative impact on mental health and other types of disorders (digestive, coronary, etc.) in workers is foreseeable.

It is worth mentioning that working in a rotating system (i.e. with alterations in their sleep and interference in their lives), in a high pace of work and workload predicts the severity of musculoskeletal pain. Females and working in that rotating schedule increases the vulnerability of employees to pain and other musculoskeletal disorders, what reflects a gender issue.

*Keywords: Shift work, physical disorders, wellbeing.*

## Oral presentation OP438

### Shifting from on-site to hybrid working: Testing the JD-R Model and SDT on job satisfaction, work engagement, and burnout of hybrid workers

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science

#### Research goals

The rise of remote working due to COVID-19 imposed rapid individual and organizational adaptations and resulted in new working patterns, which diverged from on-site working and previous remote working arrangements (Wang et al., 2020). Many employees now work completely remotely or utilizing hybrid arrangements. To understand what enables optimal hybrid conditions, a re-evaluation of established and popular frameworks can prove useful. Accordingly, the aim of this research is to compare the Job Demands-Resources Model (JD-R) and Self-Determination Theory (SDT) in their ability to explain the job satisfaction, work engagement, and burnout of hybrid workers. Investigating their mechanisms and key components can boost our understanding and – in turn – guide future studies and interventions. Moreover, it provides an implicit test of whether their effectiveness remains in contexts that diverge from where they were originally conceived.

#### Theoretical background

Understanding employee motivation and well-being have been among the key goals of the JD-R and SDT. The JD-R outlines how job characteristics (i.e., demands and resources) affect employee outcomes and how proactive job redesign behaviors, including job crafting, can affect this relation. In contrast, the SDT focuses on psychological needs (i.e., autonomy, competence, and relatedness), and has been linked with harmonious and obsessive passion.

Our first goal, given that both prior frameworks originate from on-site working, is to provide a comprehensive view of the individual value of both frameworks in their association with job satisfaction, burnout, and work engagement of hybrid workers. Our second goal, as both frameworks have also been simultaneously employed (e.g., van Wingerden et al., 2018), is to evaluate their combined utility in the context of hybrid working. Our third and final goal is to exploratively determine the commonality and relative importance of the key components within each framework, which can provide implications for optimized usage of scales. This data-driven approach is then connected back to their respective theoretical frameworks in providing implications.

#### Study design

We utilized an exploratory cross-sectional survey study design, focusing on hybrid workers who worked at least 4 days/week in total, of which at least 2 days/week remotely. A sample was gathered in 2021 (N = 299; 43% female / 57% male; M age = 44.4 +/- 13.0; 76% Dutch). The self-reported survey included demographics; a selection of demands, resources, and job crafting scales; measures for autonomy, competence, relatedness, as well as obsessive and harmonious passion; and scales for job satisfaction, burnout, and engagement. A variety of regression analyses were employed (including SEM, Automatic Linear Modelling, and commonality analysis).

#### Results

Preliminary results show that among our sample of hybrid workers, the extended JD-R explained the most variance in job satisfaction (38%), engagement (32%), and finally burnout (25%). The extended

SDT explained more variance in the same order (i.e., 58%, 49%, and 35%, respectively). Predictably, combining both frameworks explained more but differences were marginal given the increase in items. Commonality analyses revealed strong overlap between predictors in both frameworks, and the highest overall contribution came from obsessive and harmonious passion, with these two scales explaining 50%, 42%, and 25% of variance, respectively.

#### Limitations

The cross-sectional nature prevents inferring temporal or causal order.

#### Conclusions

Preliminary findings indicate that the JD-R and SDT frameworks explain considerable variance among our outcomes of job satisfaction, engagement and burnout. Thereby, this study did not find evidence that their application to hybrid workers is compromised. The SDT explained more variance, and obsessive and harmonious passion were the most important contributors overall. Framed differently, given the cross-sectional nature, these constructs may show considerable conceptual overlap with certain outcomes (see also Smith et al., 2022).

This study borrows its relevance from the – apparently permanent – shift to hybrid and remote working as well as the resurgence of COVID-19 at the time of writing, which is likely to sustain this shift. Moreover, it sets out to compare two frameworks as opposed to building on a single one, providing a critical evaluation of the frameworks we utilize to investigate remote working and guide future studies.

#### Relevance to the Congress Theme

Contemporary developments call for a deeper understanding and evaluation of established frameworks in the context of hybrid working.

#### Relevant UN SDGs

Understanding correlates of healthy hybrid working practices allow us to contribute to “Health and Well-Being” and “Decent Work”.

*Keywords: Job Demands-Resources, Self-Determination Theory, Hybrid working*

## Oral presentation OP375

### Silver Linings in the Covid-19 pandemic: How resilience promotes personal growth in adversity

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science

Research goals and why the work was worth doing: The COVID-19 pandemic is both a universal health calamity and a global economic and social crisis. It impacted workers and workplaces around the world in a dramatic manner (Kniffin et al., 2020). The fact is that “the world of work may change forever” (BBC, 2020). Taking into account the unknown unknowns of this pandemic, COVID-19 context is a crucial moment to find and comprehend mechanisms that are important but not noticeable during normal times (Kniffin et al., 2020), since it is the first attempt to deal with this virus.

Theoretical background: Resilience is a fundamental coping capability, since resilient people search for the positive side, look for creative solutions to overcome hurdles and are focused on recovering faced losses (Bonanno, 2004; Tugade and Fredrickson, 2007). We leverage conservation of resources theory (Hobfoll, 1989) to examine the extent to which resilience mitigates the consequences of COVID-19 pandemic. Resilient individuals are less likely to experience the pandemic’s negative impact in their work and personal lives (Shoss et al., 2018). Since resilient people try to adapt in face of negative circumstances, we propose that resilience may be able to buffer the negative impact of COVID-19 and boost the use of personal resources. In these demanding times, resilient individuals have the capacity to control and influence their changing work environment in a successful way (Windle, 2011).

Design/Methodology: We conducted a time-lagged study with a sample of 156 employees from multiple organizations that completed three surveys (t1, t2, t3) separated by a week’s time lag. The period of data collection happened during the first wave of the SARS-CoV-2 infection. Several countries were in a state of emergency and lockdown. Our study examines the relationship between resilience, proactive behavior (job crafting) and personal growth, moderated by the COVID-19 pandemic.

Results obtained: We found that more resilient people, faced with a threat, are the ones who engage more in proactive behaviors such as job crafting and are also the ones who grow (referring to a constant and positive change in the way of self-improvement (Robitschek, 1998). On the other hand, less resilient people lack the resources to deal with a perceived threat, and are unable to activate job crafting behaviors nor grow.

Limitations: Our mortality rate between t1-t2 and t2-t3 was rather high (66% and 76%) and the study used self-report measures, which may have caused an overestimation of the relationship between the variables and a potential overlap with other constructs.

Research/Practical Implications: In times of uncertainty and growing insecurity, employees’ personal growth initiative is a very important factor to guarantee the success of any contemporary organization (Grant and Ashford, 2008; Parker and Collins, 2010; Srivastava et al., 2020). This study advances the conservation of resources theory by including resilience as an important resource to deal with crises. It also tries to contribute to resilience studies, a topic that is increasingly important nowadays, despite there being very little empirical evidence in the workplace (from what we tend to „assume” is true). The COVID-19 global health crisis, with its human and economic consequences, has skyrocketed the interest in the concept of resilience (Vera et al., 2020). Additionally, it is very

important to understand the actual context and the new ways of working, since it is something that will perpetuate through time.

**Originality/Value:** In times of uncertainty and growing insecurity, employees' personal growth initiative is a very important factor to guarantee the success of any contemporary organization (Grant and Ashford, 2008; Parker and Collins, 2010; Srivastava et al., 2020). This study advances the conservation of resources theory by including resilience as an important resource to deal with crises. It also tries to contribute to resilience studies, a topic that is increasingly important nowadays, despite there being very little empirical evidence in the workplace (from what we tend to „assume“ is true). The COVID-19 global health crisis, with its human and economic consequences, has skyrocketed the interest in the concept of resilience (Vera et al., 2020). Additionally, it is very important to understand the actual context and the new ways of working, since it is something that will perpetuate through time.

**Intended audience:** more for academics, taking into account the advances in conservation of resources and resilience literature, but also for practice, since it is a global health crisis.

*Keywords: Resilience, Growth, Covid-19*

## Oral presentation OP807

### Sleep deprivation and negotiation

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science&practice

Negotiations are often used as conflict resolution in a society that is increasingly sleep-deprived. Yet, not much is known about how sleep deprivation affects negotiations. We presented a theoretical framework for understanding and investigating the effects of sleep deprivation on various negotiation processes and outcomes, particularly joint economic outcomes, individual economic outcomes, social perceptions and emotions, and impasses (Häusser et al., 2022). Focusing on integrative negotiations, we identified cognitive capacities and epistemic motivation to be highly relevant psychological processes, affected by sleep deprivation in negotiation. These impairments deteriorate effective information exchange and hamper information processing, which reduces the quality of (integrative) agreements.

In four quantitative studies and one qualitative study, the hypothesized effect of sleep deprivation on the quality of negotiation agreements in terms of joint economic outcomes was tested. Three experiments employed one-factorial between-subjects designs with individuals performing the tasks either sleep-deprived or well-rested. Study 1 (n = 80) and Study 2 (n = 174) manipulated sleep deprivation with one night of total sleep deprivation (min. 26 hours without sleep, cf. Barnes et al., 2015; Häusser et al., 2016), and Study 3 (n = 144) used a protocol for which individual's sleep was restricted to 50% of habitual sleep duration for two nights (Swann et al., 2006). In Studies 1 and 2 individuals performed an integrative negotiation in dyads (Hüffmeier et al., 2019; Thompson & Hastie, 1990). The central dependent measure was the joint economic outcome. In Study 3 (online) participants observed an integrative negotiation (Thompson et al., 1996) and their suggested optimal contract for both parties depicted the dependent measure. Contrary to theoretical predictions, in all three studies, there was no substantial effect of sleep deprivation on agreement quality. Even though small effects could have been undetected, Bayesian meta-analysis across all three studies provide support that the data are in favor of the null hypothesis relative to the postulated alternative hypothesis. In Study 4 (n = 152) we described the procedure of Study 2 and disclosed the exact joint outcome the well-rested dyads reached on average. Laypersons' expectations fall in line with our theoretical predictions. However, in Studies 2 and 3 there was an indication of an increase in compensatory effort for the sleep-deprived individuals that could account for the absence of a substantial negative effect of sleep deprivation. To gain further insights, qualitative interviews with 22 German elected politicians were conducted (including heads of state and federal ministers) who are experienced in negotiations under sleep deprivation (Study 5). Their responses (coded following the Qualitative Content Analysis by two independent coders) shed light on the nature of compensatory strategies that might help to cope with sleep deprivation in real-life negotiations. These strategies include prerequisites and preparations in advance, as well as actions that individuals and groups can take to counteract the negative effects of sleep deprivation (e.g. active participation, group monitoring). Our mixed-method approach provides first-time insights into negotiations under sleep deprivation. The results of three experimental studies, laypeople's beliefs, and expert interviews suggest that sleep deprivation does not impair negotiators' joint economic outcomes as we (and laypeople) expected. Instead, we suggest that compensatory effort might occur and suppress the emergence of negative consequences of negotiation outcomes.

Our research contributes to the UN Sustainable Development Goals by addressing a prevalent contextual factor (sleep deprivation) known to impair individual states predictive of negotiation success.

*Keywords: negotiation, sleep deprivation*

## Oral presentation OP781

### Smart working, job demands/resources, and cortisol to DHEA(S) ratio: A longitudinal investigation during the COVID-19 pandemic

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science&practice

**Research goals :** This study aimed to investigate the association over time between perceived characteristics of the work environment, smart working (i.e., a flexible work arrangement characterized by the absence of time/space restrictions and an organization by phases, cycles, and objectives), and possible biomarkers of stress, namely cortisol and dehydroepiandrosterone-sulphate – or DHEA(S) – in the hair, during the COVID-19 pandemic.

**Theoretical background :** Work-related stress (WRS) can be seen as the process by which psychosocial, physical, or organizational aspects of the job (i.e., job demands/resources), by interacting with employees' individual characteristics, trigger psychological, physiological, and behavioural responses in the individual over time. Therefore, the WRS risk assessment benefits from the integration of different measurement methods in a longitudinal perspective. In addition, the COVID-19 pandemic has originated several changes in the work (and non-work) domain, including a sharp acceleration in the adoption of smart working (SW) as a way to contain the spread of the new coronavirus (e.g., by reducing face-to-face interactions with colleagues/supervisors). In this perspective, and in line with the Allostatic Load model, in this study we investigated the longitudinal association between perceived workload and job autonomy – as a job demand and a job resource, respectively – and concentrations of cortisol and DHEA(S) in the hair. Specifically, we focused on the ratio between cortisol and DHEA(S), which is considered as a biomarker of adverse chronic stress. We also investigated the association between SW and cortisol/DHEA(S) ratio over time, as well as the moderating role of SW in the relationship between workload/job autonomy and cortisol/DHEA(S) ratio.

**Methodology :** The study is part of a larger research project about working conditions, biomarkers of stress, and employees' health and well-being during the COVID-19 pandemic. Workers from different organizations in Italy participated in a longitudinal, multi-method study that took place between April and July 2022. Each participant completed a self-report questionnaire at two time points, Time 1 (T1) and Time 2 (T2), with a three-months time-lag. The questionnaire was aimed at determining workload, job autonomy, and work arrangement (in-person vs smart working). Similarly, participants were also asked to provide a hair strand (i.e., approximately three cm) at both time points. Cortisol and DHEA(S) were quantified in the first 3 cm most proximal of the gathered scalp hair from a posterior-to-vertex position, and they were measured using an in-house Enzyme-linked immunosorbent assay (ELISA). The hypothesized associations were tested using moderated multiple regression analysis, controlling for gender and age.

**Results obtained :** Workload and job autonomy at T1 were not associated with cortisol/DHEA(S) ratio at T2, while SW at T1 was negatively associated with it. Interestingly, an interaction between workload and SW emerged. Simple slope analysis revealed that the longitudinal association between workload and cortisol/DHEA(S) ratio was positive for smart workers, but nonsignificant for in-person workers.

Limitations : Data were collected at only two time points, and – at this stage – the sample size was relatively small.

Conclusions : Overall, results from this study – which clearly warrants further empirical investigation – suggest that cortisol/DHEA(S) ratio is a promising biomarker of WRS. Hence, if replicated by future research, our results suggest that measurement of hair cortisol and DHEA(S) could be beneficial for early detection of employees at risk of WRS, as well as for prevention of more severe, stress-related consequences for workers' health and well-being. This study also suggests that SW can be considered as a double-edged sword. On the one hand, SW was negatively associated with cortisol/DHEA(S) ratio, a possible biomarker of stress, thus suggesting a possible "bright side" of remote working (e.g., SW may reduce the inference between work and private life). On the other hand, workload was positively associated with cortisol/DHEA(S) ratio among smart workers, thus revealing a possible "dark side" of SW. Employees working remotely may face difficulties in managing their workload (e.g., due to technology-related problems, frequent interruptions, high email quantity and poor email quality), which may lead them to invest more physical and mental effort in their work, thus resulting in higher psycho-physiological costs for the individual.

Relevance to the Congress Theme : In the future, hybrid work arrangements that combine office work and smart working will be increasingly common, and research is needed to promote well-being in this context of change. In this perspective, our study focuses on both antecedents and consequences of new, flexible work arrangements.

*Keywords: work-related stress, biomarkers, smart working*

## Oral presentation OP182

### **SOCIAL CAPITAL AND ORGANIZATIONAL RESILIENCE: THE ROLE OF HIGH-INVOLVEMENT WORK PRACTICES**

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science&practice

Research goals and why the work was worth doing

Although organizational resilience capability is critical to Small- and Medium-sized enterprises (SMEs) in the turbulent business environment, and social capital has been identified as one of the key sources for organizational resilience, the questions of how and when social capital contributes to organizational resilience in SMEs remain unanswered.

Theoretical background

Adler and Kwon's (2002) opportunity-motivation-ability framework of social capital posits that all three sources must be present for social capital to be activated. Accordingly, we propose a moderated mediation model in which external social capital influence organizational resilience indirectly via information sharing, and high involvement work systems (HIWS) moderate the indirect effect of external social capital on organizational resilience via information sharing.

Design/Methodology/Approach

We tested our model using data from 1134 participants (including top management team members, middle-level managers and entry-level employees) from 177 Nigerian SMEs.

Results obtained

The results showed that: 1) knowledge sharing mediates the impact of external social capital on organizational resilience; 2) the relationship between external social capital and knowledge sharing is stronger when HIWS is high rather than low; 3) the indirect effect of external social capital on organizational resilience via knowledge sharing is stronger when HIWS is high rather than low.

Limitations

Our study has some limitations that provide opportunities for future research. First, our study was conducted before the Covid-19 pandemic with SMEs in Nigeria, a relatively dynamic business environment and a fast-developing economy. Hence, the findings can be context-specific, limiting their generalizability to unprecedented disruptions such as the Covid-19 pandemic, other types of organizations, and national contexts. Future research can test our model in larger firms, different types of disruptions, and different national contexts. Second, to test our model, we employed a cross-sectional design. Future research can address this by adopting a longitudinal design to understand the relationships uncovered in our study.

Conclusions

Our research has several important implications. First, while there are clear indications from the literature that internal resources and capabilities, including leadership, internal investments and cash flows, internal social capital, and dynamic capability help build organisational resilience, little is known about how external factors can enhance organizational resilience. Few studies have tried to fill this gap by examining the relationship between external social capital and resilience with a focus

on relationships formed at an organizational level with supplier, our study deviates from this line of enquiry to examine the role of external social capital (i.e., resources rooted in employees' personal network relationships from outside the organization) in promoting organizational resilience capability (i.e., an organization's ability to learn and develop new strategies or growth pathways through disruptive events). Second, our study extends prior research which focuses mainly on direct relationships between dimensions of social capital (internal and/or external) and organizational resilience (with the exception of Ozanne et al., 2022), by showing the process through which employees' external social capital accumulated at the unit-level can influence organizational resilience. Third, our finding that HIWS can moderate the impact of external social capital on knowledge sharing to contribute to organizational resilience provides empirical evidence for the utility of HRM systems as a moderator in fostering organizational resilience, particularly in the SME context. Although previous studies in the strategic HRM research stream primarily focus on proposing HRM systems, such as HIWPs as antecedents to employee and organizational outcomes (see Jiang, Takeuchi, & Lepak, 2013 for a review), our study deviates from this trend to show the interactional role that HIWPs can play in the relationship between external social capital and organizational resilience in the SME context. Hence, we address the need to examine interaction effects of resources for building organizational resilience (Chu, 2015; Tognazzo et al., 2016).

#### Relevance to the Congress Theme

This research is relevant to the congress theme - the Future is now: the changing world of work shares critical links with employee wellbeing and the key terms of our research - social capital, information sharing, resilience and employee involvement initiatives have been identified through empirical research to substantially improve employee wellbeing (Cooper et al., 2014; Freeman & Kleiner, 2005; Parzefall & Kuppelwieser, 2012)

#### Relevant UN SDGs

Our research is relevant to good health and wellbeing, and decent work and economic growth

*Keywords: organizational resilience, high-involvement work systems, knowledge sharing*

## Oral presentation OP151

### **Social Influence of Informal Leaders: A Study Based on Machine Coding of Verbal and Nonverbal Charismatic Signaling**

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science&practice

#### Research Goal

We aim at testing the effect of charismatic signaling on social influence. We additionally aim at providing evidence of such effects while relying on innovative measures of charismatic signaling.

The study of leadership faces at least two challenges. First, research on leadership tends to focus on its effects rather than on its causes or does not differentiate the two. This makes leadership challenging to grasp but also to train. We thus seek to differentiate the effect (e.g., influencing people) from its causes (e.g., leaders' behaviors).

Second, traditional methods for studying behaviors might lead to biased measures and reduce the possibility of causal claims. We thus adopt new methods to measure as objectively as possible charismatic signaling using both traditional (human-based) and innovative (machine-based) approaches. Our approach to measuring charismatic signaling also enabled us to move completely from perceptual measures to objective markers of verbal charismatic signaling (VCS) and nonverbal charismatic signaling (NVCS). This reduces the risk of human biases and endogeneity issues.

#### Theoretical background

Leaders can influence others (Antonakis et al., 2016), increase the extent to which people exert effort (Meslec et al., 2020), and reach people from a distance thanks to social media (Tur et al., 2021). Leaders can influence others thanks to charismatic signaling.

Charismatic signaling is defined as “values-based, symbolic, and emotion-laden signaling” (Antonakis et al., 2016, p. 304), and “signaling” refers to the visible things one does partially designed to communicate (Spence, 2002, p. 434). Charismatic signaling thus refers to what is done or communicated by a leader that makes people become their followers, act, or promote their ideas. Charismatic signaling concerns therefore the cause of being followed and not its effect, nor the theory of charismatic leadership.

In this research, we test the effect of charismatic signaling on social influence by differentiating the cause (i.e., VCS and NVCS) from its effect (i.e., social influence). We operationalized charisma as the extent to which the leader uses VCS and NVCS. We also relied on coding, instead of questionnaires, to measure VCS and NVCS. We additionally include key instrumental variables and statistical methods adapted to the risk of endogeneity.

#### Methodology

We carried out a study using field data (n = 769 TED talk videos) where machine coding, alongside human coding, of VCS and NVCS, was used to measure the impact of charismatic signaling on social influence. Concerning NVCS, for example, we used (a) human ratings of the extent to which the speakers were expressive in their face and their body (i.e., human coding) and (b) automatic detection and classification of specific landmarks and their trajectory (e.g., detection of movements of the nose and arms then classified as big or small movements; machine coding). Concerning social

influence, the number of views, automatically extracted from the TED website, was used as a proxy for social influence.

We used instrumental variable Poisson regression models to predict social influence based on VCS and NVCS. We included talk-based material to control for static attractiveness, gender, and other variables to minimize the risk of omitted variable bias.

### Results

Our results first show that human coding—and not machine coding—of NVCS is influenced by attractiveness and gender. Second, our main results show that VCS has a positive effect on social influence, above and beyond NVCS.

### Limitations

One limitation concerns the operationalization of human vs. machine coding of nonverbal behaviors. Human and machine coding might concern different levels of abstraction (inference vs. motion unit). Still, in the current study, machine coding appears to be an appropriate proxy for nonverbal behaviors because we assumed that people being more expressive would move more.

### Conclusions

This research contributes to research and practice by improving our understanding of leadership and how what is said (VCS) or done (NVCS) influences people. Moreover, our use of machine coding enabled us to rely on objective markers of charismatic signaling, not biased by speakers' appearance. Our results provide additional evidence that speakers using more VCS achieve greater social influence.

### Relevance to the Congress Theme

This research contributes to the three facets of the 2023 theme: Contribution and Delivery by highlighting how leaders' behaviors influence others and thus, how one might lead the way to change; Urgency by using field data that mirrors current challenges. This research also aims to answer the question "What must we say? How should we say it" by discussing practical implications in terms of training, leadership, and social influence.

### Relevant UN SDGs

The implications of this research are transversal to the UN's sustainable goals by addressing ways to federate people and improve social skills training for future leaders.

*Keywords: Leadership, Charisma, Verbal and nonverbal behavior*

## Oral presentation OP445

### **Solving the puzzle of social class effects on prosocial behaviors – interactions between social class background, current socioeconomic status, and po**

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science

#### Research goals

Prosocial behaviors are crucial for the performance of individuals, teams, and organizations. Recently, research has proliferated around the relationship between social class and prosocial behaviors, reporting largely inconsistent findings, that is, negative effects (Piff et al., 2010), null effects (Stamos et al., 2020), and even positive effects of social class on prosocial behaviors (Andreoni et al., 2021), pointing to yet unexplored moderators. This study aims to reconcile said empirical inconsistencies by introducing two contextual moderators and a mediator that explain when and why social differences in prosocial behaviors occur.

#### Theoretical background

Previous research suffers from two major shortcomings: First, no distinction has been made between social class background (i.e., parental education and income) and current socioeconomic status (SES), neglecting interaction effects between the two. Specifically, after being born into a particular social class, an individual's SES often changes during their lives, which is experienced differently depending on their original social class (Martin & Côté, 2019). Indeed, research implies that individuals from higher-class backgrounds, but not from lower-class backgrounds, experience ego threat when having a low SES due to a perceived status loss (Phillips et al., 2020), which we will argue leads to an increase in self-concern and thus to lower levels of prosocial behavior.

However, individuals only sometimes act upon their goals and desires, mainly if they are in high power positions (Guinote, 2007). Previous research on social class and prosocial behaviors neglected the confounding effects of power, defined as an individual's ability to control their own and others' outcomes, which is experienced extensively by higher-class individuals but very limited to lower-class individuals (Lareau, 2002). We, therefore, predict that, only in positions of high power, individuals from higher-class backgrounds show less prosocial behaviors than individuals from lower-class backgrounds if their SES is low. Moreover, we predict that only if power is high, self-concern is (negatively) related to prosocial behaviors, mediating the interaction effect between social class background and current SES on prosocial behaviors.

#### Methodology

To test our hypothesis, we conducted an experimental study ( N = 304) and a preregistered direct replication study ( N = 410; [aspredicted.org/63au2.pdf](https://aspredicted.org/63au2.pdf)) in which we manipulated power (high vs. low) as a between-person factor and measured social class background and current SES as between-person covariates. We randomly assigned participants to two conditions. In the high power condition, respondents participated in a dictator game, in which they voluntarily shared part of their bonus payout and thus had complete control over their outcomes (Piff et al., 2010). The low power condition was identical except that their partner could finally suspend the bonus payout for both of them and thus completely controlled their outcomes (i.e., ultimatum game; Nowak et al., 2000). Furthermore, we measured current SES and social class background using combined scores of own

education and income and parental education and income score, respectively, and self-concern with one item (“I am concerned about my own needs and interests.”; De Dreu & Nauta, 2009).

## Results

Supporting our hypothesis, we find significant three-way interaction effects between social class background, power, and current SES on prosocial behavior ( $b = -7.46$ ,  $p = .014$ ). Specifically, individuals from higher-class backgrounds with low SES (but not those with high SES), who were assigned to the high (but not low) power condition, shared less of their bonus payout with their partner than individuals from lower-class backgrounds (simple effect =  $-8.04$ ,  $p = .007$ ). Moreover, in study 2, we successfully replicated these findings and tested the predicted mediation. Specifically, individuals from high-class (but not lower-class) backgrounds with low SES exhibit higher levels of self-concern, which translates into lower levels of prosocial behavior, but only if their power is high (indirect effect =  $-1.27$ ,  $p = .040$ ).

## Conclusion

With this research, we aim to reconcile empirical inconsistencies in research on social differences in prosocial behavior by diverging from a socialization perspective to a more dynamic social context perspective. By introducing two essential contextual moderators (i.e., current SES and power), we explain when and why higher-class individuals show less prosocial behavior than lower-class individuals.

## Relevance to the UN SDGs

The present research is relevant to the UN Sustainable Development Goals revealing how context affects lower- and higher-class individuals, contributing to a better understanding of social differences in behavior.

*Keywords: social class, prosocial behavior, social context*

## Oral presentation OP597

### **Speaking up in the cockpit: Do crew status differences affect team cognition, processes, and performance?**

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science&practice

Research goals and importance : Human errors, in particular poor team communication and decision-making, have proven to be determinant factors in a multitude of aviation mishaps and several prominent aviation disasters. Research on team communication in aviation crews (e.g., Foushee & Helmreich, 1988; Fisher & Orasanu, 1999; Kanki et al., 1991) shows that crew errors, omissions, and accidents are caused by fear of speaking up in the cockpit. Specifically, lower status roles such as first officers often fail to express concerns or point out mistakes to high status roles such as captains, due to a strict hierarchy and fear of repercussions. This study aims to investigate the role of status differences in impacting team cognition, team processes and coordination, and team safety. This research is critical because accidents and missteps in aviation teams have deleterious consequences, resulting in potential loss of human life (e.g., NTSB, 1986). The findings of this research will foster improvements in team training and will guide adjacent research literatures on safety critical teams.

Theoretical background : Voice behaviour is the direct and explicit communication of observations or concerns regarding the status of the mission or operations that might affect the progress of the mission. Voice behaviour is a key cause of multiple aviation disasters (e.g., Billings & Cheney, 1981). When crew members voice their opinions and concerns, this enables them to form a shared mental model which will facilitate seamless team processes. Poor voice behaviours imply that members do not share their opinions, hence then end up knowing different things (partial mental models). Lack of shared mental models in turn will prevent their seamless interactions during flight, leading to potential fatal delays and missteps (e.g., e.g., Mathisen et al., 2022; Nembhard & Edmonson, 2006).

We expect that the team's mental model will be dominated by high status members as they are more likely to engage freely in voice behaviour, while lower status members are likely to abstain from voice behaviour (e.g., Fisher & Orasanu, 1999). Status differences are predicted to be associated with differences in voice behaviour and psychological safety, in favour of high status members. Voice behaviour should affect shared mental model development and indirectly (via shared mental models) team processes and team effectiveness.

Design/Methodology : We tested our predictions in a quantitative survey-based study on a sample of N = 159 commercial airline pilots in the United Kingdom (M age = 47.34, SD age = 9.28; 151 males, 7 females, 1 non-disclosed; M experience = 23.14, SD experience = 10.11; 72 Captains, 82 First Officers). The following variables were measured: safety voice, voice behaviour, perceived team mental models, perceived team processes, psychological safety, and team performance. We controlled for interpersonal liking and interpersonal similarities.

Results : There were no significant differences between the low and high-status group in voice behaviour and psychological safety. Voice behaviour had a positive association with perceived team mental models. Perceived team mental models had a positive association with team processes. Team processes had a positive association with team performance. The results of the serial mediation were significant: Voice behaviour had an indirect effect on team performance via perceived team mental models and team processes.

Limitations : This study had several limitations, such as: reliance on cross-sectional self-report data; measurement of perceptions of teamwork as opposed to objective (e.g., behavioural) measures; potential recollection biases as participants were asked to reflect on their last flight in answering the questions.

Conclusions : This is one of the few studies to investigate the role of voice behaviour and team mental models in flight crews in a field sample. Its implications are far reaching in demonstrating that status differences in airline pilots in the UK are perceived to be low. Pilots are able to express their opinions and disagreements freely and crucially, draw each other's attention to failures, omissions, and missteps which might have fatal effects on the flight. These findings underline the importance of team training such as crew resource management to foster safe communication and interactions on the team. Further research is needed to understand how status differences operate at the inter-team level (e.g., pilots-engineers; pilots-cabin crew), in other cultures, and in intercultural teams.

Relevance to the Congress Theme : This study is relevant to the congress topic The Future Is Now : Our research aims to show how equality and egalitarian relationships in work in the 21 st century can improve team and organizational outcomes.

Relevant UN SDGs : Decent work and economic growth.

*Keywords: teamwork, status differences, team mental models*

## Oral presentation OP54

### **Square Pegs in Round Holes: Problems with defining the occupation as the environment in John Holland's P-E fit theory of vocational satisfaction**

Joel Warburton, University of Lincoln; Ciara Kelly, University of Sheffield; Eva Selenko & John Arnold | Loughborough University

science&practice

1. This research examined the congruence problem within Holland's Theory of Vocational Choice (1997). The congruence problem is defined as the unexpectedly weak associations between a good Person-Occupation Fit and positive outcomes (Arnold, 2004). In order to shed light on this issue, this research examined the experience of workers who defy fit theory, i.e. those who either assessed a good fit with their occupation but are dissatisfied, or assessed a poor fit, yet are satisfied.

Through this approach, we achieved a more detailed understanding of how workers interact with their environments, and produce findings that inform career guidance practice through improved matching tools and approaches. Given that 47% of UK workers desire career change and 23% regret their current career choice (LSBF, 2015), there are many who could potentially benefit from more informed approaches.

2. Academics, and practitioners alike, use the longstanding Person-Environment Fit approach to compare measurements of individuals and work environments (Badger-Darrow & Behrend, 2017). Good fit (congruence) is associated with positive work outcomes, such as satisfaction and tenure. The concept of fit is intuitive and alluring, supporting a popular logic that it should be possible to place the right person in the right occupation (Kristof-Brown & Guay, 2011). Career guidance theory offers several approaches to matching individuals with suitable vocations. Based on Person-Environment Fit, Holland's (1997) Theory of Vocational Choice claims when workers enter occupations deemed a match with their individual work personalities, positive outcomes follow.

Given the widespread use and influence of this approach (Patton & McMahon, 2006), relationships between congruence and positive outcomes are weaker than one might expect (Toomey et al., 2009). However, there has been little empirical investigation into why this is the case.

3. This research consisted of two phases. Phase 1 of the research measured Work personality (Holland & Messer, 2013) and satisfaction (Cooper et al., 1988), and used occupational data from 253 UK workers. We then identified a subgroup of 39 participants who defied the predictions of Holland's theory. This selective approach yields "information-rich" cases (Patton, 2014, p. 264), and provides a greater focus on the lived experience of those in an anomalous situation than could be achieved with a non-selective sample. Phase 2 used semi-structured interviews to explore these 39 participants' experiences, explanations and circumstances relevant to the congruence problem. Transcriptions were analysed using Thematic Analysis (Braun & Clarke, 2006; 2013). Themes were used to understand why Holland's theory failed to explain these participants' experiences and situations.

4. This presentation focuses on results that demonstrate the difficulties of capturing and using environmental data within the context of PE fit. For example, it highlights inadequacies in the O\*NET occupational description that contributes noise to the fit calculation, and more fundamentally, provides evidence to show that occupation itself is no longer sufficient as a measure of environment. It also delivers evidence of other potential contributors to the congruence problem discovered in this research. These will include limitations of vocational fit theory, errors and omissions in fit calculations and coping mechanisms.

5. Although this research includes a comprehensive range of occupations, participant distribution within SOC categories was not wholly representative of the UK working population. Therefore the generalisability of the findings would need to be explored further, including using transferability as a model of generalization (Firestone, 1993).

6. This research raises serious questions about the capability of Holland's Theory of Vocational Choice to determine meaningful predictions in a career guidance context. This also suggests fragility in Person-Occupation fit approaches in research and practice. Through an increased understanding of how workers' experiences are affected, improved approaches are discussed.

7. This presentation is designed for Academics with Vocational and Organisational Psychology interests, as well as practitioners in HR and guidance fields. It contributes by highlighting that current vocational approaches based on fit are risking vocational misguidance. This is Urgent in that workers subject to misdirection are likely contributing to dissatisfied and underproductive workforces. It delivers a discussion of additional and alternative approaches that capture some of the missing/mismeasured elements in traditional approaches.

8. Decent work and economic growth & Reduced inequalities

*Keywords: Person-Occupation Fit, Work Satisfaction, Career Fit Theory*

## Oral presentation OP743

### **Starting happy to innovate: Mediating effects of newcomers' happiness and job satisfaction between servant leadership and innovative performance**

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science

**Introduction :** In the changing world of work, organizations face a growing competitive environment and must adapt to succeed in the war for talent. Employees nowadays tend to change jobs more often (Gallup, 2016) and their expectations go beyond financial compensation and satisfaction. Aspects such as self-realization, influence, and meaningfulness are just some of the motivations for choosing and staying with a company (Bergmann, cf. 2019). In addition to these drivers, research demonstrates that organizational socialization impacts important financial and organizational outcomes during the first year of employment (Saks & Gruman, 2014). This outlines the need to enable newcomers to have a good and positive start. Addressing factors that make them happy and lead to more than just satisfaction with the job will make newcomers contribute from the very start and help enhance competitiveness. Against this background, the primary interest of our study is to examine differences between satisfactory working conditions and conditions that make newcomers happy. Furthermore, we seek to clarify to what extent servant leadership, which has gained growing interest and been linked to innovation and creativity (Yoshida et al., 2014), promotes satisfaction or happiness and whether this relates to innovative behavior among newcomers. Based on the Job Demands Resources Model (Bakker & Demerouti, 2008), we assume direct and indirect effects of servant leadership on newcomers' innovative performance. We expect happiness factors and job satisfaction to mediate the indirect effects, with a stronger effect via happiness factors.

**Method & Results :** The sample of our ongoing study consist of 288 recently employed newcomers from a German university. To cover the first year of organizational socialization, participants were asked to fill out seven questionnaires with intervals from 1 to 3 months, starting at 4-6 weeks after organizational entry. We used 1-1-1 multilevel mediation analysis with robust maximum-likelihood estimation and random slopes to test our hypotheses.

Results indicate that servant leadership is positively related to happiness at work dimensions and job satisfaction and has a positive direct influence on innovative performance of newcomers. The positive effect of happiness factors on innovative performance also proves significant, thus proving an indirect effect via happiness at work. Job satisfaction has no significant effect on innovative performance, thus leading to a nonsignificant mediation.

**Discussion, Limitations and Implications:** To the authors' knowledge, this is the first longitudinal study to examine innovative behavior in the field of organizational socialization and to investigate the differential roles of happiness and job satisfaction. Thus, we contribute to research in organizational socialization and to research on happiness at work and job satisfaction. We show that even organizational newcomers engage in the development, promotion, and implementation of innovative ideas within the organization, thus strengthening competitiveness. This adds to existing literature, transferring insights from group socialization research (Levine et al., 2001, 2003) into the broader context of organizational socialization. Moreover, we contribute to the literature regarding the differences between the constructs of happiness and satisfaction, which are currently not sufficiently differentiated. While doing so, we outline differences in the influence of leadership and in resulting consequences, namely innovative behavior.

Even though the sample was collected in only one organization, the results appear to be transferable because the newcomers had various backgrounds and job types. Additionally, potential moderators, such as newcomers' personal resources, could be included in future analyses to gain more detailed insights into the mechanisms of the effects between servant leadership, the mediators and innovative performance.

For practice, our study gains insights into how to enable a happy start in a new organization. Shifting from uncertainty reduction and satisfaction towards happiness not only helps newcomers generate novel ideas, but also strengthens the attractiveness and competitiveness of organizations. Demonstrating the effects of servant leadership on happiness at work, our study brings good starting points for companies that want to promote New Work and decent work from the very beginning. Simultaneously, companies may improve newcomer innovative behavior by focusing servant leadership.

The changing world of work therefore implies a need for change in the mindset of those responsible for successful and effective socialization: Successful organizations need to provide newcomers with attractive working conditions that make them happy to innovate and maintain competitiveness.

*Keywords: happiness at work, job satisfaction, servant leadership*

## Oral presentation OP624

### Starting Out in a Gender-Atypical Occupation: Understanding Negative Work Event Trajectories of Male and Female Tokens and Their Impact on Performance

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science

#### Research goals

More men in kindergartens, more women on the construction site? Wrong! The gender segregation within the labour market has barely changed in the past 35 years. (FAZ, 2014)

This quote portrays the current workforce situation in many countries where a majority of occupations is extremely gender segregated. In Germany, many technical occupations are practiced almost exclusively by men, while many social occupations are heavily dominated by women. Thus, it is relevant to ask: How do female newcomers in male-dominated occupations and male newcomers in female-dominated occupations experience their workdays? Do they experience negative events at work which prevent them from completing their job tasks or make them wish to drop out of their jobs?

Shedding light to these questions is also relevant theoretically. For several decades, research attention focused on the consequence of being demographically dissimilar to others. With special regard to gender, Kanter's (1977) tokenism theory initiated a stream of research which so far disagrees on whether men and women react in the same way to being a member of a underrepresented social group ("token").

Aim of this study is to analyze whether the effect of newcomers' gender on temporal changes in negative work events depends on the gender composition of their occupation and whether these temporal changes in turn impact performance and withdrawal.

#### Theoretical Background

Incorporating role congruity theory (Eagly & Karau, 2002) with ego depletion theory (Baumeister & Vohs, 2007), I argue that, in a symmetric way, both men and women are likely to experience an increase in negative work events if their own gender is underrepresented in their occupation. Further drawing from prospect theory (Kahneman & Tversky, 1984), I expect those changes in negative work events to decrease newcomers' performance and to increase their withdrawal in the long run.

#### Methods

To test the hypotheses, I surveyed employees of German companies in an extensive repeated-measures design on 482 newcomers. The data was matched with official occupation statistics.

To test the interaction of gender and occupational gender share in predicting negative work event changes, I built a two-level random effects model. To test whether negative work event changes predict employee performance and withdrawal, I calculated Bayes Estimates that capture the change in negative work events for every individual and used them to predict performance and withdrawal in single-level regression analyses.

#### Results

Supporting my theoretical considerations, men working in occupations with a high share of women (44% or higher) were found to experience an increase in negative work events over time. Opposing

my theoretical considerations, women were found to not experience an increase in negative work events, even if the share of men in their occupation was extraordinarily high. Analyses thus revealed that women and men react to their token status in an asymmetric way. Moreover, the increase in negative work events was indeed found to impair performance and enhance withdrawal in the long run.

#### Limitations

Besides several strengths, my study suffers from limitations. Respondents participated voluntarily and were not randomly assigned to the study conditions. Additionally, my study exclusively focuses on the gender composition at the occupational level and does not capture whether the actual worksite of a person indeed is gender segregated. However, a supplementary analysis which relied on the work-group token status arrived at non-findings. My incorporation of the extra-organizational level thus provides insights that would have gone unnoticed, if I had assessed the token status at the work-group level exclusively.

#### Conclusion

With my research, I contribute to tokenism research that has been characterized by mixed evidence by introducing the extra-organizational factor occupational gender composition. My result furthermore offers direct practical implications: Practitioners in occupations with a high share of women must prevent treating male newcomers with a negative bias.

#### Relevance to Congress Theme

Occupational gender segregation is a phenomenon that, up until today, is evident. Consequently, the probability to be a token is fairly high for members of several social groups. While historically, in an initially male-dominated labour market, especially women were likely to experience tokenism, today, men also find themselves in workplace scenarios dominated by their opposite gender. By addressing the effects of this trend, this study maps onto the Congress Theme.

#### Relevant UN SDGs

This study contributes to UNSDG #5 to combat gender inequalities. My findings suggest that in order to overcome the reproduction of structural inequality between women and men at all levels of the labour market, political actors, civil society and economic players must work together with the joint goal: More men in kindergartens, more women on the construction site!

*Keywords: tokenism, gender dissimilarity, occupational demography*

## Oral presentation OP615

### STRESS AND PERCEIVED HEALTH: THE EFFECTS OF PSYCHOSOCIAL CONDITIONS IN HOTEL HOUSEKEEPERS

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science

#### Research goal

Hotel housekeepers (HH) represent a main occupational group in the Balearic Islands (Spain), a major tourism destination in Europe. This female-dominated job plays an often invisible but essential role in the hospitality sector. It is considered a poor quality job highly exposed to occupational hazards such as chemicals, work overload and hard physical conditions, but also to mentally demanding conditions such as time pressure and emotional demands. In fact, HH report higher than average visits to the doctor and self-prescribed medication to deal with pain and perceived anxiety and stress. To advance our understanding on the mentally demanding aspects of the job, this study analyses the psychosocial work environment for HH and its relationship with stress and perceived health.

#### Theoretical background

Most research on the HH job has focused on its “physical aspects” and adopted a traditional occupational health perspective (i.e., physical health protection). Recent studies and claims by unions, however, have highlighted and recognized the relevance of psychosocial conditions, and not only the physical conditions, as risk factors for stress and poor health. Building on the Job Demands-Resources (JD-R) model, the psychosocial work environment of HH and its relationship with health outcomes is analysed in this study.

#### Design/Methodology

Hotel housekeepers (N = 1043; 100% female) in the Balearic Islands (Spain) answered a questionnaire to assess 18 psychosocial factors (Spanish COPSOQ-II), work-related stress and perceived health in the past year (National Health Survey, 2017).

#### Results

There is high prevalence of risk factors such as work pace, work-life conflict, and emotional demands. Resources rely on role clarity and task meaning as well as social factors such as social support from peers and leaders, and sense of community. Hierarchical regression showed these factors accounted for 35% variance in stress, and 15% perceived health. Health outcomes were mainly predicted by work demands and the quality of leadership. Less important but significant factors were co-worker support and job insecurity.

#### Limitations

This research relies on a cross-sectional design and self-reports. The generalization of results to other geographical locations and socio-economic and legal conditions is limited.

#### Conclusion

The health effects of poor quality jobs such as the HH occupation need considering psychosocial factors in the work environment rather than viewing it as an exclusively physically demanding job.

Work demands and quality of leadership are the most important factors in the prediction of stress and perceived health in this context. Hotel managers could improve the work setting and health of their workforce by reducing work demands and improving leadership skills of middle managers in HH departments. Future research should focus on redesigning HH jobs to develop healthier good quality jobs, and evaluating the success of such interventions.

Relevance to the Congress Theme.

This study offers recommendations to change the world of work for HH to become a healthier, more meaningful, and decent occupation.

Relevant UN Sustainable Development Goals.

Promoting decent work (SDG number 8) and good health and wellbeing (SDG number 3).

*Keywords: stress, perceived health, psychosocial conditions*

## Oral presentation OP77

### Stress of conscience, burnout, and turnover in healthcare

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**Goals and contribution:** Stress of conscience (SC) occurs when there is a discrepancy between personal moral values and actions taken at work, such as having to lower the quality of care because of a lack of time. There is still some debate about the number and nature of SC dimensions, and a lack of longitudinal research on its predictive factors and consequences. Our aim was to identify a valid, longitudinally invariant factor model for the Stress of Conscience Questionnaire, and to investigate how different SC dimensions develop over time among healthcare personnel. We also examined how SC dimensions associate with burnout and turnover intentions, contributing to healthcare staff's well-being and retention.

**Theoretical background:** To date, only two studies have investigated how stress of conscience might develop or change over time. In addition, there have been conflicting findings about the psychometric properties and dimensionality of the Stress of Conscience Questionnaire. Thus, there is a pressing need to understand more clearly how SC evolves over time so that more effective ways can be found to intervene in time to prevent harmful SC developments. We focused on burnout and turnover intentions (to change one's organization or profession) as two key indicators of the negative effects that stress of conscience can have on well-being. Both indicators are of major concern to the healthcare sector, manifesting themselves as sickness absences, higher staff turnover, and lower overall quality of care.

**Methodology:** Using a longitudinal, person-centered survey study design, we examined the SC ratings from 306 healthcare employees, who rated their stress of conscience in 2019 and 2021. This data was used to conduct a latent profile analysis. Using multinomial regression and multivariate analysis of covariance, the SC profiles were compared in terms of burnout and organizational and professional turnover.

**Results:** The factor analysis resulted in two SC dimensions: hindrance stressors (e.g., not having time to treat people properly) and violation stressors (e.g., having to do something that felt wrong). Five qualitatively different profiles were identified based on these dimensions: (1) hindrance-related stress, (2) violation-related stress, (3) both stress dimensions increasing over time, (4) both high yet decreasing over time, and (5) stable levels of low stress. Increasing SC (profile 3) associated with increased exhaustion, whereas cynicism was highest in profile 4. Employees in these profiles (3 and 4) reported more organizational turnover intentions than employees in the other profiles. Violation-related stress corresponded positively with professional turnover intentions.

**Limitations:** The two-wave study design did not allow for reliable analysis of any causal relationships or mediation processes. We measured employees' intentions to leave their organization or profession, rather than their actual turnover.

**Conclusions:** Our main theoretical contribution was that we found two dimensions to underlie stress of conscience: hindrance stressors (being unable to do the right thing) and violation stressors (being forced to do the morally wrong thing). Person-centered analysis enabled us to identify also atypical SC profiles, such as a combination of high levels of both hindrance and violation stressors, which related to employee burnout and turnover intentions. On its own, hindrance-related stress (e.g.,

lowering one's aspirations for high quality work) is less detrimental to well-being than when it is combined with violation-related stress (e.g., being forced to do something that feels wrong).

Relevance to the Congress Theme: The Future is now/Contribution: Identifying and mitigating both hindrance and violation stressors at work is a crucial aim for increasing employee attraction and retention in healthcare. Urgency: Despite other competing stressors in healthcare, stress of conscience is a relevant phenomenon to recognize, as it puts healthcare personnel in risk for burnout and turnover. Delivery: Interventions that aim to support employee wellbeing can apply these findings in identifying potential risk profiles of stress of conscience. This will help to target appropriate and effective actions that support wellbeing among healthcare employees.

Relevant UN SDGs: Understanding and mitigating stress of conscience and consequently reducing burnout and turnover in healthcare contributes to the goals of good health and wellbeing, decent work and economic growth (employees should be able to follow their moral values at work despite scarce job resources), reduced inequality (by increasing the ability to follow personal values in one's work), and sustainable communities (by supporting ethical ways of working within work communities).

*Keywords: stress of conscience, burnout, turnover intentions*

## Oral presentation OP26

### **Stressors from the Macrosocial Sphere of Life: The Missing Pieces of the Mental Health Puzzle in a Professional Context**

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science&practice

Theoretical background. Over the past century, many theoretical models have been developed for understanding occupational stress (e.g., Karasek, 1979; Siegrist, 1996). Changes in the labour market and advances in knowledge related to psychological health at work have allowed these models to evolve gradually (e.g., Johnson & Hall, 1988; Karasek & Theorell, 1990). However, several theories, including the structure/agency theory (Archer, 1995; Giddens, 1987) and the social stress theory (Pearlin, 1999), suggest the importance of using broader approaches to understanding the stressors that may influence the psychological health of professionals. These theoretical developments lead to new multidimensional models by expanding the origins of stress (Pearlin, 1999; Marchand et al., 2006), including not just those found within work, but also those found in individual characteristics, in life outside of work, and in society and its structures (the macrosocial sphere) (Marchand et al., 2006). According to Marchand et al. (2006), stressors from the macrosocial sphere come from values that are promoted in society, in the prevailing culture, and in established rules. Despite the relevance of integrating stressors from society to understanding the stress experienced by professionals, these stressors are rarely considered in the empirical studies. This limitation occurs because recent models do not precisely identify the variables that would operationalize the social dimension. However, recent studies suggest that some professions in the knowledge-based economy may be particularly exposed to these types of stressor (Cadieux et al., 2020).

Research goals. Following the multidimensional approach proposed by Marchand et al. (2006) and a mixed method approach, the research aims to: 1) identify stressors that arise from the macrosocial sphere of life, and 2) measure the contribution and impact of these stressors on the psychological distress of regulated professionals, while considering the contribution of the other spheres of life (working conditions, individual characteristics, and family).

Design. From a sample of lawyers, the methodology employs several successive phases by using mixed methods. The first phase consisted of a qualitative exploratory study using semi-directed interviews (n = 22 lawyers) enabling a thematic content analysis that identifies four main social stressors to which professionals are exposed. The second phase involved a pre-test (n = 40 lawyers) designed to confirm the validity of the scales ( $\alpha \geq 0.8$ ) and adjust them as needed. The third and last phase was a quantitative study (n = 2027 lawyers) using a self-reported questionnaire. Aligned with best practices in scale development, EFA and CFA were performed to validate scales to measure social stressors. Finally, multiple and hierarchical regression analyses were performed to isolate the contribution of four stressors from the macrosocial sphere, while considering the effect of work, family, age and sex (n = 1311 lawyers).

Results. Qualitative interviews highlighted four main stressors from society that impact the psychological health of professionals, including accountability-professional obligation, technology, performance-oriented professional culture and valorization of the professional reputation and success. In the quantitative phase, stressors from the macrosocial sphere account for 21,4% of psychological distress ( $R^2 \text{ Adjusted} = .214$ ;  $p \leq .001$ ). Even considering the contribution of stressors from the organizational, family and individual spheres, accountability-professional obligation,

technology and valorization of the professional reputation and success remain significant for explaining the psychological distress of the participants.

Limitations. To confirm its results, the study should be replicated in other professional contexts. The cross-sectional design used in the quantitative phase limits the generalizability of the results obtained.

Research/Practical Implications. Results highlighted the contribution of stressors resulting from the practice of a profession in the knowledge-based economy (macrosocial sphere). The significant contribution of these stressors to explaining the psychological distress of professionals suggests the importance of improving theoretical models for a better understanding of psychological health at work. These results should guide the development of future theoretical models for understanding psychological distress at work, particularly in the knowledge-based economy and the regulated professions.

Originality and value . The results of the study provide a better understanding of the stressors in the social sphere and highlighted the changing nature of stressors to which professionals are exposed. This research is in alignment with UN sustainable development goals, to promotes good health and wellbeing.

Intended audience. Academics and practitioners.

*Keywords: Stress, profession, lawyers*

## Oral presentation OP740

### Studying Psychological Safety in Contemporary Teams: A Dyadic Approach

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science

**Introduction** In the changing world of work, team members are often part of multiple teams, scattered across locations, and highly diverse in expertise and task focus. As a result, the traditional concept of teams—stable and bounded entities, all members uniformly involved in reaching a common goal—no longer applies to many contemporary teams. However, team researchers often still start from this traditional team understanding. Based on an a priori assumption of homogeneity, individuals' team perceptions are (given statistical criteria are met) aggregated to the team level, focusing solely on team-level variance and equating the – proportionally large – intra-team variation to measurement error. We argue that this individual variance is conceptually meaningful, indicative of underlying patterns hidden using a traditional approach. Using psychological safety (PS) as an exemplar, we examine its relational micro-foundations and compare them to the dominant referent-shift approach to improve our understanding of how team constructs, in general, and PS manifest in members' underlying relational patterns.

**Theoretical background** Team psychological safety is the shared belief that a team is safe for interpersonal risk-taking. Its emergence (i.e., the convergence of perceptions) and magnitude (e.g., high vs. low team-level PS) are assumed to result from members' ongoing collective interactions and experiences. However, members also share relationships and interactions with other members outside these whole-team events, potentially resulting in disparities in members' PS perceptions and intra-team variability. While others acknowledged the actuality and relevance of this intra-team variability, adding dispersion indices does not explain where this variation—or lack thereof—comes from. A dyadic lens to PS can reveal underlying relational patterns and identify the source of diversity at its lowest level.

**PS in Contemporary Teams** We explore how three team characteristics affect the PS relational patterns in teams as they act as an engine pushing team members to interact more (or less), contributing to the rise of dyadic PS relationships (DPS) within teams. First, we hypothesize that team members' task interdependence pushes members to interact more frequently, stimulating the rise of DPS. Similarly, in the context of flexible workplaces and telework, having a joint physically close (assigned) office can nudge team members to interact, indirectly creating safer dyadic PS relationships. Furthermore, based on the similarity-attraction principle, we expect that members sharing more similarities (e.g., language, gender, tenure, function) have a higher likelihood of developing DPS.

**Method** We administered a cross-sectional relational survey to 740 employees nested within 3680 dyads and 80 highly virtual, dispersed, and diverse teams from one large Belgium service company. Moreover, we used a longitudinal database of employees' office registrations over the past eleven months to construct dyadic colocation, indicating the extent of face-to-face contact opportunities. Data were analyzed using a multilevel Social Relation Model.

**Results** Findings indicated that the variance in DPS was primarily due to unique relational effects (47.6%), suggesting substantial intra-team variation in how members idiosyncratically perceive others. Additionally, some members consistently felt safer with others (perceiver-variance; 37.9%), while some are consistently perceived as safer by others (target-variance; 7.7%). The remaining variance in DPS was located on the team level (6.8%).

Taking a closer look at which team characteristics affect the rise of dyadically safe interrelationships, we see that task interdependence, being co-assigned to the same office, and similarity in language, function, and tenure stimulate dyadic PS via increased online and face-to-face contact.

**Limitations** The sample consisted of teams nested within departments of one company in the aftermath of the covid-19-pandemic, potentially distorting the variance components and limiting the generalisability. Furthermore, the research was cross-sectional, inhibiting any causal claims.

**Conclusion** Our research confirms the relevance of a dyadic lens toward PS as complementary to the dominant shared-belief approach. Even within teams characterized by a shared climate (i.e., sufficient within-team agreement), underlying dyadic PS relationships can reveal diversified patterns. Furthermore, these relationships and the factors influencing them can help improve our understanding of how such relationships contribute to the rise of a shared climate (i.e., emergence).

**Relevance Congress Theme** In the changing world of work, researchers must change how work is studied. As team researchers' practical contribution is limited to the match between teams-in-theory and teams-in-practice, the field must re-evaluate its conceptual and methodological frameworks to study teams as they exist in reality.

*Keywords: psychological safety, dyadic analysis, referent-shift*

## Oral presentation OP659

### **Subjective Well-being, Attitudes towards Work-Family Balance and Leadership Performance: Study with leaders of Brazilian Organizations**

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science&practice

Contemporary literature, especially in the current pandemic moment, has been demonstrating that attitudes more favorable towards work-family balance have a positive impact on subjective well-being. Both variables have the potential to influence the behavior of leaders, considering their subjective interpretations of the work reality. Attitudes are about readiness to act in the face of pre-existing mental models. Subjective well-being refers to the extent to which people rate happiness in their lives, and how fulfilled they believe they are. We consider here that the leadership performance is influenced by their attitudes towards work-family balance and by subjective well-being. This study aims to investigate the predictive relationship between subjective well-being and performance of Brazilian leaders mediated by attitudes towards work-family balance. Through procedures of systematic literature review and identification of thematic categories, a set of items that composed the three psychological instruments of this research were constructed. All instruments were submitted to validation procedures by judges and semantics along with 36 leaders, chosen for accessibility, who worked in 6 different organizations (public and private) in Brazil. The first instrument was the 'Attitudes Towards the Promotion of Work-Family Balance' (7 items; KMO = 0.74; alpha = 0.775; factor loadings ranging from 0.63 to 0.49). The 'Subjective Well-Being Instrument' had only one factor (3 items; KMO = 0.67; alpha = 0.83; factor loadings ranging from 0.97 to 0.71). Leadership Performance' was measured by self-report about the creation of organizational practices related to work-family balance (7 items, explained variance = 13.28; alpha = 0.880, factor loadings between 0.831 and 0.462). After digitizing the questionnaire, the data collection was made by survey, took place intentionally, for accessibility, at a distance mode. The procedure used to disseminate the instrument was the snowball. Only managers, of any management level, who led a team, could respond to the survey. All ethical procedures were followed. Multiple regression was used for analysis and interpretation of results. The sample obtained consisted of 220 Brazilian managers, with a mean age of 40.69 years (SD = 8.84), men (62.90%), married (66%), with at least 1 child (59.2%) and leading teams made up of three or more people (47.5%). Moderate positive correlations were identified between subjective well-being and attitudes ( $r = 0.274$ ;  $p < 0.01$ ), subjective well-being and leadership performance ( $r = 0.273$ ;  $p < 0.01$ ) and attitudes and performance ( $r = 0.30$ ;  $p < 0.01$ ). The model obtained has a fit  $r$  squared ( $r^2 = 0.116$ ). Subjective well-being (Beta = 0.233) and attitudes (Beta = 0.203), all significant ( $p < 0.005$ ), predicted leadership performance. The results show that subjective well-being, mediated by favorable attitudes towards the promotion of work-family balance, contributed to the performance of leaders. As a limitation, we highlight the little sampling variability, even if leaders from other regions of Brazil were invited to participate in this research. Organizational practices to promote quality of life and well-being at work may be impacted considering the development of positive mental attitudes. Leaders can be trained to promote a healthy organizational environment, based on respect, empathy, trust and reciprocity, promoting well-being at work.

*Keywords: employee attitudes, work-life balance, employee welfare*

## Oral presentation OP152

### Supervisory Feedback at Work: An Updated Meta-Analysis

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science

Research goals:

The meta-analysis by Kluger and DeNisi (1996) questioned the effectiveness of supervisory feedback, which decreased performance in over one third of the cases. The authors proposed a preliminary theory of feedback intervention to explain the processes at play in the delivery and reception of feedback.

After 25 years, we believe it is time to follow up on Kluger and DeNisi's (1996) controversial results, particularly in light of the growing literature on feedback quality (Elicker et al., 2019).

Theoretical background:

We are interested in investigating whether and how the content (i.e., feedback valence) and delivery (i.e., feedback quality, with its various features) of supervisory feedback can differently impact employees' responses to feedback. We build on Kirkpatrick's model of learning evaluation (Kirkpatrick, 1976, 1996) as well as on Ellis and colleagues' theory of learning from experience (Ellis et al., 2014) to identify three categories of individual response to feedback, which we name "reactions to feedback", "learning from feedback", and "behaviours after feedback". Moreover, scholars have pointed out the lack of research on cultural differences in feedback reactions (Elicker et al., 2019); so, we explored the moderating role of culture using the GLOBE model to fill this gap.

Design/Methodology:

Drawing on 103 samples (K = 33,536) retrieved via both electronic and manual searches of the literature on feedback, we conducted a series of meta-analyses of correlations, using the random effects meta-analytic procedure (Schmidt & Hunter, 2015) and correcting for sampling and measurement errors. The meta-analyses were run separately for content (i.e., feedback valence) and delivery of feedback, as well as for the above-mentioned three categories of individual responses. To limit biased results, sensitivity analyses were conducted to exclude outliers due to incommensurate sample or effect sizes and to exclude/include longitudinal measures of the outcomes; publication bias was also checked. Finally, to test the moderating role of culture, we conducted a One-Stage Meta-Analytic Structural Equation Model (One-Stage MASEM).

Results:

Preliminary results showed that both favourable feedback content and delivery are positively related to the reactions ( $\rho = .48$ , K = 19, N = 1,160;  $\rho = .44$ , K = 14, N = 4,355), learning ( $\rho = .29$ , K = 23, N = 5,231;  $\rho = .27$ , K = 24, N = 8,563), and behaviours ( $\rho = .41$ , K = 23, N = 7,460;  $\rho = .24$ , K = 23, N = 6,027) of feedback recipients. Moreover, negative feedback showed negative meta-analytic correlations with reactions ( $\rho = -.15$ , K = 6, N = 1,641); small but positive correlations with behaviours ( $\rho = .07$ , K = 14, N = 3,945); and non-significant association with learning ( $\rho = .01$ , K = 14, N = 3,761). Meta-analyses were also conducted on the specific features of feedback delivery and on the sub-dimensions of the three categories of individual response to feedback; the results will be described in the oral presentation. The One-Stage MASEM showed that several cultural values, as captured by the

GLOBE model, moderated (either by strengthening or weakening) the association between feedback valence and responses to feedback.

Limitations:

Possible limitations pertain to the use of cross-sectional meta-analytic correlations, the inevitable focus on variables previously studied in the literature, and the possibility that not all the available studies in the field have been retrieved and included in the meta-analysis.

Research/Practical Implications:

We propose and test a model of supervisory feedback that conceptualises the influence of feedback content and delivery on the individual responses to feedback. Moreover, we shed light on the contextual conditions for feedback effectiveness, addressing calls to investigate cultural differences in feedback research.

The meta-analysis offers insightful evidence-based recommendations for managers, HR professionals, and organisations on how to improve their feedback practice. The results have also implications for cross-cultural management.

Originality/Value:

We extend previous meta-analyses (Katz et al., 2021; Kluger & DeNisi, 1996; Pichler et al., 2020) by considering multiple elements of feedback giving simultaneously and a wider array of employees' responses, beyond performance outcomes.

Relevance to the Congress Theme:

The increasing demand of workers for remote working and other flexible work arrangements require that people develop interactions that are instrumental to achieve wellbeing and to successfully carry out their job – regardless of whether these interactions occur face-to-face or virtually. Supervisory feedback is a key element to provide psycho-social and performance-related support; hence our work shows what features are (most) effective in feedback giving so that they are fostered also in the new world of work.

*Keywords: Supervisory feedback; employee responses; meta-analysis*

## Oral presentation OP513

### Supporting New Moms at Work: Knowledge-Based Training Improves Attitudes Towards Inclusive Workplaces

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science&practice

Research goals and why the work was worth doing

In the United States, federal legislation requires organizations to provide breastfeeding mothers with adequate breaks and proper locations to breastfeed or pump. However, these programs are not put in place due to lack of knowledge. Research indicates that specific training about breastfeeding accommodations can promote more positive attitudes towards providing those accommodations; however, whether these accommodations can promote more positive attitudes towards accommodations generally has not been explored. Participants ( N = 315) in this study viewed either a knowledge-based breastfeeding training or control training. Afterwards, they completed a knowledge posttest and an inbox task. The result show that a short, knowledge-based video can improve people's attitudes towards breastfeeding accommodations. Moreover, the results indicate that the intervention improved attitudes towards other accommodations as well, suggesting that targeted interventions can promote more inclusive workplaces. These findings demonstrate that even a brief workplace training can promote diversity efforts more broadly.

Theoretical background

In the United States, new mothers often do not have access to breastfeeding accommodations. One study of 550 working mothers found that 59% reported having access to reasonable break time to express milk, 45% had access to a private space, but only 40% had access to both mandated accommodations (Kozhimannil, Jou, Gjerdingen, McGovern, 2015). In addition to satisfying legal obligations, breastfeeding support also leads to greater work-life balance which then leads to greater job satisfaction (Jantzer, Anderson, Kuehl, 2018). There is evidence that Seijts and Yip (2008) demonstrated that knowledge of the benefits of breastfeeding can lead to more support for breastfeeding. However, we anticipate that providing this training will improve attitudes towards accommodating policies generally.

Design/Methodology/Approach/Intervention

The study used a between-subjects design. Participants completed measures of personality, knowledge and empathy. The participants then viewed either a video describing the health benefits of breastfeeding or a control video. Both of these trainings lasted approximately 5 minutes. Participants then completed a distractor exercises and finally completed an inbox task. In the task, participants were asked to take the role of a supervisor; in the target scenarios, participants were asked whether they should accommodate an employee's needs.

Results obtained or expected (if not available, it must be made clear when they will be)

We anticipated that the video about breastfeeding accommodations would improve attitudes towards inclusive workplace policies. Participants were more knowledgeable and accommodating for breastfeeding moms after observing the breastfeeding video. In support of our hypotheses, a test of the main effect of condition indicated that participants who witnessed the video promoting breastfeeding accommodation were more accommodating in both the accommodation scenarios than participants witnessing the control video. These results indicate that the brief video not only

improved attitudes towards providing breastfeeding accommodations, but also improved attitudes towards other inclusive practices.

#### Limitations

The study was cross-sectional, which raises potential common method bias concerns. However, the fact that the differences were found between conditions mitigates these concerns somewhat. Few of the participants had experience in management positions which limits the generalizability of our findings.

#### Conclusions – research and or practical implications/Originality/Value

Our data instead suggests knowledge-based training about breastfeeding can significantly change attitudes about breastfeeding accommodations in the workplace and promote inclusivity generally. Individuals who viewed the knowledge-based training had more knowledge about breastfeeding at Time 2. Further, individuals viewing the knowledge-based trainings were more accommodating in our inbox tasks. The data also supports the statement that the videos gave the participants more knowledge regarding breastfeeding accommodations and that training on specific workplace accommodations can promote more inclusive workplace policies generally.

#### Relevance to the Congress Theme

This presentation is most relevant to the theme of Diversity and Inclusion.

#### Relevant UN SDGs

This presentation is most relevant to Gender Equality.

*Keywords: inclusion, accommodations, training*

## Oral presentation OP224

### Supporting proactive coping in adaptation to work using an evidence-based psychological onboarding training

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science&practice

Research goal: Proactivity has positive effects on work adaptation. This study introduces a professional onboarding program that aims to enhance a critical resource of newcomer adaptation, i.e., proactive coping, by resource accumulation and controllability training for organizational newcomers.

Theoretical Background : The newcomers' process of adapting to the workplace gains crucial importance. In the entry phase, an employee new to an organization must gain orientation in the current expectations regarding their functioning at the workplace at a relatively quick pace. Adapting to new vocational settings is often accompanied by feelings of confusion, uncertainty, and insecurity (Saks & Gruman, 2012). There is a strong intention to change the workplace among newly hired employees (Allen, 2006). 4% of new employees quit after a poorly spent first day on the job, and 22% leave within the first 45 days. One of the reasons for employee rotation is an inappropriate adaptation to a new workplace, resulting in a lack of commitment to work or even the desire to change it. On the one hand, an individual's adjusting to an organization is influenced by the organization, proposing various socializing techniques. On the other hand, new employees actively seek the needed information. The theory of organizational socialization (Bauer et al., 2007) highlights that newcomers' goal is to reduce the uncertainty felt in the entry phase so that their environment becomes more predictable. Such an approach corresponds with the process of adapting to a new workplace. The insecurity may be mitigated, among others, by information acquired from various sources, mainly through social interactions with supervisors and coworkers. Through multiple techniques and channels, employees are provided with information that is necessary to do their job well (role clarification), those concerning possibilities to function well in the face of real requirements of their professional roles, as well as those regarding social relations in the workplace. The settings that are unfavorable to job integration may lead to vocational exclusion. The past view of new employees described them as submissive, passive individuals who adjust to their environment and go with the organization's flow. In contrast, current employees are perceived as active participants, particularly proactive, in their adaptation processes (Griffin, Neal & Parker, 2007). Proactive adaptation is described as newcomers playing an active role by demonstrating initiative in learning. Proactivity appears to be an element that is even more significant than the support received by new employees in an organization, such as, for example, feedback or advice provided by supervisors (Ślebarska, Soucek & Moser, 2019).

Method : Our onboarding program comprises the following aspects: 1) positive assessment of events, 2) identification and accumulation of own resources, 3) strategic planning, 4) action planning, and 5) coping planning. Increasing the number of proactive remedial actions within the work orientation program makes the newly hired employee comfortable in the new organization. It leads to higher satisfaction, which may favor a better understanding of one's professional duties, the organizational hierarchy, and mission.

Results : The effectiveness of the orientation program (e-learning structured training) was assessed in a sample of organizational newcomers within a longitudinal evaluation design (one-pretest double-

posttest design). The training improved proactive coping and enhanced an important proximal adaptation outcome.

Conclusion : Overall, the study demonstrates that increasing proactive coping enhances the adaptation of organizational newcomers or work form changers concerning role clarity and provides a good point for evidence-based onboarding programs.

*Keywords: proactive coping, work adaptation, onboarding training*

## Oral presentation OP156

### Suppress to Get Along: A Lifespan Account of Social Motives for Suppression

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science

#### Suppress to Get Along: A Lifespan Account of Social Motives for Suppression

**Research Goals.** The goal of this paper is to understand why (i.e., what motives) and when (i.e., at what age) people use expressive suppression to regulate their emotions at work. This is important because expressive suppression, an emotion regulation strategy that entails hiding one's feelings, is commonly used as a reaction to interpersonal stressors, despite its negative association with a myriad of well-being outcomes.

**Theoretical Background.** Generally, the literature on emotion regulation at work assumes that people regulate their emotions for well-being and hedonic goals (i.e., to feel better and to avoid feeling bad). Yet, people commonly report suppressing their emotions at work, a putatively dysfunctional way to deal with their emotions, especially as a reaction to interpersonal stressors such as experienced interpersonal incivility. Accordingly, emotion regulation at work may be motivated by non-hedonic, instrumental goals. Given the social nature of expressive suppression, we adopt a socially motivated account for suppression use at work to understand which social motives (communion and status motives) are linked with the use of suppression, and whether salience of a given social motive influences the relationship between experienced incivility and suppression use. Furthermore, we investigate whether age is related to the prevalence of communion and status motives at work. Indeed, lifespan theory suggests that aging is accompanied by changes in the way people allocate their resources. As such, younger workers are more likely to allocate their resources towards growth (i.e., reaching for higher levels of functioning), whereas older workers are more likely to allocate their resources towards maintenance (i.e., maintaining stable levels of functioning). In the work context, an untested implication is that these developmental tendencies may shift the prevalence of communion and status motives. Accordingly, age may be linked with social motives through growth/maintenance goal orientations.

**Design and Methodology.** Using a daily diary study, we investigated the effects of experienced daily incivility, in concert with communion and status motives, in predicting suppression. Additionally, we addressed individual differences in the salience of communion and status motives by investigating how age relates to these motives via two theoretically established developmental goals at work, growth and maintenance. Data were analyzed from 291 participants (3,159 observations) who participated in a daily diary study of three measurements per day for 15 working days.

**Results.** At the within-level, we found that experienced incivility and communion motives both predicted use of suppression. Status motives did not relate to suppression, nor did both motives interact with experienced incivility to predict suppression. At the between-level, age was indirectly negatively related to status and communion motives via a lower tendency to be growth orientated in one's career.

**Limitations.** Given the design of our study, we could not investigate any chronic or long-term longitudinal effects of incivility or motives on suppression. Furthermore, the data were collected during the COVID-19 pandemic, and 64% of the observations were records of people working from

home. Therefore, the way people experienced and responded to their social work environment (e.g., instances of incivility, social motives) in the study may have been influenced by teleworking.

Conclusions. All in all, we observe that people are more likely to use suppression to regulate their emotions on days when their communion motives are salient. Both communion and status motives are more salient among people with high career growth orientation, which, in turn, is more likely among younger workers. Our findings offer insight into how daily motives influence emotion regulation strategy choice, as well as how age and higher-order goals relate to these motives at the dispositional level.

Relevance to the Congress Theme. By examining age differences in the salience of higher-order goals and social motives, this presentation provides food for thought on how we may want to change the workforce of the future to equally accommodate workers of all ages.

Relevant UN SDGs. Given the importance of emotion regulation at work for occupational well-being, the presentation is most relevant to the UN Sustainable Development Goal Good Health and Wellbeing.

*Keywords: management of emotion, coping and social support, aging workforce*

## Oral presentation OP753

### **Survival of democratic enterprises in capitalist economies: A systematic review on organizational and psychological features**

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science

Research goals and why the work was worth doing

Positive effects of organizational democracy on employee outcomes are empirically well-documented. However, the possibility of enduring survival of democratic enterprises (e.g., worker cooperatives) in a capitalist market environment without a degeneration of original democratic principles and practices has long been contested. The goal of this systematic review was to identify organizational and external conditions, organizational practices and psychological phenomena contributing to the degeneration, retention or regeneration of democratic enterprises. Against the ongoing international debate on democratic degeneration, obtained results expand theoretical and practical knowledge about how to make democratic enterprises and their positive effects on individuals and societies more sustainable.

Theoretical background

Organizational democracy refers to ongoing, broad-based, and institutionalized employee participation that is not ad hoc or occasional in nature. Written rules, regulations, and institutionalized boards enable employees to exert substantial influence on tactical and strategic decisions, either directly or through elected representatives. Examples of democratic enterprises are worker cooperatives, employee stock ownership plans (if owned by a majority of workers), democratic reform enterprises, and self-governed worker-owned firms. Since the beginning of research on democratic enterprises in the early 20<sup>th</sup> century, scholars have voiced pessimistic views about the viability of democratic enterprises in a capitalist market environment. Prominent examples are the “degeneration thesis” by Webb and Webb (1914) and the “iron law of oligarchy” by Michels (1915), which form the basis for later and more elaborated models, such as the “cooperative’s life cycle model” by Meister (1984). However, the deterministic character of these pessimistic views has been criticized, for example, by the “retention thesis” by Rothschild-Witt (1976) or the “regeneration thesis” by Batstone (1983), which assume that under specific conditions, democratic enterprises can survive and retain their democratic structures, principles and values – or have the potential to regenerate after periods of democratic degeneration.

Design/Methodology/Approach/Intervention

We conducted a systematic review of published journal articles on qualitative research investigating democratic enterprises within the last 50 years. Based on a comprehensive literature search and a set of detailed inclusion and exclusion criteria, we reviewed 77 relevant qualitative studies that examined altogether 83 democratic enterprises (including 15 studies on nine enterprises of the Mondragon Cooperative Cooperation network, which is the largest democratic corporation worldwide).

Results obtained or expected

The majority of enterprises either resisted pressures towards degeneration or regenerated after a period of degeneration (63.5%). Only 9.5% degenerated fully to the level of conventional hierarchical

enterprises, and 27% showed degeneration tendencies but still remained democratic. We were able to identify a large variety of organizational and external conditions, organizational practices and psychological phenomena that contribute to the degeneration, regeneration or retention of democratic enterprises. In this presentation, we will focus on conditions, practices and psychological phenomena contributing to regeneration and retention.

#### Limitations

The most serious limitation of this systematic review is the heterogeneity of the quality of primary studies, as well as the varying levels of detail of information about the studied enterprises and qualitative research procedures. Another limitation refers to the lack of theoretical elaboration of the identified psychological phenomena. One reason for this shortcoming might be that the primary studies mostly were not conducted by organizational psychologists, but by researchers from other academic disciplines, such as economists, political scientists, and sociologists.

#### Conclusions – research and or practical implications

The results of this systematic review refute the pessimistic and deterministic views of the “degeneration thesis” and the “iron law of oligarchy”. Democratic enterprises clearly have the potential to survive and succeed economically in capitalist market environments without abandoning their democratic structures, principles and values. The identified organizational and psychological features contributing to the retention or regeneration may inform practitioners on how to implement resilient democratic structures and procedures in contemporary organizations.

#### Relevance to the Congress Theme

Democratic enterprises can be interpreted as “real utopias” that are able to inform us about possibilities and practices for social transformation towards a more democratic, more humanistic, more egalitarian, more sustainable world of work and society – now and in the future.

*Keywords: organizational democracy, degeneration, retention*

## Oral presentation OP80

### Sustainability-oriented target groups and the effect of the locus of control on their word-of-mouth communication

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science&practice

Consumers are both receivers and senders of sustainability messages. They can perform their function both as senders in consumer policy discourse, and through proactive sustainable consumption. Sustainability communication, which makes it possible to turn consumers not only into recipients but also into senders of sustainability messages is particularly promising for a change in society. In this form, consumption becomes a political instrument that enforces the normative idea of intra- and intergenerational justice in terms of promoting the conscious consumption of natural resources. The other political instruments are not replaced by strategic consumption, on the contrary, they are supported (Bilharz, 2009). But sustainable consumption cannot replace a system change in ecological economy (Dauvergne & Lister, 2010). Consumers mainly use daily newspapers, above-the-line advertising and personal conversations with friends, acquaintances and relatives as sources of information concerning CSR. The most credible information sources are consumer magazines and test reports, personal conversations with friends, acquaintances and relatives as well as certificates from independent organizations such as Fairtrade. This proves the great value of word of mouth in spreading "green" messages (Mayerhofer et al., 2008). But little is known about the psychological factors that are associated with WOM (Kim et al., 2023).

Lam & Dick (2005) investigated the effect of subjects' control beliefs on brand word-of-mouth (WOM). While subjects with general internal locus of control (LOC) were more likely to talk about brands with "out groups" (people with whom they have a weaker relationship), those with general external LOC were more likely to spread their brand messages to "in groups" (close friends/family). People with internal LOC usually have higher education and higher income and tend to talk about brand innovations with "out groups". Addressing the latter target group would facilitate the diffusion of "green" innovations or messages.

The aim of this study is to evaluate the influence of personality traits such as competence and control beliefs (FKK, Krampen, 1991) on brand word-of-mouth communication (WOM; Lam & Dick, 2005) of in particularly sustainability-oriented consumers. For this purpose, a standardised online survey (n=709) was conducted among Austrian consumers. WOM was surveyed with questions asking for the preferred dissemination of information about new brands and products.

The results demonstrate that the segment of "proactive" sustainability-oriented consumers with higher levels of internal control conviction show increased WOM communication with both in- and out-groups. However, this effect cannot be attested for all environmentally conscious consumers. No significant effect of the external control conviction of sustainability-oriented consumers on the WOM communication with in/out groups could be substantiated. In general, the results of the survey group show that with an increasing sustainable lifestyle and increasing consumption of organic products, the WOM communication with both in- and out-groups also increases significantly.

The study indicates that an increasing level of knowledge and understanding of sustainable consumption seems to enhance the diffusion of green messages to all target groups. The influence of LOC on brand WOM needs further studies. It should be noted that the focus of the study is on Natur\*pur, an organic private label of the Austrian food retailer Spar.

*Keywords: sustainability, locus of control, word of mouth communication*

## Oral presentation OP618

### **Sustainable employability, technology acceptance and task performance in Italian workers collaborating with robots: a pilot study**

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science&practice

#### 1. Research goals and why the work was worth doing

The world of work is exponentially changed by digitalization and robotics. However, in organizations with an ageing workforce the use of these advanced technologies puts the sustainable employability (SE) of workers-collaborating-with-robots, and, in particular, their task performance at risk. However, we still don't know whether, and if yes how, SE policies can impact workers' task performance in digitalized workplaces. Drawing on the models of SE by van der Klink et al. (2015) and Picco et al. (2022), this study aims to ascertain whether the relationship between SE policies and employee task performance – as a fundamental indicator of SE – is mediated by health and productive capabilities, and whether this indirect effect is moderated by the levels of User Acceptance of Information Technology (UTAUT) main predictors (i.e., performance expectancy, effort expectancy, social influence and facilitating conditions; Venkatesh et al. 2003).

#### 2. Theoretical background

In an aging and rapidly transforming world of work, thinking about organizational policies from a sustainability perspective is needed. In this study, we define SE policies as organizational practices that may improve employee SE (Ybema et al. 2020). Based on scientific literature that highlights the relevance of organizational SE policies (e.g., Nielsen et al. 2017), we first argue that SE policies are positively related with the task performance of workers that collaborate with robots ( Hypothesis 1 ). According to van der Klink and colleagues (2015) and Picco et al. (2022), when talking about SE, it is important to consider employee capabilities. These can be defined as the perception of attainability of aspects such as taking care of health while maintaining the job (health capabilities), or having the right competencies to successfully perform the job (productive capabilities). Based on the Job Demands-Resources Model (JD-R model; Demerouti et al. 2001) and the recent literature on SE interventions (Picco et al. 2022), we consider health and productive capabilities as complex personal resources, and expect these capabilities to have a mediation role in the previously hypothesized relationship between SE policies and employee task performance ( Hypothesis 2 ). Finally, based on the UTAUT model (Venkatesh et al. 2003), we argue that employee levels of UTAUT predictors moderate the hypothesized indirect relationship between SE policies and task performance. In particular, in line with the discrepancy-arousal theory (Capella and Greene 1982, 1984; Kluger and DeNisi 1998), we suggest this indirect effect to be stronger among employees with a low score on these predictors compared to employees with a high score on these predictors ( Hypothesis 3 ).

#### 3. Design/Methodology/Approach/Intervention

Cross-sectional surveys were conducted among workers in an Italian company using collaborative robots in manufacturing processes and in a convenience sample recruited with the help of a company producing collaborative robots. The final sample consisted of 88 employees who are collaborating with robots or are expected to do so in the near future (65% men, with a mean age of 47 years, and 50% secondary education). Descriptive, correlational and moderated mediation analyses were performed by means of the SPSS 28 software package and Hayes process macro.

#### 4. Results obtained or expected (if not available, it must be made clear when they will be)

Our findings indicate that SE policies were positively related to task performance via health and productive capabilities. This indirect effect was moderated by the levels of performance expectancy, effort expectancy, social influence and facilitating conditions, so that it was positive and statistically significant only at low or medium levels of the moderators. Hence, hypotheses 1-3 were confirmed.

#### 5. Limitations

The main limitation to this study is the small sample size. Moreover, only two specific types of SE capabilities have been considered.

#### 6. Conclusions – research and or practical implications/Originality/Value

SE policies contribute to employee health and productive capabilities, and in turn to workers' task performance. The contribution and recognition of employee capabilities is fundamental when employee acceptance levels of cobots are not high yet.

#### 7. Relevance to the Congress Theme

This paper fits the Congress theme by addressing the broader question 'What makes work sustainable in a changing world of work?'

#### 8. Relevant UN SDGs

The present study aims at answering the call for a decent work for all (SDG number 8).

*Keywords: sustainable employability, technology acceptance, task performance*

## Oral presentation OP285

### **SUSTAINED AND INCLUSIVE INSTITUTIONS FOR ALL: NEURODIVERSITY-FRIENDLY WORK DESIGN.**

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science&practice

#### Research goals and relevance

Against the backdrop of calls for more theoretical and empirical research on the inclusion of neurodivergent individuals into employment in general and more specifically in non-standard ways of working, we explore the characteristics of the inclusive neurodiversity-friendly job design in the smart-work context (i.e., flexible work arrangement where employees can work outside their office and with a flexible time schedule). Understanding this appears vital since the vast majority of smart, remote, or even traditional workplaces are designed for neurotypicals. Given that approximately one in seven employees is neurodivergent, it appears paradoxical that the neurominority community has been hitherto silenced by job design theorists.

#### Theoretical background

We apply the job-demands-control-support model of job design as a theoretical lens to see a) what constitutes demands for neurodivergent employees in the smart-work context, b) what particular support is valued by this community, and c) what the perceived impact of the demands, support and control of one's work is on neurodivergents' well-being. We subsequently arrive at a revised version of the theoretical model which captures the unique needs of the neurodivergent community.

#### Design

This rich qualitative study consists of two phases. First, twenty semi-structured interviews with individuals with personal experience or professional input into the support of neurodivergent employees were conducted. The interviews were followed up with two focus groups. Each focus group consisted of five individuals studying towards the Postgraduate Diploma in 'Neurodiversity at Work' program and had varying levels of neurodivergence experience (the sample included, inter alia, high-rank managers responsible for international neurodivergence programs, neurodivergent employees and entrepreneurs, and neurodiversity champions). The goal of the focus groups was to complement the findings from the study's first phase in more interactive settings allowing for dynamic conversations.

#### Results

We found that the job experience of neurodivergent individuals is influenced by unique resources and demands. These are often overlooked in traditional job design theories due to their predominant focus on the neurotypical population. Our findings further delineate a number of support mechanisms that could be used in the smart-work context not only to mitigate the negative effects of demands placed on individual employees but also to foster better performance and well-being. Through a theoretically informed discussion of effective smart work design with neurominorities in mind, we offer a conceptual neuro-inclusive smart work model of job design to assist organizations in creating an inclusive remote work environment where both neurominorities and neurotypicals can equally contribute to organizational success.

#### Limitations

The reported research recruited a small number of participants (n=30). Even though it was inclusive of different neurominorities, it is important not to generalize the reported findings. The suggestions presented in the emerged conceptual model should be now tested further to evaluate the effectiveness of the suggested adjustments, potentially through advanced statistical methods or experimental design.

#### Conclusions

We answer recent calls for mainstream management research to stop treating employees as an undifferentiated mass and offer novel insights into well-established research on demand-control-support model. By capturing the unique needs of specific groups of employees and in the novel context of smart work, we show that job design can be a potential source of competitive advantage as long as management does not use simplified work as the default approach to designing jobs. Our revised theoretical model of neuro-inclusive job design should enable greater precision in describing existing institutional arrangements, as well as serve as a prerequisite for a fuller debate about the desired nature of inclusive smart-work job design for researchers and practitioners alike. The innovative way of looking at job design we offer is likely to change the way in which it is currently investigated and provide important directions for future research.

#### Relevance to the Congress Theme

This year's congress theme implies that the world of work is changing and although the idea of neurodiversity has been building since the '90s, it only recently started to shake the foundations of the world of work. The many neurodiversity-friendly initiatives we observed are often described as a real step change that we are all delighted to see happen. However, the onus now lies on the researchers and practitioners to make it branch out into systemic inclusion.

#### UN SDGs

Our research contributes to the promotion of inclusive employment and decent work by reducing inequalities (see: Goals 8 & 16).

*Keywords: neurodiversity, inclusion, job-demands-control-support model*

## Oral presentation OP750

### Talent individual donate their knowledge and are still innovative

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science&practice

Research goals and why the work was worth doing: The purpose of this paper is to extend the current discussion on the drivers of innovative work behavior by examining how awareness of talent status and knowledge donation affect IWB. First, our research contributes to the creativity literature by examining how knowledge donation stimulates the innovation process, answering Anderson et al.'s (2014) call for more in-depth research on knowledge and innovation. Second, we provide evidence that awareness of talent status is related to knowledge donations and innovative work behaviors, thus contributing to the talent management literature by responding to McDonnell, Collings, Mellahi & Schuler's (2017) call for a clear understanding of how talent contributes to organizational performance.

Theoretical background: The ability of employees to continuously innovate is more critical than ever for organizations due to fierce competition in global markets (Anderson et al., 2014; West, 2002; De Jong and Den Hartog, 2010). The social exchange between colleagues is a valuable source of innovative work behavior, while knowledge sharing increases creative problem-solving capacity (Carmeli, Gelbard, Reiter-Palmon, 2013), making diverse knowledge that exists within individuals (Pelled, Eisenhardt, Xin, 1999; Williams & O'Reilly, 1998) a valuable source of innovative work behavior. However, whether individuals share their knowledge with colleagues is not so straightforward (Gilson & Shalley, 2004). Therefore, managers need to encourage innovative work behavior among their employees by stimulating knowledge donation from employees that trigger novel and radical innovations. Based on psychological contract theory and social categorization theory, we hypothesize that employees who are aware of their talent status in the organization will be more likely to engage in knowledge donation because of the psychological contract (e.g., the mutual perceptions and informal commitments between an employer and an employee). We argue that individual talent identification is perceived as a signal „that the employer has fulfilled its contract by choosing to invest in the employee's future career” ( Björkman et al., 2013, p.197) and now it is the employee's turn to behave in a way that fulfills the organization's goals and interests (Allen & Meyer, 1990; Lee, Liu, Rousseau, Hui, & Chen, 2011; Wiener, 1982). Thus, we expect that individuals who perceive that they have been identified as talent are more likely to engage in knowledge donation to stimulate innovative work behaviors than those who perceive that they have not been identified.

Design/Methodology: We conducted a field study with professionals in public administration (n=383) and followed standard procedures to examine mediation model using a bootstrap approach (Preacher and Hayes, 2004). To test our hypotheses, we first examined the relationship between talent awareness status and innovative work behaviors (H1) mediated by the use of knowledge donation (H2) by conducting mediation in PROCESS. Results The result showed that talent status awareness was positively related to innovative work behavior. Moreover, mediation model 4 in PROCESS macro showed that knowledge donation mediates the positive relationship between talent status awareness and innovative work behavior, thus supporting hypothesis 2.

Limitations: Our dataset is based on cross-sectional, self-reported data gathering, and although all variables can only be assessed via self-perception, causal relationships could be reversed. Future laboratory or field experiments or three-wave longitudinal studies could address these concerns and

provide clearer evidence for the proposed causal relationships. Another limitation of our research is that we examined the effects of knowledge on innovative work behaviors rather than the different stages of innovation. Although knowledge donation and talent status awareness are critical to innovative work behavior, it would also be beneficial to provide empirical evidence on how the variables used are related to the different stages of the innovation process (idea generation, idea championing, and idea implementation).

**Research/Practical Implications:** From a managerial perspective, we provide evidence that talent status awareness is essential for innovative work behavior and knowledge donation. Therefore, managers should keep in mind that recognizing talented employees is key to increasing the quality of social exchanges among all colleagues, which can lead to higher innovative performance of the entire organization.

**Originality/Value:** This study is the first of its kind to empirically examine whether employees with talent status are also more innovative in their work, based on psychological contract theory. In addition, this paper provides evidence that talented employees are more likely to donate knowledge, which in turn increases their own innovative work behavior.

*Keywords: Talent status awareness, Innovative work behavior, Knowledge donating*

## Oral presentation OP504

### Teacher Self-Efficacy and Job Satisfaction: A Four-Wave Random-Intercept Cross-Lagged Analysis

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science

Research goals and why the work was worth doing

Although longitudinal associations between self-efficacy and professional wellbeing indicators have been investigated previously, studies that separate stable individual differences in these constructs from changes that occur within individuals over time are still scarce. Therefore, in the present research, we tested the random-intercept cross lagged panel model (RI-CLPM) and investigated the relationship between teacher self-efficacy and job satisfaction at between-person level (by examining whether teachers with higher levels of self-efficacy are in general more satisfied with their job) and within-person level (by examining whether teachers who report higher than typical levels of self-efficacy are also satisfied with their job more than expected at a single time point and across time points). In addition, since teacher self-efficacy is multi-faceted construct (i.e., efficacy for student engagement, efficacy for instructional strategies, and efficacy for classroom management), we tested these relationships for each dimension of teacher self-efficacy separately to examine its possible differentiated effects.

Theoretical background

The shortage of teachers is a problem faced by many countries around the world. Research shows that attrition rates for teachers in the first five years in the profession are as high as 50% (Buchanan et al., 2013; Lindqvist et al., 2014). Strategies aimed at reducing teacher attrition are largely focused at increasing job satisfaction, considering its established relation with the decision to leave the profession (Klassen & Chiu, 2011; Kelly et al., 2019). Teachers' self-efficacy is considered to be one of the most important factors affecting teachers' job satisfaction - teachers with low levels of self-efficacy tend to be dissatisfied with their jobs, which increases the likelihood of leaving the teaching profession (Evans, 2001; Ingersoll, 2001).

Design/Methodology/Approach/Intervention

In total, 1141 teachers (881 females) with an average teaching experience of 15.88 years ( $SD = 9.13$ ), employed in 73 secondary schools in Croatia, participated in a longitudinal study with a full panel design. Teachers filled out an online questionnaire four times within a school year with a time lag of 2.5 months. Participation in the study was voluntary and anonymous and responses of teachers from different time points were matched based on specially created self-generated codes. To account for nestedness of teachers within schools and possible bias in estimates of standard errors, the RI-CLPM was tested with the TYPE IS COMPLEX option in Mplus.

Results obtained

The results showed that stable parts of all three dimensions of teacher self-efficacy and job satisfaction were positively correlated implying that teachers with higher levels of efficacy for student engagement, instructional strategies, and classroom management also tend to be more satisfied with their job. Regarding the time-specific associations, we found that teachers with higher than expected levels of self-efficacy at a given time point, also reported higher than expected levels of job satisfaction. Finally, we established longitudinal spill-over effects from efficacy for student

engagement and instructional strategies to job satisfaction, showing that teachers with higher than usual levels of self-efficacy at one time point are also more satisfied with their job at subsequent measurement occasion. However, no such effects were found for efficacy for classroom management. In addition, longitudinal effects from job satisfaction to self-efficacy were not established. Our results point to the importance of examining different aspects of teacher self-efficacy separately and highlight the causal predominance of self-efficacy construct over job satisfaction while exploring its dynamic relationship.

#### Limitations

Common method bias may have occurred given that self-efficacy and job satisfaction were both measured using self-ratings. Also, although large, a convenience sample of participants was used.

#### Conclusions – research and or practical implications/Originality/Value

Given that higher levels of teacher self-efficacy are related to higher level of job satisfaction, it is necessary to develop and implement different methods and strategies to increase self-efficacy among teachers.

#### Relevance to the Congress Theme

As the world of work changes, so does the teaching profession. Changes in the teaching profession result in lower job satisfaction and leaving the profession, which is a problem that many countries around the world are facing.

#### Relevant UN SDGs

UN SDGs relevant to this paper are Good health and well-being, Quality education and Decent work and economic growth.

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*Keywords: self-efficacy, job satisfaction, teachers*

## Oral presentation OP104

### Team Members Familiarity, Leadership Behaviours, and Psychological Safety as Predictors of Conflicts in Virtual Teams: A Multilevel Pilot Study

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science&practice

Research aims and why the work was worth doing

Our aim was to identify the relationships between leadership styles, psychological safety and familiarity with conflict ( task, relational, process, and status) in VTs. When communication is constrained by technology, psychological safety challenged by lack of familiarity, geographical dispersion highlights the separateness and detachment, what happens to the perception of conflict? The aim for this study was three-fold :

- 1) To test how a virtual team of members with no previous history of professional or personal familiarity perceives 4 different types of intrateam conflict. We expected that familiarity (IV) is negatively related to conflict perception (DV) H1
- 2) To test if members' familiarity can moderate leadership behaviours (IV) in relation to members' conflict perception in 4 types of conflict. We expected that familiarity (M) buffers the negative effect of poor leadership behaviors (IV) on conflict perceptions (DV) H2
- 3) To test the relationship between teams' levels of psychological safety with perception of 4 types of conflict. We expected negative correlation between psychological safety (IV) and conf. perception (DV) H3

#### Theoretical background

We base our research on Behavioural Complexity in Leadership theory, which states that leaders' effectiveness manifests itself in a diverse set of behaviors in response to complex circumstances. In their interactions leaders impact certain dimensions of influence in order to prevent conflicts in VTs.

The familiarity construct consists of professional familiarity and personal familiarity. When team members do not know each other in person are their relationships solid enough to mitigate conflict in VTs?

Team psychological safety is a shared belief that team space is safe enough to take interpersonal risks. Psychological safety facilitates learning, info sharing, creativity and innovation.

#### Design and Methodology

Data were collected from 99 employees nested in 20 virtual teams with team size varying from 3 to 12 members ( $M = 4.95$ ,  $SD = 2.18$ ). The variables were assessed using Professional and Personal Familiarity Measure in VTs , Leadership Behav. Scale , Psych. Safety Scale , and Intragroup Conflict Scale . All the aforementioned variables were grand-mean centered so that when they predict the random slopes in the model. The hypotheses were tested using multilevel regression analysis with team membership as a grouping variable. The R environment with the corresponding packages was used for all the calculations.

#### Results

Surprisingly, the analyses revealed no significant relation between team members familiarity and perceived relationship, process, and status conflict in VTs. Significant individual-level effect was observed only for task conflict, suggesting that the better team members' professional familiarity, the less task conflict they reported. However, results revealed interaction effects of professional familiarity and individually experienced leadership behaviours on relationship, process, and status team conflict. In all three types of conflict, the negative relationship between leadership behaviours and the perceived severity of conflict in the virtual team was stronger when employees reported higher team members professional familiarity.

#### Limitations

While there are a multitude of factors that mitigate or aggravate VTs conflict we only focused on 3 areas. Another limitation is that the study provides a static view of team conflict.

#### Conclusions: Research/Practical Implications

Since we focus on conflict antecedents, team leaders and managers can utilise our findings to minimize destructive effects of team conflicts and maximize teams' viability. We believe that teams which can early detect and manage factors that predict conflict before it is too late, have much better chance not only to survive but thrive in modern ever-changing organisational environment.

#### Originality/Value

We extend the intrateam conflict literature by examining the effects of leadership behaviours on VTs conflict as moderated by familiarity and psychological safety. Our research focuses on the antecedents of conflict instead of its effects and does it on a cross-level analysis.

#### Relevance to the Congress Theme

In-depth understanding of virtual teams is not a concept we may wait to discover in the future. In this particular area of organisational life, the future really "is now".

#### Relevant UN SDGs

Our research is in line with the 8<sup>th</sup> goal of the Sustainable Development Goals of the UN related to promoting productive employment and decent work for all.

#### Intended audience: Academic, Practitioner

*Keywords: virtual team conflict, team familiarity, virtual team psychological safety*

## Oral presentation OP65

### Teams' media capabilities repertoires: Presenting a new construct and instrument

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science

Teams' media capabilities repertoires: Presenting a new construct and instrument

**Research goals:** Due to the COVID-19 pandemic, team members are increasingly using information and communication technologies (ICTs) to interact with each other while working remotely. The term team virtuality has been coined to refer to this phenomenon (Raghuram et al, 2019). However, our understanding of 'virtuality' still needs further work. Specifically, a limitation is that this research has largely assumed an antagonistic view of face-to-face (FtF) versus ICT-mediated interactions. This view neglects the fact that different ICTs present vastly different physical attributes or capabilities (e.g., text-based emails vs. audio-based phone calls), and that some ICTs can offer similar capabilities to FtF interactions (e.g., video calls). Examining these capabilities can offer a nuanced understanding of virtuality and help explaining some of the mixed results in the area (Gibson et al., 2014). Unfortunately, to date, there is a lack of theories addressing how team members use media's capabilities and a lack of instruments to measure them. Accordingly, this study's goals are to present (1) a new construct focused on the use of media capabilities within teams, and (2) the development and validation of an instrument to measure it.

**Theoretical background:** Media Synchronicity Theory (MST; Dennis et al., 2008) is one of the most recent developments that have systematised the capabilities of media, both ICTs and FtF. MST proposes that media can offer five different capabilities: (1) transmission velocity, (2) parallelism, (3) symbol sets, (4) rehearsability, and (5) reprocessability. However, some authors have questioned deterministic views in which technologies (and media) are argued to have intrinsic structures that shape human actions and interactions without considering the role of people's agency. Technology-in-Practice perspective (Orlikowski, 2000) argues that we must think about structures as emergent from people's use of technology (i.e., enactment) instead of them being embodied into technology. This theory proposes that this enactment emerges from the material properties (e.g., capabilities), but also the context (e.g., norms and protocols) and personal attributes of users (e.g., beliefs, experiences, and knowledge) to articulate a particular situated use of technology. The idea of enactment emphasises that people can use technologies as they were designed, but they can also use them in creative and innovative ways. Considering this, we propose the new construct of teams' media capabilities repertoires as the examination of how team members enact a particular use of the capabilities of the media that they have at their disposal to interact with each other. This construct differs from MST as it focuses on how the capabilities are actually used to support team members' interactions.

**Methodology:** An instrument to measure teams' media capabilities repertoires was developed and validated following a five-step approach. First, we generated a set of 50 items to measure the use of the five capabilities of MST within teams. Second, six experts reviewed these items to assess their content validity (relevance and clarity). After this, we reduced the initial set to 38 items. Third, we gathered a sample of 95 team members (non-experts) to assess the items' definitional correspondence and distinctiveness (Colquitt et al., 2019). Fourth, we gathered a sample of 301 workers to assess the internal structure validity of the scales at the individual level. Finally, we are collecting a sample of 100 teams to assess the team level internal structure and predictive validity of the instrument.

Results obtained: The experts and non-experts' revisions supported the content validity of the instrument. The subscales' reliability – transmission velocity ( $\alpha = .89$ ), parallelism ( $\alpha = .85$ ), natural symbols ( $\alpha = .81$ ), digital symbols ( $\alpha = .72$ ), rehearsability ( $\alpha = .87$ ), reprocessability ( $\alpha = .84$ ) – and confirmatory factor analysis –  $\chi^2 (233) = 355.42$ ,  $p < .01$ ; CFI = .96; TLI = .95; RMSEA = .04 [.03, .05]; SRMR = .06; factor correlations ranging from .02 to .46 – supported the individual level internal structure validity. The team level internal structure and predictive validity results are pending but will be available for the Conference in May 2023.

Limitations: Due to the cross-sectional nature of the samples, concerns regarding the temporal stability and predictive validity of the scales are raised.

Conclusions: This study expands our understanding of team virtuality by (1) presenting the construct of teams' repertoires of media capabilities which offers a more nuanced understanding of the use of different media within teams, and (2) a scale to measure it.

Relevance to the Congress Theme : This study concerns a relevant topic to understand work team dynamics as after the COVID-19 pandemic team members rely more than ever on ICTs to communicate with each other.

*Keywords: team virtuality, information and communication technologies, media capabilities*

## Oral presentation OP557

### Telepresence robot to promote communication between residents and relatives in a nursing home

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science&practice

#### 1. Research Goals and Theoretical Background

Sufficient contact with family and acquaintances is important for the well-being of older persons in nursing homes (Niemelä et al., 2019). Opportunities to maintain contacts can be expanded through the use of digital systems. Telepresence robots offer a new additional option. A telepresence robot is a freestanding system on wheels that has a camera, speaker, microphone, and LCD screen and can be remotely navigated in a remote environment while providing two-way video and audio transmission. However, widespread use of telepresence robots in old-age and nursing institutions has not yet been established in Switzerland (Seifert & Ackermann, 2020). The introduction of new technologies is hindered e.g. by high acquisition costs or a lack of digital skills. Consequently, there are still only a few practical examples of the use of telepresence robots in nursing institutions for elderly.

#### 2. Method

In the context of the study presented, findings were obtained on the basis of a scientifically accompanied pilot deployment of a telepresence robot in a nursing institution for elderly. For the pilot project, a telepresence robot (model "Beam" from the company GoBe Robots [www.gobe-robots.com](http://www.gobe-robots.com)) was deployed. During the pilot, the telepresence robot could be used by residents and relatives for communication. The company raumCode ([www.raumcode.ch](http://www.raumcode.ch)) provided the telepresence robot and took responsibility for the technical implementation and support during the pilot. A total of 30 calls were made during the test phase, which lasted approximately 20 minutes on average ( $M = 19.36\text{min}$ ,  $SD = 9.45\text{min}$ ). For evaluation purposes eight semi-structured interviews were conducted, three with residents, three with the respective relatives and two with the home's management and nursing staff. The interviews were conducted by telephone, Zoom or via GoBe "Beam" and recorded. For the analysis of the interviews, the content-structuring qualitative content analysis was chosen.

#### 3. Results

The results show that the use of GoBe "Beam" in the care institution led to a better conversation experience between the relatives and residents and could contribute to a positive mood. Calls that took place via GoBe "Beam" could not replace real contact, but they made relatives and residents feel closer to each other and conversations were experienced as more personal than on the phone. Relatives pointed out that the attention and participation of the residents was higher during the conversation via GoBe "Beam" and the interactions lasted longer than on the phone. Furthermore, the use of a telepresence robot in the care institution did not result in any great additional effort for the administration or for the nursing staff. The demands on the technical know-how of the staff were also low. During the test phase, relatives and residents appreciated the possibility to use the telepresence robot spontaneously. It is important that the relatives are motivated to use GoBe "Beam", as it is they who initiate the contact.

#### 4. Conclusion and Limitations

The pilot study showed that the use of telepresence robots in the context of nursing homes for communication between residents and their relatives is promising. For a long-term use, however, further uncertainties have to be clarified. For example, the question arises which further use cases would be useful, and from this it should be further derived which additional functionalities a telepresence robot should offer. However, the number of users was low during the test run. The competence requirement for the use of the telepresence robot lies in particular on the side of the relatives. They need basic skills in the use of IT tools. For example, software must be downloaded. Furthermore, it should be investigated how the telepresence robot can be integrated into the physical as well as organisational environment without any problems. This includes, for example, dealing with lifts, doors and policies.

#### 5. Relevance to congress theme and relevant UN SDGs

In the study, the UN SDG Goals 9 “Industry, Innovation and Infrastructure” and 16 “peace, justice and strong institutions” are addressed. Developing and introducing useful social robots offers perspectives for technological as well as market gains. Furthermore, the realization of the potential of such robots depends on the responsible participation of users, technology companies, and the political and social spheres. As well, the topic matches to the EAWOP Topic Area 19) Work patterns and conditions as well as to 16) Technology (Human-Robot-Interaction).

*Keywords: Social Robotic, Care for the elderly, Telepresence*

## Oral presentation OP388

### Temporal Understanding of Meaningfulness: A Cross-Discipline Structured Literature Review and Topic Analysis

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science&practice

The concept of work meaningfulness, defined as the perception or experience that one's work is positive and significant (Pratt and Ashforth 2003), has gained traction in both academic (Rosso et al. 2010) and public discourses. Work meaningfulness is associated with positive outcomes for both individuals and organizations, including increased levels of well-being, talent retention, and goal accomplishment (Allan et al. 2019; Rosso et al. 2010). Given these positive outcomes, it is worrying that an increasing number of employees experience low meaningfulness, and that the literature to date cannot yet answer questions as to the temporal dynamics of how meaningfulness may develop, stabilize, decrease, be restored etc.

Researchers have conceptualized meaningfulness as a relatively stable experience, as well as an in-the moment experience with possibly daily fluctuations, and highlighted the role of temporal cognitions in the meaningfulness process (Tommasi et al. 2020). Yet, knowledge on the temporal nature of meaningfulness is limited, in part because discussions take place within disciplinary boundaries in the fields of (cognitive) psychology, organizational behavior, management, sociology, ethics, etc. To address this research gap, we review the literature on temporal aspects of work meaningfulness from various research disciplines to: 1) identify key topics of interest and current trends, 2) achieve an overview of what is known, and unknown, in different fields, and 3) discuss the future of this nascent field of inquiry.

To address these objectives, we combine a structured literature review with citation analysis, a topic modelling approach based on machine learning technique (Blei 2012), and a manual review of articles. The corpus comprised articles indexed in Scopus and Web of Science (WoS). The initial search yielded 30,442 documents, which we will further analyze through an iterative process based on inclusion and exclusion criteria to achieve a final sample.

Initial results indicate a growing interest in the temporal understanding of meaningfulness, highlighting the significance of a review to integrate findings from diverse research fields. In general, researchers in the fields of sociology, organizational behavior, and business ethics have generally focused on work meaningfulness as a steady mindset, while scholars in psychology have also established an episodic/fluctuating conceptualization (Tommasi et al. 2020). More detailed analyses through a topic modeling procedure will further examine latent topics and patterns in published documents and map the distribution of topics over time.

A structured literature research using machine learning technique has the advantage over a traditional literature research that it can cover a wider scope of articles, and automatically detect latent and underlying patterns that are not visible when scanning these articles manually (Hannigan et al. 2019). Similar approaches in related fields (e.g., digital technologies, blockchain) have demonstrated that a structured literature review is beneficial when the field of research is broad and unstructured. These conditions are particularly applicable to the field of work meaningfulness and we envision the results of our work to contribute to the development of the field by integrating the knowledge from different disciplines and outlining opportunities for future research. Ultimately, we hope that increased insights into the temporal nature of work meaningfulness can help the

generation, maintenance, and restoration of work meaningfulness among people in society at large, so as to facilitate general well-being and mental health.

*Keywords: Meaningfulness, Temporal, Review*

## Oral presentation OP626

### Testing the effects of an intervention aimed to increase civility in Swedish workplaces

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Research goals and why the work was worth doing

Over the past two decades, research has demonstrated that workplace incivility is a ubiquitous work environment issue, which can have deleterious consequences for both individuals and organizations (Schilpzand et al., 2016; Cortina et al., 2017). Workplace incivility refers to low-intensity rude behavior in the workplace (Andersson & Pearson, 1999). The effects of incivility can be far-reaching, as it may spread in the workplace (Fouk et al., 2016; Holm et al., 2021).

One promising avenue to address incivility has been the use of civility interventions. Actively promoting civility in the workplace may reduce the risk for incivility, and increase civility and respect (Leiter et al., 2011; 2012). However, recent research has shown less consistent results of civility interventions when applied in other cultural contexts than North America (e.g., Sawada et al., 2021), or in other workplaces than hospitals (e.g., Grantham, 2019). More information is therefore needed on the effects of implementing civility interventions in the workplace, particularly exploring mechanisms and moderators in the intervention process. The aim of the present study is to test the effects of an intervention aimed to increase civility in Swedish workplaces.

Theoretical background

The present study is based on the principles developed in the Civility, Respect and Engagement in the Workplace (CREW) intervention (Osatuke et al., 2013). CREW was developed by the United States Department of Veteran Affairs in 2005. CREW was a culture-based workplace intervention promoting civility in the workplace in the departments' VA-hospitals, with documented successful outcomes (Osatuke et al., 2009). Two research studies tested the effect of the CREW intervention in hospitals in North America, showing both short- and long-term effects of the intervention on workplace behavior, attitudes, and absence (Leiter et al., 2011; 2012). However, little is still known about how civility interventions operate in other contexts than hospitals, and which mechanisms or boundary conditions that influence the impact of civility interventions.

Design/Methodology/Approach/Intervention

The present study has a quasi-experimental waitlist-control design. Participating workplaces are assigned to one of two conditions, an intervention condition or waitlist. The intervention group participates in a series of monthly workshops during the period of September 2022 – January 2023. The workshops address topics such as workplace culture, with the aim to promote workplace civility and reduce the risk of workplace incivility. The waitlist serves as the control group. Pre- and post-surveys are conducted to investigate possible effects of the intervention on measures of workplace (in)civility, norms for civility, social work environment factors, as well as work-related well-being.

Results (expected)

Baseline survey data have currently been gathered from about 200 individuals across 13 workplaces in a Swedish municipality. The intervention group is currently undergoing the workshop series. The follow up post-survey is planned for January of 2023. When post-measures have been completed,

possible change in measures of workplace civility, norms for civility, and workplace incivility will be explored. Change in social work environment factors, as well as work-related well-being, will also be explored. The intervention is expected to result in increased civility and norms for civility, as well as reduced incivility over time.

#### Limitations

Workplaces were not assigned to the intervention or control condition via cluster randomization. Instead, it was based on practical aspects such as feasibility and scheduling in the participating organizations. Moreover, the follow-up measure is carried out only a few weeks after completion of the final workshop. Possible effects on behavior or well-being may take longer time to develop. Lastly, the measures are self-reported by participants.

#### Conclusions – research and or practical implications/Originality/Value

Results from the post-measure surveys will be presented at the congress. The originality of the project lies in exploring the effects of an updated version of a civility intervention, in a context outside of hospital settings in North America. The study will also provide information about potential mechanisms and moderators involved in the intervention process. Practically, the knowledge that results from the study could be of use in future attempts to improve the social work environment in workplaces by working with the workplace culture.

#### Relevance to the Congress Theme

The study is relevant to several of the congress themes, e.g. 6. Group dynamics, 8. Organizational design and development, 15. Stress and dysfunction, and 18. Well-being.

#### Relevant UN SDGs

Goal 3. Good health and well-being

Goal 8. Decent work and economic growth

*Keywords: workplace civility, workplace incivility, intervention*

## Oral presentation OP317

### The activities system of unemployed persons: regulations and deregulations

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In response to the questions raised by the relationship between life at work and life outside of work, the theoretical model of the activity system has been developed in France by Curie & Hajjar. It makes it possible to account for the way in which the individual signifies, objectifies his activities. The system is made up of three subsystems (family; personal and social; professional) which are both autonomous (own goals) and interdependent (exchanges between the subsystems). The regulation between these three subsystems is determined by an interweaving of external and internal elements, which we mean to broach through the activity system inventory.

The activity system inventory (ISA) is a French questionnaire developed by Curie & Hajjar. Within the framework of an action-research with the French work support place, Pôle Emploi (equivalent of jobcentre in the UK or employment agency), the aim of our research is to standardise a version of the ISA adapted to jobseekers in order to understand deregulations and regulations during unemployment. This version of the ISA is based on previous qualitative research with 14 unemployed people (Cimier, 2021). The French employment agency is regionalized. Nine out of the thirteen French region are participating in this study. A total of 158 occupational psychologist from those agencies administered at least 2 questionnaires. Those occupational psychologists assist unemployed people to help them to elaborate a reflection related to their future. Their target population, which is also ours, is long term unemployed people. We collected more than 350 questionnaires through the psychologist cooperation.

In our paper we will present the tool which is composed of three exercises. The first exercise deals with the action model made up of the individual's priority objectives in the different spheres of life. The second exercise allows us to determine the model of life made up of what the individual values most in the different spheres. Finally, the third exercise concerns the activities carried out, suspended, and thwarted, which testify to the activation and inhibition of the overall system. In order to refine the variables of aspirations (exercise 1) and valuations by spheres of life (exercise 2) to formalise this activity system inventory for unemployed people, we use three scales with proven psychometric qualities: the General Health Questionnaire (Goldberg & Hiller, 1979); the Meaning at Work (Arnoux-Nicolas, Sovet, Lhotellier & Bernaud, 2016) and the Locus of Control (Rotter, 1954). The final tool will be made available to occupational psychologists at the Pôle Emploi for coaching purposes. The first results show that imbalances in the life model and the action model lead to a loss of meaning at work and a feeling of poor perceived health. They show that these imbalances are not systematically sources of pathologies of the global system, but can be a sign of future development of activities. We will also present the final developments of our tool.

*Keywords: unemployment - activities system*

## Oral presentation OP95

### **The association between collective orientation and team flow: the mediation effect of teamwork-related stressors and resources**

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#### Research Goals

Flow is often experienced under stress-related conditions and associated with improved performance and well-being (Rijavec et al., 2017). Moreover, there is first evidence that flow on the team level is also associated with better performance outcomes (van den Hout et al., 2019). This could be important especially in the firefighting context where teamwork is indispensable and bad performance or failure can have severe consequences. Increasing team flow could enhance the performance in these teams. To do so it is necessary to find out which factors influence flow at the team level. Our study explores the associations between team flow, typical teamwork-related stressors, and resources as well as the role of collective orientation.

#### Theoretical Background

Team flow has been described as a shared experience of flow within a team that occurs while working on interdependent personal tasks (van den Hout et al., 2019). While different workplace stressors and resources demonstrably affect individual flow (cf. Peifer & Wolters, 2021), research about influencing factors considering the team level is scarce and heterogenous. Firefighters work under extremely challenging conditions and rely on functioning teamwork processes, thereby constituting a promising sample for examining team flow and its contributing factors. Our study explores if the experience of typical teamwork-related stressors and resources experienced during firefighting missions influence the frequency of team flow. Moreover, we examine the role of collective orientation. Highly collectively orientated people pay more attention to their team members and show better coordination processes (Driskell et al., 2010; Hagemann, 2017). Therefore, we wanted to know if collective orientation affects the experience of teamflow, teamwork-related stressors and resources.

#### Methods

An online questionnaire was implemented in Germany which addressed firefighters from different areas. The frequency of experienced teamwork-related stressors (e.g., delayed disclosure of information), and resources (e.g., knowing mission tactics) during firefighting missions were elevated with a recently developed questionnaire based on expert interviews and a document analysis. Team flow was measured with self-constructed items based on the Flow Short Scale (Rheinberg et al., 2003) and the Team-Flow-Monitor (van den Hout et al., 2019). Collective orientation was also measured (Hagemann, 2017) as a potential predictor of team flow and of teamwork-related stressors and resources. The final sample consisted of 317 experienced firefighters.

#### Results

Multiple regression analyses showed that the more often firefighters experienced stressors of teamwork (e.g., problems regarding leadership or lacking shared mental models) the less often they

experienced team flow. Conversely, the experience of resources of teamwork (e.g., good communication and shared mental models) was associated with more frequent team flow. Collective orientation was positively associated with team flow. This relationship was mediated by frequency of experienced stressors and resources of teamwork. Here, collective orientation was associated with less frequent experience of teamwork stressors and more frequent experience of resources.

#### Limitations

Data was collected in a cross-sectional design. Therefore, other directions of action cannot be excluded. For example, the frequent experience of teamwork-related stressors could lead to a lower collective orientation as this attitude is amenable to experience and training. Furthermore, a retrospective survey was used, so that biases due to long professional experience may have occurred.

#### Conclusion

Our study provides empirical evidence that team flow is affected by the experience of stressors and resources of teamwork, suggesting additional conditions and characteristics in team flow compared to individual flow. Conditions of team flow therefore need further investigation in different contexts. Since team competencies can be trained, the study offers concrete approaches for interventions that strengthen teamwork and thus increase team flow. These can be applied not only to firefighters, but also to teams in other professions. Collective orientation is positively associated with team flow. This relationship is mediated by the experience of resources and stressors. Again, this relationship should be addressed in future research with an experimental setting.

*Keywords: Collective Orientation, Team Flow, Teamwork Stressors and Resources*

## Oral presentation OP158

### **The association between hospital physicians' working hours and on-call work with wellbeing. A cohort study with survey and register linkage**

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#### Research goal

The aim of this study was to investigate the associations between actual working times and on-call work with sickness absence, occupational injuries, and wellbeing among hospital physicians.

#### Background

Health care services run at all hours. Hospital physicians are required to be on call at the workplace in addition to normal working hours. Earlier survey research has linked physicians' long working hours to many negative outcomes, such as sleep problems, work-life conflict, and needle-stick injuries. To our knowledge, no prior study had used long-term data on physicians' realized working hours to analyze the associations between working hour characteristics and wellbeing.

#### Methodology

This study included twelve Finnish hospital districts with working hour data from 14 704 hospital physicians (2005–2019) whereof 2 845 physicians (64% women) had a short sickness absence (1–3 days) and 556 physicians (64% women) an occupational injury in the Finnish Workers' Compensation Center data. These data were analyzed using case-crossover methods with conditional logistic regression analysis with 28-day exposure and control windows for the short sickness absences, and 7-day windows for the occupational injuries. The cross-sectional survey data on sleep, work-life conflict, and work pace in 2015 included 892 physicians (62% women) from three hospital districts in the Finnish Public Sector study. Survey responses were linked with working hours from preceding 91 days and analyzed with multinomial logistic regression analysis adjusted for age, sex, hospital district, marital status, number of children, stressfulness of the life situation and control over working hours.

#### Results

Frequent ( $\geq 5$  vs. none)  $>12$ h work shifts (OR 2.54, 95% CI 1.68–3.84), frequent  $>24$ h continuous work periods (OR 2.62, 95% CI 1.61–4.27), frequent on-call shifts of any length (OR 2.15, 95% CI 1.44–3.21) and frequent short shift intervals ( $<11$ h, OR 12.61, 95% CI 8.88–17.90) were all associated with higher odds of short sickness absence.

Having had 3–4 on-call shifts during the preceding 7 days was associated with higher odds of occupational injury (OR 3.54, 95% CI 2.11–5.92) as well as having had 3–4 long ( $>12$ h) work shifts (OR 2.14, 95% CI 1.11–4.09) compared to zero such work shifts. An increasing number of several consecutive workdays was associated with higher probability of occupational injury in a dose-response manner, whereas increasing number of  $\leq 12$ -hour work shifts associated with reduced likelihood of occupational injury (OR 0.79, 95% CI 0.64–0.98).

Frequent night work ( $>6$  shifts/91 days) was associated with short sleep ( $\leq 6.5$ h, OR 1.87 95% CI 1.23–2.83) compared to no night work. Long weekly working hours ( $>48$ h/week) were associated with perceived insufficient sleep (OR 1.78 95% CI 1.15–2.76) compared to short weekly ( $<40$ h/week)

working hours. Frequent on-call duties (>12 duties/91 days, OR 2.00 95% CI 1.08–3.72), frequent night work (OR 1.60 95% CI 1.09–2.37), and frequent short shift intervals ( $\leq$ 11 hours; >12 times/3 months, OR 1.65 95% CI 1.01–2.69) were all associated with insufficient sleep compared to having not at all the working hour characteristic in question. Frequent night work associated with increased odds for difficulties in initiating sleep (OR 2.43 95% CI 1.04–5.69) but otherwise sleep difficulties were not associated with the studied working hour characteristics.

Although actual working hours of over 40 or over 48 hours on average per week were not associated with work-life conflict, self-evaluated similar average working hours were associated with having work-life conflict (OR 2.46 95% CI 1.60–3.79 and OR 2.90 95% CI 1.92–4.63, respectively). Self-evaluated >48-hour work weeks were also associated with perceived time pressure at work (OR 2.99 95% CI 1.92–4.63).

#### Limitations

Register data did not include possible working hours outside the studied hospital districts, whereas the self-estimated working hours included all the work done, including, e.g., the private sector. The register data did not allow analysis between different medical specialties. These results are likely generalizable to other EU countries that comply with the EU Working Time Directive, whereas other countries may have different legislation for maximum working hours and minimum rest periods. Survey response was available from less than 40% of the physicians.

#### Conclusions

To maintain hospital physicians' wellbeing and occupational safety, long work weeks and long work shifts should be avoided, and amount of short shift intervals and night-time on-call shifts should be reasonable.

*Keywords: working hours, sickness absence, occupational injury*

## Oral presentation OP435

### The association between well-being, coping strategies, and thoughts about their career among Hungarian employees

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science&practice

The aim of the study is to extend knowledge of the well-being and coping strategies of employees in distinct career stages and indicate further applications and how they identify challenging situations at work.

World Health Organization (2018) defined mental health as a state of well-being in which one can discover one's abilities, is able to cope with the normal level of stress, is productive at work, and adds value to their company. Positive psychology is a useful approach when trying to enhance employee well-being, since it helps us to understand better the „dark” and „bright” side of human behavior, emotions, and cognition (Seligman et al., 2005). There are several theories with different aspects and elements. The current study focuses on multidimensional models of well-being, which highlight the importance of career and work-related success (Seligman, 2011; Rath & Harter, 2010; Marsh et al., 2020). Besides the positive effects of increased well-being, also advanced coping strategies result from positive emotions (Fredrickson & Joiner, 2002) and prevent setbacks (Fava & Ruini, 2003). Just like human behavior, neither well-being nor coping with stress and challenging situations are black or white. Researchers claim that employees and their preferences may change as they face different development stages during their career, which suggests developing personalized interventions and programs instead of general ones (Veiga, 1983; Darcy et al., 2012).

Cross-sectional research was conducted to analyze a) the relationship between well-being, experienced career crisis, actual and desired career stage, and coping strategies, b) how well-being explains the variance of an experienced crisis, c) how coping strategies explain the variance of well-being. The study sample included 457 actively working Hungarian employees. Instruments used in the research were Wellbeing Profile (Marsh et al., 2020) (WB-Pro, 15 items), Brief COPE (Carver, 1997) (28 items), and own items regarding participants' thoughts regarding their career.

Results show weak or moderate relations in the case of correlations. However, regression models mean sufficient evidence to highlight the importance of tailored development of coping strategies and well-being factors to enhance the level of well-being and lower experienced career crises. We developed two models to describe the connections between Well-being components and Coping strategies and Experienced crisis and Actual career stage. Structured Equation Modeling confirmed our models and showed very good fit indicators. In conclusion, our findings have further strengthened our conviction that career and work-related experiences play a vital role in employees' well-being which are consistent with the well-being theories of Seligman (2011) and Rath and Harter (2010).

The research has some limitations. We consider cross-sectional research a good choice for this research to explore whether there are any relations between the variables. However, in the future we aim to use longitudinal design to enhance the reliability of our findings and test whether these connections are stable. Furthermore, the reliability of Brief COPE was not as good as we hoped. This also suggests the use of other coping surveys when conducting further research.

These findings may help practitioners to identify challenging situations at work, elaborate customized programs, and apply targeted interventions instead of using general solutions. On the other hand, our observations have several implications for research into the analysis of career-lifespan, challenges at the workplace, and enhancement of workplace well-being.

This study is the first step towards enhancing our understanding of characteristics of well-being and signature coping strategies among employees in Hungary. Although there is room for further research, these suggestions might be helpful for practitioners and organizations when planning career development, well-being programs, or interventions.

*Keywords: employee well-being, work stress, coping strategies*

## Oral presentation OP712

### The Benefits and Boundaries of a Remote Positive Self-leadership Intervention

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science

#### Goals

At the start of the COVID-19 pandemic, non-essential workers were suddenly forced to work from home and integrate their work and home lives in times of great uncertainty. This accelerated switch to teleworking has led to a new standard of work in which online interaction is ever more important. However, simultaneously managing home and work demands can induce burnout symptoms such as exhaustion, especially among women (Meyer et al., 2021). The aim of this study is to test the effectiveness of an online intervention that combines strengths use with self-leadership in reducing burnout symptoms, compared to a control group. Taking a process-oriented approach, this study also aims to examine whether the intervention effects depended on subjective and objective adherence, including days of participation, how well instructions were followed, effort put into the assignments, and post hoc perceptions of the intervention.

#### Theoretical background

Self-leadership interventions consist of training cognitive and behavioral strategies with which people positively influence themselves to behave and perform towards the outcomes they desire (Unsworth & Mason, 2012). According to positive psychology and strengths use theory, interventions that encourage proactive behaviors by focusing on positive individual traits and valued subjective experiences can increase well-being and prevent ill-being (Bakker & van Woerkom, 2018). With the capacity to identify and use personal strengths, people can visualize a positive vision of themselves and utilize their strengths to achieve goals that are aligned with that vision. In this study, we integrate strategies of self-leadership with personal strengths to develop and test the first online positive self-leadership intervention. We predict that intervention participation will reduce burnout symptoms compared to nonparticipation, and that intervention effectiveness relates to adherence, effort, and interest.

#### Design

This study consisted of three measurement points (baseline, posttest, and follow-up) and one intervention week. 187 eligible Dutch workers (54% female, 45% male, 1% unspecified; age 19-77,  $M = 42.43$ ,  $SD = 14$ ) completed the baseline survey, after which the sample was randomly split into experimental and control groups. At baseline, all were asked to provide demographics and respond to scales measuring work and wellbeing-related measures about the past week, including information about their current work situation due to the lockdown. In the following five-day workweek, the experimental group received daily assignments containing positive reflections on their work the current day and a positive goal-setting assignment for the next day. After the intervention week and two weeks later, participants were asked to respond to the baseline survey again, including questions about their experiences participating in the intervention.

#### Results obtained or expected

The analyses are currently ongoing and expected to be finalized in November 2022. Here, we present preliminary results. A 3x2 repeated measures GLM with time (baseline vs. posttest vs. follow-

up) and group (experimental vs. control) as the predictors and gender as a covariate revealed a significant GROUP \* TIME interaction on levels of burnout (  $F(2,78) = 3.75, p = .028, \eta^2 = .09$ ), such that burnout symptoms decreased in the experimental group after the intervention week whereas no change was detected in the control group, as expected. Furthermore, controlling for baseline differences, intervention adherence positively related to degrees of self-leadership skills (  $t(48) = 4.05, SE = .13, p < .001$ ) and strengths (  $t(48) = 3.20, b = .25, SE = .08, p = .002$ ) used during the intervention week, and the more interest participants had for the intervention, the more they continued to use their self-leadership skills two weeks later (  $t(15) = 3.09, b = .22, SE = .07, p = .009$ ).

#### Limitations

Limitations include the use of self-reports, which raises the issue of common method variance, and the fact that we were not able to test long-term effects of the intervention.

#### Conclusions

The emergence of telework has blurred the boundaries between home and work and caused strain for many teleworkers. These findings provide some support that some strain may be mitigated by an online positive self-leadership intervention, which researchers and practitioners can use to study and encourage positive proactive behaviors among teleworkers.

#### Relevance to the congress theme

In a changing world of work where teleworking is the new standard, it is crucial to find ways to remotely foster employee well-being and prevent ill-being.

*Keywords: Strengths use, self-leadership, burnout*

## Oral presentation OP301

### **The boon and bane of perfectionism for employees' goal progress and well-being: Psychological capital as a mediator**

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Research goals and why the work was worth doing :

It is unsurprising that perfectionism is on the rise in a world that is increasingly competitive. The workplace is a domain that is particularly affected by perfectionism, given that this context is predestinated for topics such as goal achievement, performance appraisal, and feedback. A recent meta-analysis and review on perfectionism in the workplace highlight the double-edgedness of this multidimensional personality disposition concerning a wide range of organizational variables. Commonly, researchers distinguish perfectionistic strivings, referring to high-performance standards, and perfectionistic concerns, including the fear of negative evaluation and concern over mistakes. Especially perfectionistic concerns may place employees at risk for high stress and impaired well-being. Perfectionistic strivings, on the contrary, are considered less detrimental and are even discussed in terms of adaptiveness. Comparatively little research has focused on the mechanisms that underlie the different associations of perfectionism and organizational outcomes. Knowledge of these mechanisms, however, is important to advance theory on what renders the dimensions of perfectionism adaptive or maladaptive and to support employees in coping with perfectionism in terms of interventions (i.e., coaching). From the perspective of positive psychology, we propose the generation and availability of resources as such a mechanism. In this study, we investigate whether psychological capital mediates the associations of employees' perfectionism with goal progress and well-being.

Theoretical background:

According to Hobfoll's conservation of resources (COR) theory, individuals aim to build and protect their resources. Resources are valuable because they facilitate meeting demands and achieving goals and protect individuals from losing resources. Based on COR theory, we expect that employees high in perfectionistic strivings but not those high in perfectionistic concerns are able to manage their resources successfully and thus to meet their high work demands and experience well-being. In addition, employees high in perfectionistic concerns can be assumed to have few resources. Thus, they should be vulnerable to resource loss and impaired well-being. In this study, we focus on psychological capital (PC) as a valuable resource for employees. PC, comprising the four cognitive strengths hope, self-efficacy, resilience, and optimism, is a positive developmental state that emphasizes individual's strengths and facilitates personal growth. We propose that perfectionistic strivings will display a positive indirect effect, whereas perfectionistic concerns will show a negative indirect effect on goal progress and well-being (operationalized as job satisfaction and meaning in life) via PC.

Methodology : Three waves of data, each with a time lag of two months, were collected via the German panel provider Respondi. The data collection was part of a larger project on entrepreneurship; all variables were assessed using self-report measures. For the present study, a subset of 264 employed or self-employed participants was analyzed. About half of them was female (43.6%), with a mean age of 45.34, mean weekly working hours of 35.88 and mean tenure of 10.80

years. The mediation model was tested using Mplus and bootstrapping was employed to test the significance of the indirect effects.

**Results:** The results from path analysis revealed positive indirect effects of perfectionistic strivings (T1) and negative indirect effects of perfectionistic concerns (T1) on goal progress, job satisfaction and meaning (T3) via PC (T2). Autoregressors of the T3 variables as well as positive and negative affect as control variables were included in the model.

**Limitations:** With its focus on PC, the present study investigates one specific resource. Future research may extend these findings to other resources and examine their relative predictive validity.

**Conclusions:** Perfectionism can be considered as 'boon and bane'. Our results indicate the dimensions of perfectionism are differently related to PC as a resource which is relevant for goal progress and well-being. Thus, the lack or availability of resources may be one decisive aspect for the adaptiveness or maladaptiveness of perfectionism. Given that PC is a trainable resource, practitioners may support employees high in perfectionistic concerns in building this resource. Further, our results highlight the urge to reduce perfectionistic concerns.

**Relevance to the Congress Theme :** Work is changing and so are employees: Perfectionism is on the rise among young adults. Consequently, organizations will inevitably face the assets and drawbacks of this disposition and have to consider how to deal with it.

**Relevant UN SDGs:** Our study aims to identify mechanisms that are decisive for health and well-being of employees, as well as for their productivity (goal progress) and, thus, economic growth.

*Keywords: perfectionism, psychological capital, well-being*

## Oral presentation OP247

### The boundaries of agile work: Longitudinal effects of work intensity and agility on sleep and next-day performance

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Research goals and why the work was worth doing:

The basic aim of this paper is to rigorously examine how occurrences at work in the agile/innovative setting affect sleep, and vice versa. Length, quality and consistency of sleep represent crucial factors in human energy restoration and subsequently a key predisposition to normal functioning for individuals at work, and away from it. Individuals sleep and work approximately two thirds of our lives, and sleep has important implications for workplace performance, collaboration and general well-being. The '24/7-on' society with a high emphasis on high intensity workload, the need for adaptability and responsiveness to change, and the innovation imperative at workplaces have made these issues even more highlighted. Our lives, and thus sleep patterns, are 'now more complicated than they were', leaving people disrupted and disorientated, with crucial effects on how individuals behave at work. We posed the following research question: What is the relationship between sleep and workplace occurrences (perceptions and performance), and vice versa, in the context of agile work?

Theoretical background:

Recent meta-analyses and systematic review articles on this matter are insightful, however, several crucial shortcomings related to research linking sleep and work are identified:

- 1) Previous reviews were predominantly based on cross-sectional studies and consequently do not allow for causal inferences.
- 2) The body of literature focused on the relationship between work and sleep usually focuses on only one aspect of a potentially reciprocal relationship between the two; only examining work as an antecedent of sleep, or vice versa, but not both simultaneously.
- 3) Methodologically, there is a clear dearth of research on work and sleep association that would be applying objective measures of sleep, especially in a natural sleep environment, and do so in connection with real-life work phenomena.
- 4) Theoretically/content-wise, while studies have addressed the relationship between sleep and workplace performance and vice versa, there is an important thematic gap in the literature related to assessing workplace performance in the context of agile, creative, innovative knowledge work.

Design/Methodology/Approach/Intervention:

We used objective measures for sleep (via clinically-validated devices, i.e., Dreem bands) in a natural sleep environment, combining them with daily (morning and afternoon) experience-sampling-method(ESM)-based perceptions and participants' experiences in a real-life work setting (14 days and nights per participant). We implemented this research design on a sample of 67 employees that experience agile and innovative ways of working in six service companies based in Slovenia. Data were analyzed with longitudinal (multi-level) modeling using MLmed.

Results obtained or expected:

Preliminary data analyses indicate that work intensity and required agility predict higher levels of strain and stress, and cause lower levels of sleep efficiency, REM and deep sleep. However, we could not find effects on next-day creativity, individual innovation, work focus or work performance. This might indicate that important boundary conditions of the work and sleep relationship unfolding over time in this context might play a role, such as employee personal characteristics (e.g., proactivity, resilience) and job/contextual characteristics (e.g., autonomy, task interdependence, social support, skill variety, psychological safety).

Limitations:

Self-reported and shortened measures in the ESM part of the data collection with daily surveys. Possibility of stronger effects in more extreme cases of agile work.

Conclusions – research and or practical implications:

The main contribution is in treating the relationship between sleep and work in a reciprocal, possibly recursive manner. Using objective measures for sleep, combining them with daily experience-sampling-based perceptions and participants' experiences in a real-life work setting over time, we capture the causality in the basic relationship between sleep and work. Our research addresses the paradox that agile work was set up to foster innovative work and beneficial outcomes, yet previously underexplored adverse effects related to individuals' strain, stress, burnout and negative outcomes. This contributes theoretically and empirically by enhancing our understanding of the true nature of the work-sleep relationship, practically allowing for managers and organisations to the organisational context in a way that improves the potential for high-quality sleep of individuals with different sleep patterns and profiles, maximising their well-being on the one hand, and work outcomes on the other.

Relevance to the Congress Theme:

Our study provides a valuable insight on one's coping with work demands and well-being in the changing world of work that tends to be increasingly agile and requires creativity and innovation.

*Keywords: sleep, agility, performance*

## Oral presentation OP683

### THE BURNOUT EXPERIENCE OF UNIVERSITY TEACHERS

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#### Introduction

The job of a university teacher has suffered important changes in the last few decades. Many lecturers have to devote part of their working hours to prepare their classes, to do research in a very competitive way (“publish or perish”), to be in charge of multiple administrative tasks and, in some cases, also to do managerial functions at their department, faculty or university or at their research group.

Traditionally, it was economically recognized profession and had social prestige. It was a healthy job as it was free from both ergonomic and psychosocial risks at work. Recently it has changed to become highly competitive, its social status has diminished and for many lecturers and researchers the working conditions now include precariousness, instability, insecurity, among other psychosocial risks. Those higher demands and lower compensations are responsible for the high levels of stress and burnout.

Burnout can be defined as a state of emotional and physical exhaustion. It can happen when the employee experiences long-term stress in their job or when the job itself is physically or emotionally draining for a long time. Thus, burnout appears as a prolonged response to chronic interpersonal stressors on the job. In our context, university teachers may feel overwhelmed, helpless, cynical about the people they work with or negative about their own achievements. Maslach (1982) defined burnout as a psychological syndrome involving emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment that occurred to professionals who work with other people in challenging situations.

Our aim is to identify the psychosocial factors and other variables to predict the severity of burnout in university teachers and researchers. The theoretical framework consists of “demand-control-social support” (Karasek, Theorell and Johnson, 1990) and the “effort rewards” model (Siegrist, 2002). According to that, the psychosocial risks of university teachers in a University at the south of Spain (University of Granada) have been analyzed. A multiple regression analysis was run to predict the severity of university teachers’ burnout.

#### Method

The questionnaire COPSQ-ISTAS 21 was administered to a convenience sample of 1735 teachers and researchers from the University of Granada (Spain), 769 females and 953 males (13 did not report their sex). 1537 were teachers and researchers, 109 only teachers and 89 only researchers. 275 were up to 31 years old, 471 were between 31 and 45 and 984 were older than 45.

The main psychosocial risks suffered by university teachers in Spain are the insecurity about their working conditions (M=3.731), insecurity about employment (M=3.505), quantitative demands (M=3.378), double presence (M=3.212), role conflict (M=3.158), demands to hide emotions (M=3.083). The rest of the dimensions scored lower than 3 in a 5-points scale.

Mean contrast analyses were run between each of the 15 dimensions of COPSOQ-ISTAS21 and sex, age and type of function, and those statistically significant were included in the multiple regression analysis (stepwise). The result was the burnout was predicted in a 49.6% by a set of variables as double presence, emotional demands, sex (female), age (younger), pace of work, support from superiors, role conflict. Other variables act in a protective way against burnout as group feeling, meaningful work and influence.

#### Limitations

The number of participants was limited and a convenience sample was used, and it is a cross-sectional study, what reduces the generalizability of these results. In addition, further developments of this research would study the consequences in health and well-being for workers with conventional hours (e.g., weaker decrease in well-being) and workers on rotating shifts (e.g., stronger decrease in well-being), for instance, during the weeks following a vacation time.

#### Conclusion

Currently, the job itself of a university teacher as it is conceived in most universities reflects a wrong organization that causes burnout in many professionals. Psychosocial factors related to the job itself can be identified. In many cases teachers must cover simultaneous demands from work and family, with a feeling of failure in one or both demands, the need not to express their own opinions at work, the high pace of work because quite often the deadlines are too short or they have to do many different tasks (teaching and research...) at the time. This situation is more severe when there is lack of support from superiors, and when there is a role conflict (how much energy is put either in teaching and research or in their family life) . This burnout experience is worse for females and younger teachers, what reflects a gender issue. On the other side, other factors may protect the teacher from burnout, such as the feeling of belonging to a group, considering that one's work is meaningful and useful and the capacity to make decisions about the content of the job.

*Keywords: Burnout, university, psychosocial risks*

## Oral presentation OP695

### **The case of the WOP-P mentorship program: an organizational intervention to reduce acculturative stress in international education.**

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practice

#### 1. Research goals and why the work was worth doing

In this paper, we analyse the case of the “WOP-P Peer Mentorship Program”, a program designed and developed by master students[NMM1] . The program is oriented at providing peer support (practical, social, emotional) and alleviate feelings of acculturative stress and anxiety among international first-year master students. Herein, incoming students (“Mentees”) are partnered with a volunteering second-year student (“Mentors”) who provide support through regular meetups and social events. The main goal of the program is to provide guidance and support for [NMM2] first-year students from their peers in the second year. Furthermore, mentors can provide tacit academic knowledge and detailed practical advice that allow mentees to develop essential competencies and social skills in their new environment. In fact, peer mentorship programs have been shown to improve student academic performance, which is one of the expected results. [NMM3]

#### 2. Theoretical background

International university students face several personal and social challenges when moving away from their home country. [NMM4] Such transition may be associated with feelings of anxiety, homesickness, or depression, which have been conceptualized as acculturative stress. Ultimately, this may exacerbate the mental and physical health of the students. And indeed, international students seem more vulnerable for negative effects on mental health and wellbeing compared to domestic students. Previous literature suggests that a strong social support system can help to navigate stress associated with such transition. Mentees of the peer mentorship program will have the chance to experience a series of psychosocial benefits through friendships, role modelling, identity development, socialization, and academic advice from their mentors.

#### 3. Design/Methodology/Approach/Intervention

Previously, mentors were trained in mentoring competitions.

A mixed-method approach was used to assess the efficacy of the program. Questionnaires were passed and interviews were conducted with the participating mentees (N= 26) before, during and at the end of the first academic year. Their level of acculturative stress was assessed using the Acculturative Stress Scale for International Students with 36-items. Their perceived social support was assessed using the Index of Sojourner Social Support Scale (ISSS) with 18 items.

Additionally, interviews were conducted go uncover pros and cons of the mentorship program.

#### 4. Results obtained or expected

Although the quantitative data did not show significant differences between the three measurements, the interviews conducted showed a positive assessment of the program and its contribution to the adjustment of the mentored students towards the new international academic environment. In addition, the program contributed to the development of professional competencies

of the mentors. Lastly, the mentorship program helped creating an international social network between 1 st and 2 nd year students, that was beyond the goals of the program.

#### 5. Limitations

In the present study, the Number of participants was limited to the scope of the program. Further, the support for the effectiveness is limited to qualitative data. Future efforts in assessing the program could exploit qualitative data methods (e.g. focus groups) to explore the contributions of the program. Further, a control group would have provided further support for the efficacy but was disregarded out of ethical reasons.

#### 6. Conclusions – research and or practical implications/Originality/Value

The case study shows the potential of support systems (peer mentoring) to improve the well-being of international students; an initiative that was taken by students who changed the narrative from a problem-focused approach towards a positive approach by focusing on the members' potentials. It also contributes to the improvement of mentors' competences and through fostering networking opens the possibility for the construction of a professional support network. Such systems, through accumulating knowledge and ideas, may increasingly adapt to the needs and opportunities of the context and develop continuously. Additionally, peer-to-peer support programs reduce the burden on the coordinative and administrative staff of the master.

#### 7. Relevance to the Congress Theme and Relevant UN SDGs

Well-being & health. The result of this programme can be a valuable case study for providing support to international students/workers that have to face the move between culturally different countries.

*Keywords: Peer to peer support, acculturative stress, international students*

## Oral presentation OP234

### **The co-construction of transparency and accountability in teams: the mediating use of digital project management tools**

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#### Research goal

The goal of this study is to examine how transparency and accountability are co-constructed using mediating technologies in the context of project management. It is relevant for understanding the dynamic relationship between transparency and accountability, and how this relationship is shaped by the current virtual work context.

#### Background

Accountability is a social relation, where one party has the obligation of giving accounts of their conduct to another party that has the power of imposing rewards or sanctions (Bovens, 2007), and as such, accountability is central to project management (Leong, 1991). Burga and Rezanian (2017) show that accountability in project management is enacted by dynamic processes involving not only people, but also artifacts (e.g., the building under construction, and digital communication tools) that disclose information about the progress of the project.

In recent years, it has become a common approach for organizations to use digital technologies to disclose information about organizations' inner workings, thereby creating transparency to achieve positive accountability (e.g., Bertot et al., 2012). Some scholars (e.g., Hansen & Flyverbom, 2015) criticize this approach for ignoring the role of technologies in allowing the selection and manipulation of information and shaping the production of transparency. Moreover, Heimstädt and Dobusch (2020) highlight the limitation of using transparency and accountability as analytic concepts with predefined meaning and make a call for empirically examining "what is at stake when people claim and contest transparency and accountability" (p.7).

The use of digital project management tools (DPMTs), such as Jira and Trello, can be seen as examples of transparency-creating initiatives in the context of project management. These tools are developed to display tasks and project status and log every change that has been made. Since both clients and project teams can access DPMTs regardless of their location and time once given permission, DPMTs provide a way for project teams to make their work visible to clients, and for clients to monitor the progress of projects (Vanzin et al., 2006). Because of the centrality of demonstrating accountability in project management (Leong, 1991), the use of DPMTs affords an interesting opportunity to answer the call of Heimstädt and Dobusch (2020) and empirically examine how transparency and accountability are practically co-constructed by the mediating DPMTs.

#### Methodology

Ethnography is chosen since it provides a situated perspective on practices (Hammersley & Atkinson, 2007; Jarzabkowski et al., 2014), which makes it possible for the researcher to investigate how DPMTs are used to co-construct transparency and accountability, and the related consequences. Specifically, I followed five project teams from a Scandinavian software consultancy company over nine months in 2022 using participant observation and interviews (Spradley, 1979, 2011) and analyzed the data using thematic analysis (Braun & Clarke, 2006).

### Preliminary findings

The preliminary findings show that there is a dynamic relationship between accountability, transparency, and digital technologies, which on the one hand allows the construction of transparency and related claims of accountability, while on the other hand ties the project teams and their clients to their past transparency and keeps them continuously and mutually accountable.

Specifically, the accountability demands of clients urge project teams to make their work transparent using DPMTs, which can provide them with a historically documented justification of their conduct of work. Since project teams are themselves responsible for updating their DPMTs, they can to some extent control the produced transparency and related claims of accountability. However, this freedom of co-construction is far from unlimited. Since what is made transparent cannot be quietly changed later due to system logging, the use of DPMTs holds both clients and project teams accountable for their past conduct.

### Limitations

This study focused primarily on the perspective of project teams, and how they understand and work with their accountability relationships with their clients. However, this does not necessarily reflect clients' understanding of the same relationship, which could be explored by future studies.

### Conclusions

This study demonstrates that transparency and accountability are co-constructed by means of DPMTs. The DPMTs' specific logging holds an important role in structuring this dynamic relationship by settling the possibilities and limitations of the visible and accountable.

### Contribution to the congress theme

This study contributes to the congress theme by providing an understanding of how project management has changed with the introduction of new technologies, and the potential consequences involved for transparency and accountability.

*Keywords: Computer Supported Cooperative Work, project management, accountability*

## Oral presentation OP40

### The Conceptualization and Development of the Employee Ambassadorship Scale

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science&practice

Organizations worldwide are competing to acquire talent, as human capital is the main source of competitive advantage (Pandita & Ray, 2018). Due to shortages in the labour market, acquiring and retaining talent has not been evident. Researchers have proposed employer branding as an efficient strategy to create a sustainable workforce (Alves et al., 2020). This strategy focuses on building an employer image and transfer this image to stakeholders. Employees can play an influential role in this process as they can resonate the employer image to employees and applicants, and become ambassadors (Sengupta et al., 2015).

Despite the influential role of employee ambassadorship for the organization, this concept has received limited attention in research, which is in sharp contrast with the organizational environment. Employee ambassadorship programs are exponentially implemented (Andersson, 2019). However, their policy is not based on research and can hold negative implications for organizations (Gill, 2018). Therefore, to encourage scientific insight in this research field, we aim to create a common understanding of this concept and developing an employee ambassadorship scale.

Based on Hinkin (1995) and Podsakoff et al. (2012), we developed a five-phase methodology. First, we conceptualized employee ambassadorship based on the tripartite model of Hilgard (1980). As such, we constructed a five-dimension model of employee ambassadorship: Employer Brand Knowledge, Employer Brand Relevance, Employer Brand Affective Connection, Employer Brand Consistent Behavior, and Employer Brand Citizenship Behavior. Subsequently, we interviewed 6 actors related to employee ambassadorship and finetuned our theoretical model and definitions based on these interviews. Once we finalized our model, we began to generate items from literature, existing scales, and the interview input. Next, we represented them to the interviewees and ask them to give their opinion.

Afterward, we assessed this model and items in the second phase. To assess the content validity of the items, we conducted an item sorting exercise. To determine the factor structure, an EFA (N = 238) was conducted. Based on eigenvalues > 1 and parallel analysis, a 5-factor solution was suggested. In the third phase, the CFA confirmed the 5-factor structure (N = 257). We also investigated the tendency to respond "socially desirable". Only the moralistic response scale correlated higher than .20 and a good internal consistency was observed ( $\alpha > .85$ ; AVE > .55, CR > .80). In the fourth and fifth phase, we will assess construct, nomological, and concurrent validity by collecting a sample of 250 employees. We intend to have these results in December '22.

This study has scientific and practical implications. First, we contribute to the literature on employee ambassadorship by providing a conceptualization of employee ambassadorship. Furthermore, a validated measure of employee ambassadorship is constituted, drawing on five dimensions. This will give researchers the opportunity to shed light on this highly relevant but under-researched topic through future studies. Regarding the practical implications, organizations can take interventions to encourage ambassadorship among their employees. By measuring the five dimensions of employee ambassadorship, they can gain insights into how much knowledge, employees have regarding employer brand or how willingly they want to behave like an employee ambassador. As such, HR managers can analyse which of the five dimensions need attention and determine a plan of action.

Lastly, due to the scale, organizations will be more able to recognize employees who want to become an ambassador, which ultimately assists in attracting and retaining talent.

When developing a scale, there are limitations. First, the employee ambassadorship scale has been developed as a self-reported measure, however, by validating this scale with objective measures and control for social desirability, we counter these effects. Secondly, the samples largely included well-educated English-speaking participants, which raises a concern about the generalizability of the scale beyond these occupations. Therefore, the next step could be to validate this scale in more diverse samples and languages.

As there are shortages in the labour market and high turnover, organizations are urged to adopt strategies to attract and retain employees. As a result, organizations are encouraging employees to promote the employer image to stakeholders, which assists in attracting applicants and fosters economic growth and success. However, organizations are not supporting their policy on research, as employee ambassadorship is unexplored research field. By conducting this research, we aim to change the way organizations work regarding employee ambassadorship, support practitioners in creating an evidence-based policy for employee ambassadorship, and encourage researchers to study this topic.

*Keywords: Employer branding, Employee Ambassadorship, Scale Development*

## Oral presentation OP347

### The COVID-19 Pandemic for University Students: How Resilience and Social Support Help in Dealing with a Career Shock

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science

As a global crisis, the COVID-19 pandemic had a massive impact on the daily as well as career-related lives of individuals (Elmer et al., 2020). Consequently, it forced society to take drastic measures to reduce infection rates. Young people – being in crucial stages of their development at the beginning of social distancing – suffered from its consequences. Career planning, which is already a difficult task under normal circumstances, became even more difficult during the COVID-19 pandemic. First, young people were more preoccupied with the crisis and its consequences. Second, important experiences in relation with career planning were not always possible due to the pandemic: e.g. internships had to be cancelled. Therefore, adolescents and young adults might be less certain about their career choices.

According to Akkermans and colleagues (2021), the COVID-19 pandemic can be categorized as career shock. Career shocks are disruptive and extra-ordinary events that are, at least partly, outside the individual's control, and trigger a conscious thought process concerning one's career (Akkermans et al., 2018). The thought process triggered by the career shock and the deliberation one one's career can have a major impact on career trajectories. For example, 69% of school and college students in a study by Bright et al. (2005) indicated that chance events influenced their career decision making process. Students who aim to become teachers after their study programme (prospect teachers) might be especially influenced by the COVID-19 pandemic. On the one hand, they are influenced by the consequences of the distance learning and the decreased social contacts with their peers and professors. On the other hand, they also experience the drastic change of their future work environment in a way that they were not prepared for in their studies. Thus, it seems important to investigate how those students are affected by the COVID-19 pandemic and the career deliberation process triggered by it.

Resources could play an important role in alleviating the consequences of the career deliberation process on the confidence in the vocational choice of those prospect teachers. According to Conservation of Resources Theory (COR Theory), individuals with higher resources are less affected by challenges and career shocks. Especially resilience and support in their social networks are important resources in crises, as they help in dealing with challenges and setbacks.

Our study followed a group of German bachelor students (N=790) in a teaching degree at three time points: in January 2020, during the first period of social distancing in April 2020, when distance learning started in the universities, and afterwards in June 2020, during a period of less restrictions. We assume that students with high resilience and social support experience less career reflection processes due to the COVID-19 pandemic and are thus more likely to remain confident in their career choice.

The findings align with those assumptions: more resilient students worried less about their career as consequence of the COVID-19 pandemic. Furthermore, the thought process triggered by the COVID-19 pandemic also led to less confidence in their vocational choice. Students who worried more about their career were less confident in their chosen field of study at a later point in time. Resources –

namely social support and resilience – were also positively related to confidence in vocational choice over medium-term.

These results, underline the importance of resources in dealing with career shocks and crisis in alliance with COR Theory,. Furthermore, it shows that that thought processes triggered by career shocks have a direct influence on confidence in vocational choice, possibly influencing the career path of individuals. Since both resilience and social networks can be influenced, we recommend different measures for universities, students, and the society.

Regarding to the UN sustainable development goals, the current study shows the importance of quality education for the career paths of young adults. Young adults can profit from counselling programmes to strengthen their resilience and helping them rebuild their social networks after the COVID-19 pandemic.

The COVID-19 pandemic showed one aspect of the changing world of work: People had to quickly exchange their workplace for a home office, students and pupils had to get used to digital learning environments and the whole system had to be converted to digital solutions. That individuals' career paths are strongly influenced by this shock seems unsurprising. This also affects young people who are still at the beginning of their careers, figuring out what they want to achieve. In this context, the study can help to better understand the effects of and how to deal with career shocks. In this context, measures can possibly be taken to support young people in their career planning and career development in the face of crises.

*Keywords: career shocks, resources, COVID-19*

## Oral presentation OP108

### The Dark Side of Stardom: The Negative Implications of Star Centrality on Shared Leadership

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practice

#### 1. Research goals and why the work was worth doing

Stars employees are often highly sought after by organizations because they are believed to offer significant and disproportionate contributions. Star employees are known for their disproportionately high and prolonged performance, strong internal and external visibility, and social capital. Without much surprise, star employees garner significant attention and resources given that they often perform key roles in their team. Thus, star employees often take on informal leadership roles within teams. This raises important questions with respect to the leading-following dynamics within these teams: If star employees often take on leadership roles, how does this affect nonstars' perceptions of their own team role? How does this affect shared leadership in the team?

#### 2. Theoretical background

According to adaptive leadership theory, employees participate in mutual reciprocation of leading-following interactions that influence the formation of team role identities, which affects the shared leadership structure. Drawing from this lens, star members who are central to the team workflow (i.e., star centrality) affect their leading-following interactions with nonstars. Importantly, stars and nonstars are unlikely to equally participate in these leading-following actions. Thus, star members who occupy central network positions are likely to claim leadership roles that are granted by nonstars who claim followership roles that are reinforced by these central stars. Adaptive leadership theory suggests that these leading-following interactions facilitate the social construction of leader and follower identities that inherently provides self-relevant social information to nonstars. This invites a social comparison, which reflects thinking about information about one or more other people in relation to the self. Social comparison research suggests that nonstars make an upward comparison to central stars, given that stars are superior on at least one dimension (e.g., performance, social capital, visibility). Through this social comparison process, nonstars acknowledge that central stars are superior because they provide more inputs to others, making nonstars believe that their team members have doubts about their leadership capabilities. In turn, these leadership (underdog) expectations are associated with a decrease in the leadership claims of nonstars, hindering shared leadership within the team. Lastly, team diversity can affect these leading-following interactions and we investigate the moderating role of team cognitive diversity given that diversity affects interpersonal interactions, including the claiming and granting of leadership and followership roles.

#### 3. Design/Methodology/Approach/Intervention

Using time-separated, multisource field data collected from 517 members, 87 teams to test these team-level hypotheses.

#### 4. Results obtained

We find that star centrality has a negative direct effect on shared leadership and a negative indirect effect via leadership (underdog) expectations of nonstars. Furthermore, these direct and indirect

effects are strengthened under conditions of low team cognitive diversity, suggesting that star centrality has a stronger effect when there is little team cognitive diversity.

#### 5. Limitations

First, despite strong theoretical underpinnings for the hypothesized relationships, the data does not permit causal inferences. Future studies should employ scenario experiments to facilitate causal inferences.

Second, although our conceptualization of stars was in accordance with the stars literature, the results may not apply to other conceptualizations of stars, such as “relational stars”. Future research should investigate the effects of alternative conceptualizations of stars.

#### 6. Conclusions – research and or practical implications/Originality/Value

Organizations are in a constant state of competition, which has placed significant focus on the need to attract highly skilled talent. Although star employees can offer significant contributions to organizations, little research has investigated how star centrality can affect team dynamics within the leadership context. Our research shows that the central position of star members is negatively associated with shared leadership via leadership (underdog) expectations of nonstars, which is exacerbated when there is little cognitive diversity within the team. Thus, organizations must start to recognize that stars can have an important effect on nonstars, ultimately affecting leading-following team dynamics.

#### 7. Relevance to the Congress Theme

Star employees are highly valuable in current changing work environment. Therefore, understanding how they affect other employees is of significant value to complete in dynamic work context.

#### 8. Relevant UN SDGs

Decent work and economic growth

Partnerships for the goals

Reduced inequalities

*Keywords: Star employees, shared leadership, underdog expectations*

## Oral presentation OP392

### The Detrimental Effects of Financial Worry on Customer-Directed Counterproductive Performance

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#### Research goals

Chances are that we all experience financial worries at some point during our careers. Financial worries can stem from a number of causes (e.g., unexpected expenses, getting a divorce). The COVID-19 pandemic and the associated job loss have spotlighted the topic of financial worry. The emotional and psychological consequences of financial worry are well documented, but there is a dearth of research on its organizational consequences. Moreover, research has ignored the possibility that financial worry fluctuates over time. A negative event (e.g., unexpected expenses) can cause financial worry even among people who generally have low levels of financial worry, and once these expenses disappear their financial worries will simmer away. This study addresses both knowledge gaps. We investigate the extent to which financial worry fluctuates over time, and to what extent within-person variations in financial worry associate with within-person variations in counterproductive performance among service personnel. Due to the nature of service-related jobs, employees are more likely to direct their counterproductive performance towards customers. Accordingly, we focus on customer-directed counterproductive performance.

#### Theoretical Background

Building on the stressor-emotion model of counterproductive performance, we argue that the experience of financial worry leads to higher levels of experienced negative affect and increased customer-directed counterproductive performance. This model predicts what happens to individuals when they experience stress and is therefore suited for developing hypotheses about the within-person associations between financial worry and counterproductive performance. One of the predictions is that stressors cause individuals to experience negative affect which in turn triggers negative behavior. Accordingly, we hypothesize negative affect to mediate the within-person association between financial worry and customer-directed counterproductive performance. Another prediction that follows from the model is that control mitigates the impact of stressors on negative emotions. Hence, we test whether the strength of the within-person association between financial worry and negative affect depends on individuals' personal involvement with money. Finally, we propose a conditional indirect effect, in that the within-person indirect association is moderated by personal involvement with money.

#### Methodology

We conducted a weekly diary study among 129 employees in service jobs. Participants completed a questionnaire assessing their personal involvement with money (Level-2). One week later, participants received the first of five weekly diary surveys measuring weekly financial worry, customer-directed counterproductive performance, and negative affect (Level-1).

#### Results

Financial worry was positively related to negative affect ( $b = 0.14$ ; 95% CI[0.04, 0.25]) but not to customer-directed counterproductive performance. We found a cross-level interaction between financial worry and personal involvement with money: the positive Level-1 relationship between financial worry and negative affect was moderated by Level-2 personal involvement with money ( $b$

=-0.08; 95% CI[-0.16, -0.01]). Financial worry was only related to negative affect for employees with low (  $b = 0.24$ ,  $p < .001$ ) and average levels of personal involvement (  $b = 0.14$ ,  $p < .05$ ). Results further showed that negative affect was positively related to customer-directed counterproductive performance (  $b = 0.07$ , 95% CI[0.00, 0.13]). Unexpectedly, negative affect did not mediate the relationship between financial worry and customer-directed counterproductive performance.

#### Limitations

Since all data was gathered through self-reports the results should be interpreted with caution.

#### Implications

This study provides evidence for the stressor-emotion model of counterproductive performance in the context of financial worries and shows that worrying about one's financial situation elicits negative affect, especially among employees who are generally less involved with money issues. Organizations could develop interventions to teach employees to be more involved with their personal finances, enabling them to cope with their worries more efficiently and refrain from working out their frustrations on customers.

#### Originality

To our knowledge, no other study investigated the consequences of financial worry on customer-directed counterproductive performance. From the study we learn that financial worry-induced negative affect can be effectively managed by actively taking control over one's finances. Finally, this study is a first attempt to investigate the within-person variability of financial worry.

#### Relevance Congress Theme

The current research specifies the effect financial worries have on service employees in order to formulate strong interventions for prevention in the future.

*Keywords: Financial worry, customer-oriented counterproductive performance, multilevel*

## **Oral presentation OP777**

### **The development of the Embodied, Dynamic and Inclusive (EDI) model of self-confidence; a conceptual model for use in executive coaching**

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**Research goals and why the work was worth doing:** The goal of this research was to develop a model of self-confidence for use in executive coaching. Self-confidence is an important coaching topic, yet our understanding of what it is and how it can be developed is limited to narrower concepts of self-efficacy and self-esteem. The aim was to address shortcomings in the literature, including those identified in this systematic review (a conceptual and methodological review of measures of self-confidence, self-efficacy and self-esteem in workplace settings).

**Theoretical background:** This paper explores the development of the Embodied, Dynamic and Inclusive (EDI) model of self-confidence at work. It was in response to findings from a systematic literature review (SLR) of measures of self-confidence, self-efficacy and self-esteem. It was evident further qualitative work was required to define self-confidence. This paper discusses the embodied and inclusive methodology, which overcame some of the limitations of existing measures, as discovered in the SLR.

**Methodology:** The methodology employed in this study sought to address various limitations noted in past research. The research team ensured to recruit a diverse participant pool and ensure the credibility of the approach. This diverse sample of 27 employees included a range of genders, ethnicities, sexualities, socio-economic statuses, ages, professions and industries. Having completed the interviews, we thought it would be interesting to report the participants' neurodiversity as well as mental and physical disability. A survey was emailed to collect this data.

We used an embodied interview approach. This extended through to the analysis, where the researcher listened carefully to her whole mind-body to guide her thematic analysis. The researcher expanded the analysis approach to include mind-mapping, percolating data and plugging one text into another.

**Results obtained:** The Embodied, Dynamic and Inclusive (EDI) Model of Self-Confidence emerged. It contains the components of Authenticity, Competence and Connectedness. The EDI Model is unique in that it captures the dynamics of Loss of Confidence and building a Confident Performance and identifies the role Mindset plays.

We sought to identify a broader model yet identify the risk that the conceptualisation can be too broad, and factors might not relate to a higher-order core construct.

**Limitations:** It is possible that we have found a cluster of constructs that only have minimal relation. Other limitations noted are that while our research focused on diversity and inclusion to overcome limitations in existing research, we acknowledge that neither interviewees were male, BAME, nor had disabilities and they reported as neurotypical. It is possible this influenced and limited our research findings.

**Research and Practical implications:** This research has enhanced our understanding of self-confidence in five ways because it:

Responds to the need for a dynamic model

Moves beyond cognitive and emotional concepts to the embodiment

Reflects workplace diversity

Identifies the role of mindset

Conceptualises self-confidence as a broad factor

Recommendations for coaching include a focus on certain topics for building confidence such as the art of giving and receiving feedback, giving, and receiving support from colleagues and leaders creating inclusive environments where a range of individuals feel secure being themselves and have a sense of belonging.

Relevance to the Congress Theme:

Contribution: The EDI model of self-competence shows us it is about competence, connectedness and authenticity. Contributing to the now by building confidence across a range of professions to lead the way.

Urgency: The EDI model was partly developed to address the criticism that existing research focused on white, young, American undergrads. To solve the complex problems of the world, we need diverse experiences, thinking and leadership. The EDI model is already supporting the development of people from a range of diverse backgrounds, enabling the confidence building of not just the established elite and privileged few who have historically created the problems that now need solving.

Delivery: Change is inevitable. The focus of the EDI model is to enable the development of confidence among the most diverse and vibrant group of people. We plan to deliver this transformation through the implementation of our Authentic Confidence Program.

Relevant UN SDGs:

Our research has shown that there is a link between self-confidence and well-being at work. Our substantial coaching experience using the model shows us that it is best to improve health and well-being before working on self-confidence. Once confidence has been mastered (it is a skill to develop rather than a purely innate quality), then individuals and teams are equipped to produce decent work and generate economic growth.

*Keywords: Self-confidence, Coaching, Inclusive*

## Oral presentation OP509

### The Direct Intercultural Effectiveness Simulation Instrument

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science&practice

#### Research goals

The present research is rooted in a regionwide Flemish project that aims to address the problem of ethnic discrimination towards ethnic minorities, spanning four domains that are anchored into the constitution: education, health care, housing and work. To this extent, the project is developing digital tools to make domain professionals (e.g., teachers, healthcare workers, brokers and employment counselors) aware of their biases towards ethnic minorities and to train these professionals so that their intercultural interactions contribute to reduce ethnic inequality in these four domains. The present research aims to contribute to this practical goal by introducing the DIES (direct intercultural effectiveness simulation) instrument. The DIES instrument measures to which extent professionals know and tend to display intercultural effectiveness (IE) in (future) intercultural interactions. In practice, the participant results and subsequent feedback can be used both as standalone interventions towards more awareness of personal behavior as well as in combination with other interventions towards training.

#### Theoretical background

An implicit trait policy (ITP) is a known construct that represents the interaction between the personality (amongst other factors) of an individual and the individual's beliefs (often called general domain knowledge) towards which behavior is effective in specific situations. For instance, if an individual is convinced empathic behavior is effective to solve work conflicts, an empathic person will endorse or perform more empathic behavior in conflict situations. As literature already shows that empathic behavior enhances effectiveness, measuring an ITP can predict future behavior. ITPs are normally used in SJTs to measure future effectiveness in work situations. However, IE literature does not yet report an instrument that measures an ITP directly, which can predict future behavior. Such an instrument can help in addressing important issues in intercultural interaction like ethnic discrimination.

#### Design and Methodology

In a series of three empirical studies (N = 993), DIES directly simulates an ITP on IE by presenting future professionals with a series of four scenarios and ten responses to each scenario. Participants have to rate the effectiveness and/or the chance they would act like the response in future interactions (score of 0 to 100). The ITP is calculated using the principles of the accentuation effect by subtracting the average score of the ineffective items from the average score of the effective items. As effective and ineffective items are compared against each other, we expect to observe a clear difference between effective and ineffective items. The reliability of the DIES is obtained over items and over scenarios. The construct validity of DIES is assessed using structural equation modeling (SEM), not only including a confirmatory CFA, but also a full structural framework of IE including measures of intercultural traits, attitudes, capabilities and real life behavioral measures like the intensity of intercultural contacts. The DIES results are also correlated with a nomological network containing about twenty related measures like modern racism, social dominance orientation and right wing authoritarianism to establish convergent and divergent validity.

## Results obtained

Results show that participants can distinguish and intend to use effective over ineffective intercultural behavior. This effect was found and replicated across three studies. These findings are in line with literature on the accentuation effect, general domain knowledge and ITPs. DIES shows reliability measures of about  $\alpha = .80$ , while showing positive correlations with scales like open mindedness and cultural intelligence and negative correlations with scales like modern racism, social dominance orientation and right wing authoritarianism. SEM analyses show that the ITP measure functions as the bridge between cultural intelligence and actual behavior.

## Limitations

Present research was conducted on future professionals. Future research will target actual domain professionals.

## Conclusions – research and or practical implications/Originality/Value

Theoretically, the present research provides literature with an instrument capable of measuring an ITP on IE. Practically, the DIES instrument can be used as a proxy for actual behavior to tackle important problems like ethnic discrimination.

## Relevance to the Congress Theme

DIES contributes to developing IE in (future) professionals in domains of education, healthcare, housing and work. DIES is urgent as intercultural interactions are becoming the norm. DIES delivers as the instrument is able to measure if people have the knowledge and the intent to interact effectively in intercultural situations.

## Relevant UN SDGs Reduced inequalities

*Keywords: Direct Intercultural Effectiveness Simulation;*

## Oral presentation OP29

### **The Double-Edged Sword of Leaders' Resource-Seeking: Divergent Curvilinear Effects on Leaders' Perceived Humility, Competence, and Effectiveness**

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science&practice

The extant literature on the consequences of leaders' resource seeking has produced inconsistent results on whether it helps or hurts leaders' humility, competence, and ultimately effectiveness perceptions. We resolve these by proposing that the frequency with which leaders ask their followers for resources plays a crucial role. In contrast to previous literature, which has predominantly focused on linear effects, we argue for a too-much-of-a-good-thing logic and emphasise that leaders who seek resources too infrequently or too frequently are appraised as less effective. We explain this nonmonotonic relationship using a competitive mediation model where perceived leader humility and competence act as two mediators with opposite curvilinear directionalities of influence. Results of a vignette study and a two-wave field survey support our theorising that humility premiums mediate a positive relationship between resource seeking and perceived leadership effectiveness at low to medium levels of frequency, while competence penalties mediate a negative relationship when frequency exceeds medium levels. In consequence, our study offers integration for prior empirical inconsistencies and allows for better advice to practitioners, who often are rightfully wary of the double-edged sword of asking followers for resources.

*Keywords: double-edged, resource-seeking, curvilinear*

## Oral presentation OP647

### **The effect of organizational justice on knowledge hiding among self-initiated expatriates (SIEs) and host country nationals (HCNs)**

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science

#### Research goals

In this study, we draw upon social exchange theory to examine the effects of distributive, procedural, and interactional justice on knowledge hiding. We also examine the potential moderating effects of employment type (SIE versus HCN) and culture (high versus low collectivism). This research has several theoretical and practical contributions. First, we examine a theoretically plausible antecedent to knowledge hiding. Second, we examine two theoretically plausible moderators (employment type and collectivism) of the relationship between justice and knowledge hiding that are highly relevant to the increasing globalization of organizations. Together, we advance our theoretical understanding of what causes and exacerbates knowledge hiding in organizations, which will provide researchers with a more complete framework for future research and provide practitioners with guidance for reducing knowledge hiding in organizations.

#### Theoretical background

Perceptions of low distributive justice (fairness of outcomes), low procedural justice (fairness of the formal processes or policies by which outcomes are allocated), or low interactional justice (fairness of the interpersonal treatment they receive from organizational decision makers, Cropanzano et al., 2002) should signal an imbalance in the exchange of resources such that employees believe they should have received more outcomes, different procedures, or better interpersonal treatment for what they have provided as employees. In line with social exchange theory, this imbalance should subsequently encourage employees to retaliate in such a way that will rebalance the exchange relationship. Knowledge hiding would effectively harm the organization and restore the balance in the exchange of resources.

The resources invested by self-initiated expatriates (SIEs) in order to work at a foreign organization are considerably high, especially compared to host country nationals (HCNs). Thus, SIEs should perceive low justice as a failure to reciprocate, not only to the contributions they have made to the organization, but to the sacrifices they have made to be an expatriate. HCNs, on the other hand, would only perceive low justice as a failure to reciprocate to their organizational contributions. As such, the greater social exchange imbalance for SIEs' in a low justice environment should result in a more exaggerated retaliatory response (knowledge hiding) in the exchange relationship.

Finally, collectivists place greater value on social resources, such as interdependence (Thomas et al., 2003), loyalty and cohesiveness (House et al., 2004) and norms of reciprocity (Van Dyne et al., 2000). All three forms of justice relate to these social resources. Thus, SIEs from collectivist cultures may perceive low justice as a greater threat to resources, as they place a higher value on these threatened resources, and will subsequently be more inclined to retaliate (knowledge hiding) and bring balance back to the exchange relationship.

#### Methodology

Data was collected in two public organizations in the United Arab Emirates. 462 employees completed the time 1 survey, which included organizational justice (distributive, procedural,

interactional) and demographic information (age, gender, tenure, nationality). 390 employees completed the time 2 survey, which included collectivism and knowledge hiding.

#### Results and Conclusion

Our results showed that all three types of justice were negatively related to knowledge hiding. However, in line with our hypotheses, we found that the relationship between procedural justice and knowledge hiding and the relationship between interactional justice and knowledge hiding were both stronger among SIEs. We also found that the relationship between procedural justice and knowledge hiding was stronger among SIEs with high collectivism. This research highlights the importance of organizational justice in ensuring effective knowledge management and identifies specific groups (SIEs, especially those with high collectivism) that are more susceptible to knowledge hiding following injustice.

#### Limitations

First, we collected data from organizations in the UAE, which is a highly diverse context (90% expatriates from over 209 countries). This diversity may limit the generalizability of our results to organizations or labor forces with fewer expatriates. Second, our variables were measured via self-report methods. However, we mitigated potential issues of common method variance by separating the collection time of our variables.

*Keywords: justice, knowledge sharing*

## Oral presentation OP162

### **The effect of public value and transformational leadership on flow-experience: An investigation in the context of public administration**

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science&practice

**Content:** Given the past years' challenges and the organisations' requirement to adapt rapidly to new environmental and working conditions, leadership issues and motivational factors enabling cohesion and adaptation among employees have come even more into focus. On a societal level, public value contribution of organisations' was identified to provide an important contribution to cohesion in society (Bozeman, 2007; Moore, 1995). More recent research, however, also indicates that the individual in the working environment may benefit from the public value orientation of organisations (Grubert et al., 2022; Meynhardt et al., 2018). Building upon this research, the goal of the present study is to investigate the relationship between public value and the psychological construct flow as well as the spillover effect on life satisfaction at the employee level. Moreover, this study examines the moderating role of transformational leadership and mediating role of professional self-efficacy. In addition, this study wants to show that the organisational public value is an essential aspect in the current work environment and contributes to offering managers ways to increase the public value of their organisation and consequently raise motivational processes among their employees. The present study is based on Meynhardt's public value approach (2009), which demonstrates the organisation's contribution to the common good and builds on the cognitive-experiential self-theory by Epstein (2003). This study aims to make an important contribution to ensuring that the topics public value and leadership and their impact on different levels within an organisation, in particular at the employee level, increase in relevance. The contribution of the present research is two-fold: First, it contributes to the public value literature by showing that the public value contribution of organisations translates into motivational effects on the individual level. Second, it contributes to the flow literature by showing that the public value contribution provides an important antecedent of the flow state.

**Design/Methodology:** The study is tested on data collected in 2022 within an online survey at the public administration organisation ( German Federal Employment Agency ). The sample in study 1 consists of 3,326 respondents. Respondents' ages ranged between 18 and over 60 years, and 70.4% of the respondents were female, 17.0% held a leadership position, and 68.4% worked full-time. A second study will occur end of 2022 in the same participating institutions.

**Results:** Study findings suggest that organisational public value is positively related to flow-experience at the individual level and that this relationship is partially mediated by professional self-efficacy. Results further show that the indirect effect of organisational public value on flow-experience via professional self-efficacy is moderated by transformational leadership such that they are stronger at higher transformational leadership levels. The results of the second study are expected in January 2023, enabling us to provide causal inferences and further analyses.

**Limitations:** All data were collected through self-reports.

**Research/Practical Implications:** The underlying results provide important implications for management practice, particularly in public administration. The management should focus more on public value creation within and outside the organisation. As mentioned, the perception of individuals plays an important role in the context of the working environment. When public institutions focus their efforts on creating public value and even engage in public value entrepreneurship (Meynhardt and Diefenbach, 2012; Kearney and Meynhardt, 2016), they can contribute to positive work outcomes as well as well-being of employees.

**Originality/Value:** This study provides first results on the relationship between public value and flow-experience at the level of employee in the context of public administration. The underpinning research design reveal a moderated mediation.

**Relevance to the Congress Theme and Relevant UN SDGs:** Perfectly in line with the congress topic, the present study shows the importance of employee perceptions and needs in a changing world of work. The contribution of companies to the common good has come more into focus due to events such as the pandemic, that led to the need to adapt future-oriented working conditions. Moreover, this study contributes to the UN SDGs by showing that a perceived public value contribution of a company by the employee leads to a better flow-experience and thus also to life satisfaction and, consequently, well-being. In addition, the study takes place in the context of public administration and visualises the important aspect that the perceived public value contributes to a balanced functioning system and peace in the society. This represents the public administration as a form of a strong institution, especially within times of crisis.

*Keywords: Public value, flow-experience, transformational leadership*

## Oral presentation OP426

### **The effect of talent management on motivation, commitment and citizenship behavior of talented employees: examining the role of organizational support**

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science

#### Research goals

Contemporary economic realities, characterised by intense market competition, high dynamics of changes in the organizations' environment and declining demand due to the recent lockdowns caused by the COVID-19 pandemic, have led to a significant increase in risk and uncertainty in managing the organization. These tendencies have contributed to the weakening of bonds between employees and employers who, facing difficult market conditions, are unable to provide their staff with stable, long-term employment. This, in turn, evokes in employees growing dissatisfaction with their work and willingness to change the job. In response to the economic challenges of the 21 st century, organizational decision-makers implements the talent management (TM) programs to mitigate the loss of talented employees and meet the company's current and future competency needs (Seopa et al. , 2015).

Despite the ongoing discussion on TM over the past few decades the question that still remains unanswered is: How TM affects employees' attitudes and behavior? Whereas some studies ( e.g. Barkhuizen et al. , 2014; Mensah, 2016) find positive effects of TM on work-related attitudes and behavior, others report that talent pool members demonstrate negative reactions to TM, that is feeling of stress and insecurity (Dries & Pepermans, 2008) or identity struggles at work (Tansley & Tietze, 2013). This tension makes managers lack a scientific ground for taking decisions related to the talented employees. Therefore, the purpose of our study is to identify the consequences of TM practices for talented employees. Specifically, following the theoretical model of strategic TM (Collings & Mellahi, 2009), as part of these consequences we examine motivation to work, organizational commitment and organizational citizenship behavior (OCB) of talented employees, as attitudes and behaviors associated with organizational performance in previous research. Moreover, to better understand employees' reactions to TM, we explored the psychological process that is involved in shaping attitudes and behavior of talent pool members.

#### Theoretical background

We apply social exchange theory (Blau, 1994) to explain how the employees' reactions to TM are formed. Based on literature review we argue that the perception of TM practices has a positive impact on their motivation to work, organizational commitment and OCB. It was also expected that perceived organizational support (POS) constitute a transmission mechanism through which TM practices affects employees' attitudes and behavior.

#### Method

We surveyed 730 participants of TM programs from 33 large companies operating in Poland. At least 22 correctly and completely completed questionnaires were obtained in each of the examined organization. A series of hierarchical multilevel regression analyses and structural equation models were performed to test our hypotheses.

#### Results

The results reveal that intended TM practices significantly predict perceived TM practices, and these, in turn, have a direct and indirect positive impact on talent pool members' motivation to work, organizational commitment and OCB. We also found that POS mediates the relationship between perceived TM practices and examined attitudes and behavior of talented employees.

#### Limitations

The study is limited in some ways. First, all the data for the study were gathered at a single point in time, raising concerns about common method bias (CMB). However, the post-hoc test indicated that CMB is not a threat to our results. Second, our study had a cross-sectional design. There is thus a possibility for reverse causality such that individuals who are seen to exhibit attitudes and behavior examined in the study are more likely than others to be included in talent pools.

#### Research and practical implications

The study expands the academic understanding of employees' reactions to TM and, in consequence, verifies the assumption that TM practices positively affects motivation to work, commitment, and OCB of talent pool members. It also provides a profound insight into the underlying psychological process that is involved in shaping employees' attitudes and behavior. The results obtained are valuable for organizational decision-makers who invest increasing amounts of money into TM initiatives without confidence whether these are successful in achieving the TM objectives.

#### Relevance to the Congress theme

The study is particularly relevant in the light of changing world of work because when the financial capital becomes widely accessible, and product or process innovations can be easily imitated, the talent that is rare and difficult to imitate, may be a source of a sustainable competitive advantage.

#### Relevance to the UN SDGs

The results of our research show that TM contribute to a more positive working experience and elicit discretionary behavior, which leads to strengthening interpersonal relations and building social capital. This may results in achieving UN SDG, such as well-being.

*Keywords: talent management, perceived organizational support, employee attitudes*

## Oral presentation OP710

### **The effect of Workplace Health Promotion Programs (WHPP) on the well-being of blue-collar workers within the Transport & Logistic sector**

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science&practice

#### Purpose:

Transport workers are highly at risk of developing overweight and obesity (Naug et al., 2016; STL, 2016; Arbouw, 2010; Goetzel et al., 2010). A recent study has shown that 73% of the transport and logistic workers is overweight (STL, 2021). Excessive body weight is associated with increased mortality and morbidity and has a negative impact on health and work ability, like for example the incidence of chronic diseases such as low back pain, diabetes type II or cardiovascular disorders (Burdorf et al., 2016). Overweight and obesity are also related to a decrease of work ability of the individual [Damen et al., 2022]. A few companies in the Netherlands in the Transport & Logistic sector offer Worksite Health Promotion Programs (WHPP's) with the aim of improving the health, vitality and work ability of workers. There is until now little insight into the effect of WHPP's and which factors influence the effectivity of WHPP's.

#### Design:

An experimental design has been used with a 12-month follow-up (intervention group= 159, control group n=1378) (Blue collar workers within the transport and logistic sector). The health promotion interventions of the Transport and Logistic Sector have been evaluated on process and effect outcomes. The primary effect outcomes were Work-Ability (Ilmarinen, 1999), Vitality, Physical and Mental Health (SF-12), Work-engagement (Schaufeli, 2014) and relationship with management (VBBA). The secondary effect-outcome variables were weight and healthy behavior. Furthermore, qualitative data was analyzed to evaluate the implementation of the intervention. This project used the RE-AIM model framework (Glasgow et al., 1999), combined with the validated framework of Steckler & Linnan (2002). The data has been collected through interviews with different stakeholders as well as a longitudinal survey study.

#### Results:

The linear regression shows that the following variables: work engagement, relationship with management and perceived health (physical and mental), have improved significantly after the intervention. However, no significant effects on lifestyle outcomes have been observed after the intervention. The control group (no intervention) goes significantly

backwards on most variables after 12 months. This indicates that following an intervention not only can have a stimulating effect on wellbeing but can also prevent health deterioration and demotivation of the target group.

*Keywords: workplace health promotion, transport and logistic sector, effect-evaluation*

## Oral presentation OP297

### **The Effects of Authentic Leadership on Employee Well-Being: The Mediating Role of Psychological Empowerment, Psychological Capital and Work Engagement**

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science

**Purpose:** The purpose of the current study was to examine the relationship between authentic leadership and employee wellbeing and specifically to shed light on the underlying mechanisms that are at play in the association between authentic leadership and employee wellbeing. Employee wellbeing is becoming an increasingly relevant and important consideration in the modern workplace environment, especially in the post-Covid era. Prior research has revealed that employee wellbeing is affected not only by the physical work environment, but also the psychosocial work environment. Specifically, the management style at work is considered to be one of the most fundamental organizational factors that can influence the welfare of employees. Currently, one of the increasingly important explanatory models of leadership, is the model of authentic leadership, drawing from the positive organizational psychology field. Our paper takes a look at leadership through this positive lens.

However, even though authentic leadership has for long been proposed as a 'pathway to positive health' and various studies have substantiated the fundamental role of authenticity in wellbeing, there seems to be limited research involving the relationship between authentic leadership and employee wellbeing. In light of recent calls made by researchers (Hildenbrand et al., 2021; Rahimnia & Sharifrad, 2015) who contend that additional empirical research is needed in order to better understand the process through which authentic leadership affects employee wellbeing, the current study seeks to address this gap in the literature by exploring two underlying mechanisms and more specifically the mediating role of psychological empowerment, psychological capital and work engagement.

**Theoretical Background:** In order to explore the dynamic interplay between job resources and personal resources that lay the foundation for employee wellbeing, two conceptual frameworks were utilized: the Job Demands-Resources Model and Conservation of Resources Theory. Accordingly, authentic leadership was conceptualized as a job resource given its potential of leveraging healthier, happier and more productive workplaces. Psychological empowerment and PsyCap were viewed as personal resources that mediated the relationship between job resources (i.e., authentic leadership) and employee wellbeing. Finally, work engagement was construed as an intervening mechanism that connects psychological empowerment and PsyCap, respectively, to employee wellbeing.

**Design/Methodology:** Non-probability convenience sampling was employed, using a sample of 213 employees (N =213) working in various public, private and non-profit organizations. The study is grounded on two serial double mediation models. In the first mediation model, authentic leadership is predicted to result in employee wellbeing through the mediating effects of psychological empowerment and work engagement. While, in the second mediation model, authentic leadership is predicted to result in employee wellbeing through the mediating effects of psychological capital and work engagement.

**Results:** Multiple hierarchical regression analyses along with Process Macro, utilizing bootstrapping, confirmed all of the hypotheses. Authentic leadership was found to result in greater employee wellbeing, with the results validating both mediation models, thereby confirming the mediating role

of psychological empowerment, PsyCap and work engagement in the relation between authentic leadership and employee wellbeing.

Limitations: Conclusions are limited by the cross-sectional design of the study, the use of single, self-report data and the lack of examination of moderating variables.

Research/Practical Implications: The study fills a research gap, by shedding light and expanding our current knowledge and understanding of the relationship between authentic leadership and employee wellbeing. At the same time, it also offers important guidance to organizations, supervisors and human resource practitioners on how to foster authentic leadership at work in order to promote greater employee wellbeing. As such, authentic leadership represents an extremely valuable health-promotion tool that organizations can and should leverage in order to maintain a healthy workforce.

Originality/Value: To our knowledge, no empirical research has examined the combined effect of psychological empowerment, psychological capital and work engagement in the relation between authentic leadership and employee wellbeing. This study is among the first to examine these important variables in conjunction, helping us to obtain a more nuanced understanding of the underlying processes that are involved in the relationship between authentic leadership and employee wellbeing.

Relevance to the Congress Theme: The study is relevant to the congress theme as it tries to identify mechanisms to lead our way towards a future of work with more wellbeing for all.

*Keywords: employee well-being, authentic leadership, psychological capital*

## Oral presentation OP56

### **The effects of career adaptability on perceived future employability and career motivation: Employed vs. Unemployed fresh university graduates**

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science&practice

The changing economy and work environment due to the COVID-19 pandemic has made the transition to the labour market more complex for fresh university graduates. Derived from Rudolph et al. (2017) model and career construction theory by Savickas (2017), career adaptability, defined as individual's attitude and behaviours that they adopt in fitting themselves into careers that are suitable for them (Savickas, 2005), was identified as an essential factor to help individuals adapt and cope with challenges. This career adaptation is expected to result in higher perceived future employability (PFE) and career motivation (CM), an outcome not considered by Rudolph et al. Thus, we aim to fill in this research gap. In addition, we also compared the effects of career adaptability on the adaptation results (CM and PFE) between employed and unemployed fresh university graduates, which could help individuals strategise their career.

We utilised a cross-sectional method where 457 (257 employed, 200 unemployed; 64.1 women; 58.6% private universities graduates) Malaysian fresh university graduates from various public and private universities participated. Graduates of tertiary education were chosen as they have the ability to impact their community the most compared to others, especially with income obtained from their employment (Gagnon, 2022). Data were collected between May to September 2022. Participants completed a set of demographic questions and the Career Adapt-Abilities Scale – USA form (CAAS-USA), Career Motivation Scale and The Perceived Future Employability Scale to assess their career adaptability, career motivation, and employability in their future-self, respectively. All measurements were tested using Structural Equation Modelling and shown a good fit.

The structural model showed an acceptable fit and we found differences in the effects of CA dimensions on CM and PFE dimensions between employed and unemployed Malaysian fresh university graduates. The CA–concern and control dimensions were negatively associated with PFE dimensions for unemployed participants, but positively associated for employed participants. The CA–curiosity dimension negatively affected PFE and CM dimensions for both groups of participants, with a stronger effect for employed participants on PFE and for unemployed participants on CM. The CA–confidence dimension positively affected PFE and CM for both groups, with a stronger effect for unemployed participants.

There were a few limitations to our study. Firstly, we utilised a self-reported survey method which are usually subjected to social desirability bias despite the assured anonymity of participants. Future research should take social desirability bias into consideration, and implement strategies that could overcome this bias, such as including a social desirability scale which would help to detect respondents who are more prone to this type of bias. Secondly, the contrasting association in the relationship between CA dimensions and perceived future employability between two different groups might indicate the existence of mediators and moderators which were not considered in our study. Therefore, future studies should identify and examine possible variables which could provide a deeper insight into how the association between CA and PFE varies in different situations.

We validated parts of Rudolph et al. (2017) model on a Malaysian population by supporting how adaptability resources (career adaptability) lead to adaptation results. We also compared the CA of

the employed and unemployed Malaysian fresh university graduates who are transitioning from academic to employment and shown the importance of career adaptability on career outcomes (i.e., PFE, CM – resiliency). Higher educational institutions should focus on improving CA of their graduates by providing training that enable them to better cope and adapt to the changing labour market, thus, increasing their chances to obtained full-time employment upon graduation.

Our study is relevant to the congress theme as the working environment experienced a profound change due to COVID-19 pandemic and career adaptability become an even more important quality for fresh university graduates to transitioned successfully from academic to the work environment. It is particularly relevant to Subtopic 1 as we examine the effect of career adaptability on career outcomes between employed and unemployed individuals.

Our study is relevant to UN SDG Goal 8, as we found that career adaptability leads to resilience and that employed individuals has higher career resilience than the unemployed. This could indicate that more adaptable individuals are more resilient and productive, thus, are more likely to be employed. Therefore, it is important to develop policies that support productive activities to facilitate employment for all individuals, especially the new generations of young people joining the workforce.

*Keywords: Career adaptability, Career motivation, Perceived future employability*

## Oral presentation OP214

### The Effects of Islamic Work Ethic Rules on Employees Perception of Wellbeing in a Cross-Cultural Context

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science&practice

#### Research Goals

The first aim of the current research project was to evaluate the influence of Islamic Work Ethic (IWE) values on perceptions of work characteristics for religious British and Turkish employees. The second aim was to compare the influence of IWE values on Christian-majority British participants' and Muslim-majority Turkish workers' perceptions of work characteristics.

#### Theoretical background

Quality of working life (QoWL) theory is an increasingly popular component of the quality of life of employees; its conceptualization includes all workplace-related factors that may affect an individual's wellbeing as well as the impact of work on an employee's quality of life. As the QoWL concept investigates an individual's subjective perspective of the quality of their working life, it has also been shown to be especially affected by an individual's religious beliefs. Thus, the impact of religiosity on the QoWL is likely to be an important factor to consider in employee wellbeing and satisfaction. Islam is the second-largest religion in the world, as well as in the UK (that is, the emigration of Muslims due to refugee crises has increased the number of Muslims working and living in western countries such as the U.K.). One of the most measured effects of religiosity on work is through the corresponding work ethic value. Although Western-based work ethic scales (e.g. the Protestant work ethic) have been investigated in non-Western countries, in Muslim-majority countries, and in cross-cultural research, no such research investigates the role of Islamic Work Ethic values in Western contexts.

#### Design/Methodology

This study's data analysis was based on correlational statistical methods. The study compared a cohort of highly religious Turkish Muslim participants (n=241) with a cohort of British Christian religious participants (n=237) on their scores for Islamic Work Ethic (IWE) and Work-related Quality of Life (WRQoL). The WRQoL scale comprised 6 sub-scales, including Work-life Balance (WLB), Job career satisfaction (JCS), General Wellbeing (GWB), and working conditions (WCS). A correlational method design was used and structural equation modelling (SEM) was conducted to analyse the hypothesized measurement model.

#### Results obtained

Results of the SEM analysis supported the full mediation model. The results showed that scores on IWE significantly predicted JCS and WLB for both Turkish and British religious employees, with these factors also mediating the relationship between IWE values and WCS. The Turkish employee's GWB was indirectly affected by IWE through the sequential mediation of WLB and WCS, while the British employees' GWB was affected through the sequential mediation of JCS and WCS. This difference between countries could be a result of their overall culture. Turkey is a collectivistic country as well as Islam encourages collectivism. For Turkish employees to have WLB as the initial mediator between IWE and GWB, might be due to the emphasis Islam and culture put on the family. On the other hand, the individualistic nature of UK employees would mean that the influence of IWE on their GWB is more dependent on perceived individualistic job satisfaction.

### Limitations

The current research project was performed in two separate parts: the Turkish data were collected before the COVID-19 pandemic while the British data were collected after the COVID-19 pandemic. It is acknowledged that this could have potentially created some invariance between the groups; to overcome this, the researcher applied scales and metric invariance tests to ensure the data were comparable.

### Research/Practical implications

In terms of the implications of the findings, some of the IWE rules (e.g., Good work benefits both oneself and others; Producing more than enough to meet one's personal needs contributes to the prosperity of society as a whole) could be applied to Christian workers as well as Muslim workers and therefore they are likely to similarly affect the wellbeing of both these types of religious employees. Organizations and practitioners could develop organizational policies that incorporate such religious values, for the mutual benefit of both Christian and Muslim employees.

### Originality

This paper contributes to the literature and highlights the importance of religious cultures on work behavior and job satisfaction. It demonstrates that although religious values affect employees' perceptions of their work and life, the perceived effects of these values are likely to be dependent on the cultural background of an employee's country of origin.

*Keywords: Well-being, Work Ethic, Cross-Cultural*

## Oral presentation OP399

### The Effects of Self-Compassion and Leader-Compassion on Affect and Thriving: A Multilevel Experimental Study

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science

Title of oral presentation. The Effects of Self-Compassion and Leader-Compassion on Affect and Thriving: A Multilevel Experimental Study.

Research goals. Many employees suffer from work-related mental health problems due to structural job demands, such as high workload. To mitigate these issues, it may be beneficial to focus not only on building resilience on the individual level, but also to investigate the role of the leader in strengthening employee well-being. On the individual level, self-compassion is a promising personal resource for employees to maintain employee well-being at work (Ferrari et al., 2019). In addition, leader-compassion may have added benefits for the self-compassion of their employees. The goal of the current study was to examine the direct and interaction effects of leader-compassion and individual-level self-compassion on individual affect and thriving.

Theoretical background. According to the Job Demands-Resources Model (JDR-model; Bakker & Demerouti, 2007), individuals may use their personal resources to deal with job demands. Personal resources are defined as psychological characteristics or aspects of the individual, which relate to one's resilience and to one's ability to successfully influence the work environment or shape the environment to one's own control (Hobfoll, 1989; Xanthopoulou et al., 2007). We investigate self-compassion as an important personal resource that may help individuals deal with job demands and improve their well-being (i.e., affect, thriving). Self-compassion consists of three aspects that can help employees through negative self-relevant experience (e.g., failure, negative feedback): self-kindness, common-humanity, and mindfulness (Neff, 2011). Moreover, taking a multilevel approach (Martin et al., 2016), we examine whether leader compassion might strengthen the effects of individual self-compassion on thriving and affect. First of all, we expect that a positive direct effect of leader compassion as well as self-compassion on thriving and affect. Secondly, we expect that leader compassion moderates the effect of self-compassion on thriving and affect, such that high levels of leader compassion will lead to a larger effect of self-compassion on thriving and affect.

Methodology. Participants (N = 176 students) were randomly assigned in a 2 (leader compassion: neutral vs. compassionate) x 2 (self-compassion: neutral vs. self-compassion) between-subjects design. Participants first completed an online marketing task, after which they received either neutral or compassionate feedback on the task from a vignette supervisor (Manipulation 1). Subsequently, participants reflected on the feedback either with self-compassion, using a self-guided writing exercise (cf. Kreemers et al., 2020), or by freely writing about the feedback (Manipulation 2).

Results. Factorial ANOVAs showed support for the direct effects of the (individual-level) self-compassion intervention on state self-compassion (manipulation-check) and negative affect, but not on positive affect and thriving as compared to the freely writing condition.

Furthermore, results indicate no direct effect of leader compassion (compared to the neutral feedback condition) on state self-compassion and positive affect, but a (marginally) effect on negative affect, and thriving.

Lastly, no support was found for the interaction effects of leader compassion and self-compassion on negative affect, positive affect , and thriving.

Limitations. Even though the use of an experimental design allows us to establish causality, the use of students who received fictional feedback limits the generalizability to actual employees in organizational contexts. Future research can shed a light on this by observing leadership behaviors and their impact on follower self-compassion in a sample of employees.

Conclusions. This study suggests that self-compassion and leader-compassion are effective resources for improving well-being. However, no interaction effects of self-compassion and leader compassion were found on thriving and affect. The findings of this study contribute to the (self-)compassion intervention literature by showing the additional benefits of leader-compassion beyond individuals' self-compassion. In a broader perspective, this study shows how self-compassion and leader-compassion can contribute to employee well-being.

Relevance to the Congress Theme. This study shows that self-compassion may be an important personal resource that is malleable and offers benefits for employee well-being. By demonstrating the added effects of leader-compassion, we contribute to creating healthy workplaces for the future.

Relevant UN SDGs. We strive to contribute to creating healthy workplaces by showing how self-compassion and leader-compassion can increase individual mental health and well-being.

*Keywords: Self-compassion, intervention, leadership*

## Oral presentation OP799

### The Emotions and Entrepreneurial Passions of Tech and Digital Entrepreneurs During Their Start-up Journey

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science

#### Research goals

Entrepreneurial ventures in the Tech and Digital sectors form an increasingly important part of the UK and European economies. One of the critical factors determining the success of entrepreneurs is how they deal with their emotions and remain passionate and motivated during the start-up phase on their venture, when challenges, setbacks, failures, and frustrations are common. However, there is still a shortfall of research on the lived emotional experiences of entrepreneurs owing to a historical positivist bias in entrepreneurial research that endures to this day. This longitudinal, qualitative research aims to bridge this gap by examining how UK Tech-Digital entrepreneurs experience emotions and passions as their venture unfolds and how these shape both the founder and their venture.

#### Theoretical background

Entrepreneurship has long been regarded as an emotional endeavour. It has metaphorically been described as a rollercoaster ride involving stronger and faster changing negative and positive emotions than most other professions and occupations (De Cock, Denoo, Clarysse, 2019). Although the role of emotions in entrepreneurship is receiving increased focus as a topic of research (Baron, 2008; Delgado et al., 2015; Fodor & Pinteá, 2017), it remains under-researched. Most academic research into entrepreneurship has been positivist and temporal in nature, so very little is known about how entrepreneurs experience the process as it evolves (Schindehutte et al., 2006). Entrepreneurial passion (EP), or intense positive feelings toward entrepreneurial activities and roles that are meaningful to the entrepreneur (Cardon et al., 2009) has emerged as a particularly popular emotional and motivational construct among researchers seeking to better understand entrepreneurial behaviour and processes. This interest reflects a growing acceptance that entrepreneurship is an intensely emotional experience requiring high levels of energy, enthusiasm, and motivation to succeed. Yet EP is still poorly understood. Most studies assume a positivist paradigm, are survey-based, and measure EP at a single point in time. There is also no agreed definition on what EP is, how it emerges and is experienced by different entrepreneurs, and how it shapes both the entrepreneur and the venture creation process.

#### Method

Employing purposive sampling and a longitudinal research method, data were collected from a diverse group of 12 Tech-Digital business founders over a 12–18-month period. Seven of the participants were female and 5 were male. The researcher used three c.45-minute semi-structured interviews together with a short questionnaire before the second and third interviews. Each interview was transcribed and coded using NVivo. Within-case narrative analysis was used to examine unique variations in entrepreneurs' emotional experiences and EP. Template analysis was then applied to investigate common themes within the sample.

#### Results

The results of the study will be available by April 2023, although publication of the final thesis is planned for September 2023.

#### Limitations

Given the qualitative nature of this research and intention to provide a rich, contextualized account of entrepreneurs' evolving emotions and passions, the results are not generalizable to UK Tech-Digital entrepreneurs or entrepreneurs in other sectors. Another potential limitation is that the researcher has significant experience in Tech-Digital entrepreneurship, having founded two HRTech businesses. As pointed out by Berger (2015), even with critical self-reflection and reflexivity, this may lead the researcher to unconsciously project their own experiences in the way they observe and interpret participants' narratives.

#### Conclusions

This research enriches the body of research and literature on the role of emotions and EP in venture creation by providing insights into how entrepreneurs experience the inevitable highs and lows of their start-up journey. Moreover, it highlights the unique emotional experiences and sense-making of each entrepreneur in response to unfolding events, including how this shapes their motivation, behaviour, and self-identity. This is particularly salient for the design of training curricula offered by universities, start-up accelerators, and other entrepreneur training organizations in future. The research will also enable entrepreneurs to gain a better understanding of how their emotions and EP shape their identity, motivation and how the venture emerges.

#### Relevance to the congress theme

Entrepreneurship is becoming increasingly common in a fast-changing world of work, with more people of working age turning to Tech-Digital entrepreneurship as an alternative to traditional corporate roles. In this fast-changing context, it is important we conduct more research to augment our understanding of entrepreneurial processes and behaviours, including how emotions and EP emerge, are experienced, and impact an entrepreneur's start-up journey.

*Keywords: Entrepreneurship, Passion, Emotions*

## Oral presentation OP401

### **The employee's sense of influence on the organisation: its dimensions and importance in fostering motivation and commitment**

Justyna Pawlak & Małgorzata Adamska-Chudzińska | Cracow University of Economics

science

An important determinant of the quality of human capital is an organisation's ability to attract and retain talented employees. One way to achieve this is to strengthen their autonomous motivation. Especially in job positions where employee has to deal with sometimes uninteresting tasks requiring disciplined commitment (what is very often the case in work reality) it is the autonomous extrinsic motivation that can lead to the most effective performance. Identifying and implementing effective solutions to support employee autonomous motivation is therefore an important task for researchers and managers.

From the perspective proposed by self-determination theory, autonomous motivation includes intrinsic motivation and well internalised extrinsic motivation. Being autonomously motivated thus means that one is motivated by one's own interest in an activity (intrinsic motivation) and/or that the values and regulations associated with that activity have been integrated into the person (integrated extrinsic motivation). Autonomous motivation is therefore characterised by a sense of choice and freedom, whereas controlled motivation is based on a sense of pressure and the need to engage in a certain behaviour. The experience of autonomy at work is one of the main dimensions of the sense of influence on organisational reality, which in turn can determine the readiness for a proactive response on the part of the employee.

The present research attempts to find an answer to the question of whether and to what extent a sense of influence is a factor with such a level of attractiveness for employees that it will result in a high level of organisation commitment. Identifying the type and degree of this relationship can be a guideline for the design of motivational systems that will strengthen employees' willingness to bind themselves to the organisation for the long term and allow verification of some of the actions taken by management practitioner.

In our research we distinguish two manifestations of the sense of influence on organisational reality. The first emanates from the leader and manifests itself as enabling the employee to experience autonomy in their roles and is an invitation to the employee to take on the responsibility that comes with that autonomy. The second comes from the employee and manifests itself in his or her initiative and readiness to innovate. It requires, in turn, openness from the leader and willingness to support the proposed solutions. Based on the survey results, we develop a model of the employee's sense of influence in the organisation and organisational commitment.

The study was conducted on a sample of 541 employees and it used the author's Employee's Sense of Influence questionnaire and the organisational commitment model proposed by Mayer and Allen. The results showed that providing employees with a sense of influence has a positive impact on their affective and normative organisational commitment.

These findings provide insights and suggestions for managers, as they indicate how leaders can develop organisational commitment among their employees by adopting effective human resource practices that could lead to organisational competitiveness and increased productivity. The essence of any such action is the treatment of employees as subjects, which, depending on their position,

professional and personality predispositions and needs, might involve different forms of taking interest in the employees and creating space for independent actions.

*Keywords: sense of influence, organisational commitment, autonomy*

## Oral presentation OP406

### The future is subtractive

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science

#### Research goals

The discourse on sustainable innovation is dominated by a „more is more” mindset that focuses on additive transformations (e.g., adding new technologies). Ironically, this often leads the benefits of energy technologies to be canceled out by the further expansion of energy demands (Jevons Paradox). Thus, the sustainability transition will also require subtractive solutions guided by a „less is more” mindset (e.g., eliminating certain technologies, products or processes). The aim of this project, therefore, is to examine factors that mitigate the additive bias (i.e., the tendency to solve problems by adding elements to the existing situation) and foster the implementation of subtractive innovations, hence leading to a better balance between additive and subtractive change. In the present work, we are investigating potential cognitive factors that may favor or hinder the creation of subtractive solutions to problems.

#### Theoretical background

Recent research shows that people are more likely to make additive changes (adding elements to an existing situation) than subtractive changes (removing elements to transform a situation). However, the mechanisms behind this bias are not completely clear. As a first step in this project, we focus on a cognitive explanation, specifically by addressing the role of cognitive demands and construal level. Previous research has shown that instruction cues towards subtraction can weaken participants’ additive bias, especially when people are under low cognitive load. This suggests that subtractive changes are more cognitively demanding (even when cued); however, this has not been directly tested yet. Furthermore, according to construal level theory, we suggest that subtractive changes might be less cognitively demanding under a high construal level, because construal level is positively associated with cognitive flexibility and creativity. As such, a high construal level could serve as a way to diminish the additive bias without incurring cognitive costs.

#### Methodology

In two experimental studies, participants will be asked to come up with creative solutions in a transformation task. In Study 1, we will replicate existing work on the additive bias, assigning participants either to a control condition or a condition with a subtraction cue. Moreover, we will include measurements of cognitive depletion and (exploratively) construal level. In Study 2, we will use the same transformation task as in Study 1, manipulating construal level (through temporal distance) by assigning participants to a high construal or low construal condition and measure their cognitive depletion as in Study 1.

#### Results expected

We are currently in the process of setting up the two studies and plan to run them this winter. The results are expected in early spring 2023. In Study 1, we expect participants to predominantly make additive choices in the control condition, but less so in the cue condition. Cues may help reduce the additive bias, but at the cost of cognitive depletion; therefore we expect cognitive depletion to be higher in the cue condition than in the control condition. In Study 2, we expect that under a high construal level, participants will make more subtractive changes than under low construal level;

however, in contrast to the cue effect in Study 1, we do not expect this increase in subtraction to be associated with higher cognitive depletion.

#### Limitations

The current study is a first step in a larger project and only addresses additive bias on the level of the individual change agent. In our future studies we aspire to explore additional determinants of additive bias, as well as the interplay between macro-environmental and organizational-level factors that affect top management and employee receptiveness to and implementation of subtractive ideas.

#### Relevance to the Congress Theme

By understanding the conditions under which subtractive innovations may occur, this research project contributes to the development of new competences that can help lead the way towards a sustainable future. It aims to understand how people think about problems and how their thinking may be influenced in order to consider subtractive transformations more seriously. This “new way of thinking” may eventually help to address urgent socio-ecological problems, by helping us to avoid falling into the trap of renewed overconsumption.

#### Relevant UN SDGs

It is widely agreed that addressing the world's pressing socio-ecological problems requires effective and innovative solutions. Sustainable innovation is the main focus of this project, which aims to create viable solutions to problems, such as the depletion of natural resources and the tendency towards excessive consumption and irresponsible production.

*Keywords: sustainable innovation, additive bias, subtractive transformations*

## Oral presentation OP165

### The Gender Bias Scale for Women Leaders: Gender bias and women's motivation to lead

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science

Research goals and why the work was worth doing

Despite efforts to achieve gender equality, women are still underrepresented in elite leadership roles. This might be due to bias and gendered barriers keeping women from entering and succeeding in leadership positions. Our aim was twofold: first, we wanted to translate and validate the Gender Bias Scale for Women Leaders (GBSWL; Diehl et al., 2020) in German and Spanish. The GBSWL is a heterogeneous instrument assessing a broad range of gender biases and has originally been developed for women leaders in the US. Second, we aimed to investigate the impact of gender bias on women's motivation to lead.

Theoretical background

We use role congruity theory (RCT; Eagly, 1987) and the theory of motivation to lead (Chan & Drasgow, 2001) as our overarching frameworks. RCT posits that the perceived incongruity between the (self-)ascribed female gender role and leadership roles lead to two forms of prejudice: 1) women are evaluated as less favorable compared to men as potential occupants of leadership roles and 2) women who exercise leadership behaviors experience backlash (i.e., evaluating women more negatively when acting as leader compared to men). This is because male and leader stereotypes contain more agentic, that is assertive or dominant, qualities (e.g., "think manager, think male"; Schein, 1973) than women, who ought to be warm, sensitive and helpful (i.e., present more communal qualities). Furthermore, recent meta-analytic results (Badura et al., 2020) suggest a small, but consistent gender difference in affective-identity motivation to lead, the facet that reflects mostly agentic qualities. We argue that gender biases are negatively related to women's affective-identity motivation to lead.

Design/Methodology/Approach/Intervention

In this study, we translated and validated the Gender Bias Scale for Women Leaders (Diehl et al., 2020) in German and Spanish samples of women with ( $n = 470$ ) and without leadership responsibility ( $n = 400$ ). We performed confirmatory factor analyses to establish factorial validity and conducted measurement invariance analyses between both the two countries and two leadership responsibilities.

We further ran ordinary least square regression analyses, controlling for relevant variables, to examine the influence of specific gender bias facets (i.e., male culture, unequal standards, constrained communication and lack of sponsorship) on women's motivation to lead.

Results

Confirmatory factor analyses (CFA) exhibited good model fit for an adapted version of the scale (CFI range = [.93 – 1.00], RMSEA range = [.000 - .098], SRMR range = [.013 - .060]). Results of the multi-group CFAs revealed at least metric invariance between all groups. We further found that specific gender bias facets, especially those pertaining to leadership identity and agentic qualities, have a statistically significant negative association with women's motivation to lead.

### Limitations

Our study is not free from limitations. First, some items of the Gender Bias Scale for Women Leaders exhibited low standardized factor loadings and low reliabilities. Second, construct validation of the German and Spanish versions has only been tested in Germany and Spain, respectively, but not in other German or Spanish speaking countries. Thus, we advise scholars to be careful, when using the scale in German or Spanish speaking samples not from Germany or Spain, since nuances in terms of use of language might affect the meaning of items and thus validity of the instrument.

### Conclusions

The adapted version of the Gender Bias Scale for Women Leaders can be used to assess the degree of gender bias experienced by women with and without leadership responsibilities in Germany and Spain. Thus, it can help to shed light on what keeps women from entering as well as succeeding in leadership positions. This knowledge can potentially be used to develop specific interventions on either organisational or individual level to foster gender equality at the workplace. We furthermore showed how women's motivation to lead is impacted by several forms of gender bias.

### Relevance to the Congress Theme

To tackle the persisting gender inequality at work, change is imperative. We present German and Spanish versions of a scale to assess the degree of gender bias at work. Our hope is that scholars will use the scale to enhance the understanding of the gendered barriers women face at work, as well as develop and evaluate specific interventions to enable organisational change towards an equal future.

*Keywords: women and leadership, motivation to lead, construct validation*

## Oral presentation OP566

### The good, the bad and the... so what? A review of the "double-edge sword effect" in organizational research

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science

Research goals and why the work was worth doing

The research sought to review the recent organizational literature to examine the treatment of the "double-edged sword effect" to evaluate its potential for describing aspects of organizational life. A double-edged sword effect reflects a pattern of results where a variable has both positive and negative effects concurrently, which can often appear paradoxical. At present, the examination of double-edged sword effects is popular with a seemingly growing number of concepts being identified as having these mixed outcomes (e.g. team diversity, occupational callings, citizenship behavior, HR practices) and can be seen in numerous reviews of the "dark sides" of concepts. So, against the background of a growing appreciation that many concepts within the field can be constructed as being a "double edge sword", we seek to 1) describe how the field is currently theorising and researching these effects, to 2) categorise double-edged sword effects into a more nuanced set of relationship patterns, to 3) differentiate them from other related-phenomenon within the field (e.g. too much of a good thing effects, multi-dimensionality), and then 4) develop good practice for researchers studying "double-edged sword effects" in relation to any variable in the wider field.

Theoretical background

While we believe that this work will have widespread practical and theoretical utility, we develop an example based within the area of employee wellbeing and careers. Accordingly, we draw on theory relating to occupational calling (Bunderson & Thompson, 2005), goal systems (Kruglanski, 2003) and eudaimonic wellbeing (Ryan & Deci, 2001).

Design/Methodology/Approach/Intervention

We conducted a review of all CABS-rated 3, 4 and 4\* rated journals in the areas of general management, human resource management, organization studies and organisational studies for articles using the terms "double-edge sword" and "mixed blessing" in the five-year period between 2017-2021. We identified 333 articles that used these terms, of which just over 200 we identified as having directly examined a "double edged sword effect" either empirically or theoretically. We then sought to content analyse these articles to form the basis of the review.

Results obtained or expected (if not available, it must be made clear when they will be)

Early results are available, but will be developed further. They show that even over a five-year period, a sizeable increase in the use of the two search terms has occurred. Concerningly, they indicate many common misapplications of the term which is mistakenly used to describe a range of other effects, including moderated relationships, nonlinear relationships, and positive and negative dimensions of a construct. It is also common for studies to only examine one side of the double-edged sword (e.g. the dark side). The detection of a "double edged sword effect" (and labelling as such) is often the end point of a research study, with consideration of deep implications being offered by only a few studies. The examination of mechanisms (mediators) to explain a concept's relationship with contrasting findings is very rare.

Several “good practices” are generated from the review and then applied together to the topic of occupational callings and worker wellbeing, as a worked model.

#### Limitations

Given that researchers will use a variety of terms to describe these kinds of effects, it is possible that we did not review all relevant studies through our keyword search.

#### Conclusions – research and or practical implications/Originality/Value

The research clearly conceptualises what a double-edged sword effect is, what it is not, and how researchers can generate more insightful theoretical and empirical implications when studying concepts that are likely to have a set of positive and negative effects.

#### Relevance to the Congress Theme

The review seeks to directly address the greater complexity that will characterise the future and changing world of work.

#### Relevant UN SDGs

The research could relate to all, but the presentation will be particularly focused on good health and wellbeing.

*Keywords: double-edge sword, wellbeing, calling*

## Oral presentation OP412

### **The impact of burnout symptoms on coping and appraisal of acute stressors: An event-based approach among Dutch riot police trainees**

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science

Police officers are exposed to acute stress situations while on duty, such as arrests, violent suspects, use of firearm, situations of human suffering (Abdollahi, 2002; Violanti et al., 2017). Ineffective or lacking coping with stressors increases risks of developing stress-related psychological issues, such as acute stress disorder or PTSD (Benight & Bandura, 2004; McLean & Clauw, 2004). Further, accumulation of stress can lead to burnout symptoms, reduced job performance and outflow of police officers (Anshel, 2000; Burke, 1993). To maintain psychological wellbeing effective coping is required, which depends on an individual's appraisal of the situation and the availability of coping resources (Hobfoll, 1989; Delahaij & Van Dam, 2017). Stressors can be appraised as both threatening and challenging and elicit specific emotions (appraisal theory; Lazarus, 1993), which trigger psychological and physiological responses (Crawford et al., 2010; Delahaij & Van Dam, 2017).

Theory and research generally focus on either the acute stress process, involving appraisal and coping processes in acute stress situations, or the chronic stress process, which involves accumulation of residual need for recovery (NFR) and burnout symptoms as a result of chronic work demands. To our knowledge, no studies incorporated measures of chronic strain in the appraisal and coping of acute stress situations, especially using an event-based approach. The goal of this study is to investigate these two processes as intertwined. Therefore, we examined the impact of burnout symptoms on the appraisal and coping of acute stress situations.

Drawing on theories of appraisal, COR, and efficacy beliefs, we test a model in which burnout symptoms moderate the relationships between coping self-efficacy (CSE) and appraisal emotions, and between appraisal emotions and NFR. On a sample of Dutch riot police (Mobiële Eenheid; ME) trainees (n=47) we used an event-based approach, that is we look at the effects of pre-measured variables on event-triggered variables. The ME is a national unit that consists of regular police officers who are trained for this additional role. During their regular working hours and spare time, the ME can be summoned for deployment at large events and riots, where they perform under varying, sometimes extreme circumstances that constitute acute stress events. ME-trainees are all subject to fixed acute stress events at the same stages in their training in the form of stressful exercises. As a result, it is possible to compare whether individuals react differently to the same event and what the effect of differences in their levels of pre-existing strain is.

Pre-existing strain (BAT-12; Schaufeli et al, 2019) and CSE (Police Resilience Monitor; Kamphuis et al., 2017) were measured at baseline, appraisal emotions (Stress Questionnaire; Delahaij & Van Dam, 2017; Folkman & Lazarus, 1985) and NFR (Need for Recovery Scale; Van Veldhoven & Meijman, 1994) were measured after the stressful event. After 16 days of training, participants were subjected to the acute stress event.

Moderated mediation analysis (Hayes' Process macro, model 58, 10.000 resamples; Hayes, 2018) showed that individuals with high levels of CSE experienced high challenge emotions, which then negatively affected NFR after the event. More importantly, the results indicated that for individuals who have high levels of burnout symptoms, low levels of CSE were associated with high threat emotions, while high levels of CSE were associated with low threat emotions. CSE, especially in

exhausted individuals, proved to play a key role in preventing negative experiences from stressful situations. Further research into the intertwining of chronic and acute stress, also on larger samples, is needed to prevent negative outcomes for police officers and to make clear recommendations for future deployment.

We demonstrated that initial levels of burnout symptoms moderate the effect of CSE on threat emotions. We assume this process is relevant because NFR, following an acute stress event, could build up and be predictive of future burnout symptoms. Limitations of the study are low sample size, use of a healthy police officer sample, and generalizability to the general (riot) police population as only one acute stress event in a training setting was measured. This study demonstrates whether and how an event-based approach can be used to extend research on the combination of chronic and acute stress processes. Future research could focus on multiple events. Ultimately, results may lead to new insights into training and adaptive deployment of riot police and regular police personnel.

Our study relates to the congress theme The Future is Now: the changing world of work and the UN SDGs Good health and wellbeing and Decent work and economic growth, as we aim to gain insight into the possibilities of adaptive deployment and positive wellbeing for sustainable employment of police officers.

*Keywords: burnout symptoms, acute stress process, police personnel*

## Oral presentation OP421

### The Impact of Gender Norms on Gender Gap in Leadership: Focusing on Voice Pitch Analysis

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science

We examine to what extent gender norms affect the voice patterns of women in leadership positions by analysing voice pitch. Motivated by studies that show links between women's vocal behaviours and gender stereotypes, we investigate whether gender inequalities are related to the gender gap in voice pitch. We hypothesize that women from countries with traditional gender norms will speak in higher-pitched voices than men and that the gender gap in voice pitch will be more pronounced compared to countries with less restrictive gender norms. Using 578 voice samples from 58 countries from 2019 to 2020, we find statistically robust patterns that the gender gap in average voice pitch increases in countries with less gender equality. These results provide suggestive evidence that gender norms play a critical role in the gender disparity of social leadership.

Considering the biological differences between the sexes – with a woman's average voice pitch being about an octave higher than a man's average pitch – voice pitch can be a contributing factor to the smaller number of females in leadership positions. People with higher-pitched voices are often regarded as insecure, less qualified, and less dependable. This suggests that because women, in general, have higher-pitched voices than men, the voice pitch could contribute to fewer women holding leadership positions than men. Thus, we hypothesize that women in countries with strong gender norms use higher-pitched voices than women in countries with more flexible gender norms.

We compile a cross-country dataset of 58 countries containing 578 voice samples from 68 broadcasting programs between 2019 and 2020. We use an open-source phonetics software called Praat (ver. 6.1.38) to calculate average, minimum, and maximum voice pitches for each speaker. Our dataset also includes information on the speaker's gender, the date of the broadcast, and the type of program. Using the 2020 Global Gender Gap Index (GGI) from the Global Gender Gap Report published by the World Economic Forum, we measure the overall level of gender disparity among countries. We then divide countries into three equally sized groups by GGI, resulting in the top, middle, and bottom gender equality groups. Using an ordinary least squares (OLS) model, we measure the gender differences in average, minimum, and maximum voice pitches across these three gender equality groups while controlling for the month, year, program type, and country fixed effects.

Consistent with our assumption, we find that the gender gap in the average voice pitch decreases by 12 to 18 Hz for the top and middle gender equality groups in comparison to the bottom gender equality group. For example, in our sample, the average voice pitch in the bottom gender equality group is 145 Hz for men and 219 Hz for women, which creates a gender gap of 74 Hz. However, the gap decreases to 56 Hz in the middle group and 62 Hz in the top group. These differences translate to a 24% decrease in the voice pitch gender gap between male and female speakers in countries with average gender equality and a 16% decrease in countries with the highest gender equality. Even after controlling for detailed characteristics, including the time of the broadcast, program type, and country, the estimated coefficients for the gender gap in average voice pitch are robust and significant at the 1% level. These results provide suggestive evidence that gender norms play a critical role in the gender disparity of social leadership.

There are a few important caveats to these conclusions. First, we cannot completely rule out the possibility that voice pitch may be correlated with certain socioeconomic traits of an individual that

we cannot measure in this study. Also, some argue that the vocal behaviours of media professionals are heavily conditioned by the gender norms of society. Therefore, such trained speech patterns may not accurately represent the common language patterns of the public. Additionally, due to data limitations, our study only focuses on the pitch, a single acoustic parameter of voice.

This research examines the impact of gender norms on women's speech patterns in assuming leadership. Our focus on the voice pitch stems from numerous studies that show how the social construction of gender bias accounts for gender differences in vocalization. Using an OLS regression, we find that the gender gap in average voice pitch is wider in the countries with higher gender inequality compared to the countries with lower gender inequality. This paper contributes to the literature by being the first to conduct a cross-country analysis of the gender gap in voice pitch and to show a significant effect of gender norms on the vocal behaviour of women. These results are consistent with empirical patterns observed in previous studies. Our findings support the importance of gender parity for greater representation of women in the world of leadership.

*Keywords: gender gap, leadership, voice pitch*

## Oral presentation OP439

### The impact of managers' role-modelling on the leadership behaviours of their subordinate supervisors

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science&practice

Research goals and why the work was worth doing

The construction industry is heavily affected by occupational accidents; in the year 2019 it accounted for more than 20% of all occupational fatalities in Europe. Leadership behaviours on construction sites, both generic and safety-specific, have been found to be associated with employees' safety-related behaviours, and safety-related behaviours have been identified as important antecedents of workplace accidents and injuries. The overall aim of the present study was to investigate how safety-leadership behaviours are fostered within the construction industry through managerial role modelling.

Theoretical background

One of the pathways through which senior managers' safety-leadership may influence workplace safety is through its influence on their junior managers' safety-leadership behaviours, via the mechanism of role modelling and imitation. Sims and Manz (1982) argue that modelling and imitation occurs regularly within organizations and are central to organizational functioning. Modelling may establish new behaviours and increase the frequency of existing behaviours.

Design/Methodology/Approach/Intervention

A two-wave longitudinal cohort study with 4 months between measurement occasions was conducted among construction site supervisors in Sweden ( $n = 51$ ). Supervisors' ratings of their site managers' as well as their own generic and safety-specific contingent reward leadership behaviours were obtained by means of questionnaires. Cross-lagged panel models were tested within a path model framework to test the hypothesis that site managers' leadership behaviours prospectively influence supervisors' leadership behaviours.

Results obtained or expected (if not available, it must be made clear when they will be)

Site managers' contingent reward behaviours prospectively influenced supervisors' contingent reward behaviours, both generic contingent reward behaviours ( $\beta = .29, p = .01$ ) and safety-specific contingent reward behaviours ( $\beta = .22, p = .04$ ). For safety-specific contingent reward behaviours, a reversed effect ( $\beta = .26, p = .03$ ) was also found; implying that supervisors' behaviours also prospectively influenced site managers' behaviours when it comes to safety leadership.

Limitations

All data included in the present analyses were obtained from a single source (i.e., the supervisors) using a single method of data collection (i.e., questionnaire data). This may lead to common-methods-variance, potentially inflating the associations between the study variables.

Conclusions – research and or practical implications/Originality/Value

The results of the present study indicate that senior leaders may improve workplace safety through their influence on junior leaders, via the mechanism of role modelling. This finding imply that senior

leaders can use role-modelling as a way of influencing the safety-leadership behaviours of junior leaders and thereby the occupational safety performance.

#### Relevance to the Congress Theme

Safety-leadership is a key component for organizations to maintain high occupational safety in a changing world of work. Understanding how safety-leadership behaviours can be transferred from senior to junior leaders is therefore urgent.

#### Relevant UN SDGs

Maintaining efficient safety-leadership in the construction industry is a prerequisite for good health and well-being of employees as well as decent work and economic growth.

*Keywords: role-modelling, leadership, occupational safety*

## Oral presentation OP101

### The Impact of Personality on Candidate Reactions to Selection Processes

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science&practice

#### Research goals

With the continuing 'War for Talent' and the recent 'Great Resignation', it is clear that competition for talented employees is increasing. The selection process is often a key point of contact between individuals and organisations and there can be significant negative impacts of a poorly received selection process for both parties. Therefore, a better understanding of how selection processes may be perceived by individuals with different traits could help inform the design of processes which are viewed more positively and appeal to more diverse talent pools.

While there is a large body of research regarding the reactions of candidates to different types of selection processes, far less is known about the role personality plays in candidate reactions. Further, the majority of research in the field of candidate reactions has been with students and junior populations using traditional selection methods. This field study provided a unique opportunity to investigate the reactions of senior candidates internal to the organisation using newer, technology-enabled selection processes.

#### Theoretical background

The study was based on Gilliland's (1993) model of distributive and procedural justice, which identified a number of 'rules' which a selection process must follow in order to be perceived as just and fair by candidates. In addition, a recent review by Woods et al. (2020) on selection in the digital age concluded that practice has moved faster than research and that a more comprehensive evidence base is needed to support the application of technology in selection, in particular noting the need to review the changing nature of procedural justice in the digital age.

#### Methodology

A cross-sectional survey design was employed. An adaptation of Bauer et al.'s (2001) Selection Procedural Justice Scale was used to measure candidate reactions to the selection process and items from the IPIP were used to measure the Big Five Factors of personality.

Participants were applicants to a selection process for talent development schemes in the UK Civil Service. These prestigious development schemes attract a large number of applicants each year and are targeted at senior managers and leaders in the organisation. The selection process comprises two stages, stage one was the focus of the current study. In stage one, candidates were asked to complete two questionnaires, a candidate statement, and a situational judgement test. Following completion of these exercises, candidates were invited to complete the reactions questionnaire and the personality test. 625 participants completed the study.

#### Results

The responses were investigated through correlational analysis and significant relationships were investigated further using hierarchical multiple regression. The results of the study showed that Conscientious, Agreeableness and Neuroticism had small but significant relationships which candidate reactions, with Conscientiousness explaining the largest proportion of variance. Hypothesised relationships with Extraversion and Openness to Experience were not supported. The

relationships between personality factors and candidate reactions varied depending on the exercise investigated.

Socio-demographic factors were also investigated as control variables, with differences in some aspects of the reactions questionnaire found for Gender and Ethnicity.

#### Limitations

The study was carried out with internal candidates for selection onto development schemes, meaning that the findings may not generalise to other selection settings. However, the candidates were from a large variety of professional backgrounds and the schemes represent a significant career development step, therefore there are similarities with other high-stakes selection processes.

#### Implications

The study expanded the evidence base into the factors driving candidate reactions. By investigating a multimethod selection process it was possible to compare reactions to a range of commonly used, but under-researched selection methods in the same sample. The research also investigated a population who have been given limited attention to date.

The research highlighted that a combination of selection exercises and personality factors play a role in candidate reactions. Practitioners would benefit from considering how their selection process will be perceived by potential candidates with traits that are desirable to the job role in question, and should consider using selection methods which comprise different exercises in a single early stage in order to maximise their chances of attracting the broadest pool of potential talent.

#### Relevance to the Congress Theme

This research responds to the theme of the changing world of work by testing well-established concepts with newer technology-enabled selection methods and investigates current populations of interest in the current economic climate of the 'Great Resignation'.

*Keywords: selection, personality, technology*

## Oral presentation OP376

### The Impact of Telecommuting on Psychological Distress: A Cross-Lagged Study during the COVID-19 Pandemic

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science

Telecommuting is “a work practice that involves members of an organization substituting a portion of their typical work hours to work away from a central workplace—typically principally from home—using technology to interact with others as needed to conduct work tasks” (Allen & Golden, 2015). Since the beginning of the COVID-19 pandemic, many governments have encouraged or mandated telecommuting to contain the spread of the virus. This massive switch to telework may have an important impact on workers’ mental health. Research from before the pandemic is mainly cross-sectional and yields inconsistent findings on the effect of telecommuting on health. Thereby, clear insights into the explanatory mechanisms of this effect are lacking. We aim to enhance our understanding of the impact of telecommuting on psychological distress during the COVID-19 pandemic by simultaneously investigating four explanatory mechanisms. In doing so, we use four-wave longitudinal data, examining these processes within individuals.

Building on the Job Demands-Resources model and extensions adding the effect of organizational context factors to the model, we predict that telecommuting acts as an HRM practice affecting employees’ well-being through changes in their perceived work characteristics. Indeed, telecommuting was first introduced by companies as an important HRM practice to save costs and create advantages for employees (e.g. less travel costs, more flexibility, better work-home balance). In this regard, it can be conceived as an organizational resource that positively affects well-being through individual job resources. However, during the COVID-19 pandemic, many employees were forced to work from home exclusively, which came with some challenges. First, extensive telework might have blurred the boundaries between work and personal life and make detachment from work at home more difficult, thus increasing work-home interference (WHI). Second, telecommuting might have increased home-work interference (HWI), especially as many employees had to combine telework with homeschooling and taking care of their child(ren). Finally, telework could have decreased the interactions with colleagues, lowering social support by colleagues and increasing feelings of loneliness. Hence, in this study, we predicted telecommuting to act as an organizational demand increasing workers’ psychological distress through these individual (job) demands.

Data were collected in a heterogenous sample of 5959 Belgian workers, who participated in at least one of four online surveys during the initial lockdown and a period of initial relaxations of the COVID-19 measures (April-June 2020, time lag of four weeks between measurements). Random Intercept Cross-Lagged Panel Modeling using MPlus 8.7 was conducted to investigate within-person processes over time and to test hypotheses.

Within-person level results show that the effects of telecommuting on HWI, social support and loneliness depended on the time of measurement. While telecommuting positively affected HWI at the peak of the COVID-19 wave when schools and daycare centers were closed (from T1 to T2), it was only related to a decrease of social support and an increase in loneliness at the end of the study when people could slowly return to their workplaces (from T3 to T4). There was no direct effect of telecommuting on WHI and psychological distress. Next, loneliness positively predicted psychological distress earlier in the study (from T1 to T2 and from T2 to T3), social support negatively predicted

psychological distress from T2 to T3 and from T3 to T4, and WHI and HWI affected psychological distress only from T3 to T4. No indirect effects from telecommuting to psychological distress via the mediators were found.

Study limitations are the use of self-reports to measure our study variables and the finding that several lagged effects were found to be unstable across measurement points.

This study contributes to our knowledge of the explanations of the effects of telecommuting on mental health. We found that the effects of telecommuting on HWI, social support and loneliness differed depending on the stage in the first wave of the COVID-19 pandemic. This suggests that the context presents certain challenges to teleworkers that may or may not make telecommuting challenging in terms of HWI, social support and loneliness. Customized support is recommended depending on the stage in the pandemic (e.g. attention to HWI when schools and daycare centers close, attention to social contact when the pandemic lasts longer and there are opportunities to return to the workplace again).

This study best fits within the '8. Organisational design and development' EAWOP topic area. It also contributes to the UN Sustainable Development Goals of 'Good health and wellbeing' and 'Decent work and economic growth', as it investigates the impact of telecommuting on employee well-being and addresses ways to protect the welfare of home workers.

*Keywords: Telework, Employee well-being, Work-life conflict*

## Oral presentation OP404

### The impact of the COVID-19 pandemic on the prevalence of physicians' burnout, depression, and sickness absence

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science

The unprecedented demands on clinical practice and the disruptions caused by the COVID-19 pandemic have contributed to physicians' experience of higher levels of burnout, psychological distress, anxiety, insomnia, and depression with variations across workplaces and specialties. A few longitudinal studies indicate that the level of mental health problems increased among, especially, front-line physicians during the pandemic. However, knowledge is limited due to methodological shortcomings or restricted samples. To summarise, many studies focus on one single clinic or hospital or only physicians at the frontline leaving out a large share of physicians. Moreover, many studies have small samples and short follow-up times. This study uses a nationally representative sample of physicians from various medical specialties and positions (physicians in training, specialists, and consultants) to expand current knowledge.

This study aims to investigate the impact of the COVID-19 pandemic on physicians' mental health problems by assessing changes in the level of burnout and depression between 2021 and 2022 among physicians in Sweden. Also, we will investigate whether burnout and depression in 2021 predict the prevalence of sickness absence. Differences across genders, hierarchical positions, and specialties will additionally be explored.

We will draw on data from the Longitudinal Occupational Health survey for HealthCare professionals in Sweden (LOHHCS). A questionnaire was distributed to a representative sample of physicians in the Swedish occupational register from February to May 2021 (T1). A follow-up questionnaire was distributed from March to June 2022 (T2). A total of 1575 physicians answered the questionnaire at both times. The Burnout Assessment Tool 12 (BAT) was used to assess burnout, and the Symptom Check List 6 (SCL) was used to assess depression. Data on sickness absence derives from Swedish Social Insurance registers and covers all the number of days on sick leaves, exceeding 14 days until June 2022.

The full results are yet to be compiled. Preliminary results show that the mean value of burnout measured with the BAT score has increased in the total sample of physicians from 1.80 to 1.91. For female physicians, the mean level on the BAT score in 2021 was 1.86 and 1.99 in 2022. For male physicians mean score in 2021 was 1.71 and in 2022 1.81. The prevalence of depression was 3.7% in 2021 and 5.5% in 2022. The prevalence of depression among female physicians increased from 4.1% in 2021 to 6.4% in 2022 and among male physicians from 3.1% to 4.3%. Further analyses will be carried out to determine if there are significant differences between 2021 and 2022 across groups of physicians in Sweden. Also, logistic regressions will be carried out to determine if burnout and depression in 2021 predict sickness absence.

A limitation of this study is that no data was collected before the start of the pandemic. That would have given us the opportunity to monitor the full impact of the pandemic.

Based on these preliminary results, we conclude that mental health problems have increased in Swedish physicians between 2021 and 2022.

Relevant to this study are the UN Sustainable Development Goals 'Decent work and economic growth' and 'Good health and well-being'. Furthermore, this study is relevant to the congress theme by emphasising the urgent need to explore organisational shortcomings that drive and maintain ill health among healthcare workers. This study has relevance for theme 18 well-being and theme 15.

*Keywords: burnout, sickness absence, physicians*

## Oral presentation OP34

### The impact of transformational and transactional leadership on employee engagement in the context of the COVID 19 pandemic

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science

#### Research goals

The primary aim of this study is to investigate whether and what relationships exist between transformational and transactional leadership styles and employee engagement in the context of the COVID 19 pandemic.

#### Theoretical background

The outbreak of COVID-19 confronted many companies with new challenges (Aditama & Riyanto 2020). Managers play a central role in reducing the discomfort of employees in this exceptional situation and ensuring that the employee engagement of the workforce is maintained (Aditama & Riyanto 2020).

In general, leadership can be considered a substantial driver of employee engagement (Bedarkar & Pandita, 2014). Both transformational and transactional leadership can be used to influence employee engagement (Breevaart et al., 2014). Transformational leadership, as opposed to the transactional method, motivates employees to not only meet but exceed the expectations of the respective leader (Bass, 1996, p. 2). Although elements of both styles may trigger additional effort from employees, transformational leadership produces better results in terms of effectiveness (Bass, 1990). Nevertheless, transformational leadership is not a substitute for transactional leadership, but a complement to that style (Bass, 1999).

Due to the pandemic and its impact on the world of work, it is now necessary to review how leadership styles influenced employee engagement. Measures that have been taken in organizations to contain the virus, such as social distancing regulations, influenced the relationship between superiors and subordinates and led accordingly, to certain changes in leadership (Chen & Sriphon, 2021).

In the past, the linkage between the two research areas of leadership and employee engagement has been pointed out and studied in different countries (cf. e.g., Li, Sun, Taris, Xing & Peeters, 2020). The specific use of transactional and transformational leadership has also been considered in combination with employee engagement (see, e.g., Breevaart et al., 2014). However, under the current external circumstance, specifically the global pandemic, little research has been conducted in this regard. Initial research has been completed in which either the area of leadership or employee engagement has been analyzed in the context of COVID-19. For example, it was found that in this exceptional situation, it is significant for employees to report to a leader who has a clear vision of the future for the team (Tiwari & Singh, 2021). In this regard, the presence of an inspiring vision resonates with transformational leadership (Bass, 1999). However, because the consequences of the virus were not felt in many parts of the world until the spring of 2020, there are generally few publications in which there is an exploration of leadership or employee engagement. There has been no consideration of transformational and transactional leadership, employee engagement, or COVID-19. Consequently, it is unknown whether the insights generated in this regard are also valid

under the current pandemic conditions. Furthermore, the consequences triggered by the virus, such as short-time work, have not yet been included in the research.

### Methodology

An online survey with 280 participants was conducted applying the validated German version of the Multiple Leadership Questionnaire (Felfe, 2006) for assessing transactional and transformational leadership and employee engagement was measured by the survey of Rich et al. (2010).

### Results

The study found that transformational leadership style has a positive relationship with employee engagement. Also, each of the four associated sub-elements (Idealized Influence, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration) has positive relationships with Employee Engagement. In the case of transactional leadership, a positive (Contingent Reward), a non-significant (Management by Exception: active) and a negative (Management by Exception: passive) relationship to employee engagement was found for the three components. Overall, transformational leadership is used more frequently than the transactional approach.

### Limitations

As the current study focused on the two theoretically and practically established leadership constructs no statements with respect to other up to date leadership approaches can be made.

### Conclusions

Through the findings of this work, the previous research results can also be largely confirmed in the context of the COVID-19 pandemic. Consequently, even under the current circumstances, it is recommended that transformational leadership style is primarily used and transactional leadership style should be used as a supplement in order to be able to generate an optimal basis for high employee engagement.

### Relevance

In the context of the changing world of work – there is more remote work than ever before - it is important to learn more about how organizations are able to effectively manage these situations by applying efficient leadership styles.

*Keywords: Leadership, Employee Engagement, COVID-19*

## Oral presentation OP19

### **The impact of transformational leadership on workers' personal resources: Latent profile analysis and links with physical and psychological health**

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science

**Research goals:** This study aims to i) identify latent 'resources' profiles among two samples combining vigor at work, work engagement, and vigorous, moderate, and walking physical activity levels; ii) examine the link between the identified profiles and indicators of psychological and physical health; and iii) test whether different levels of transformational leadership determine the probability of belonging to a particular profile.

**Theoretical background:** Several studies have examined the impact of leadership on employee wellbeing and health, and their underlying pathways. Yet, this research has focused on a variable-centred approach. In contrast, we adopted a person-centred approach; it allowed us to identify different groups of employees to know the implications that transformational leadership has on them, and which results to expect at the employee well-being level. Thus, the combination of vigor at work, physical activity and work engagement could help to better understand their jointly effects addressed in worker's profiles, following job demands-resources theory.

**Design/Methodology:** Two samples of workers (N Sample 1 = 354; N Sample 2 = 158) completed a cross-sectional survey before their annual medical examination at a company for health surveillance and control in Spain.

**Results:** For Sample 1, results from latent profile analysis yielded three profiles: Spiritless , Spirited and High-Spirited . Both High-Spirited and Spirited profiles showed a positive relationship with mental health, whereas Spiritless showed a negative relationship. For Sample 2, two profiles ( Spirited and Spiritless ) were replicated with similar effects on mental health to those found in Sample 1, but none of them was found to be related to total cholesterol biomarker values. In both samples, transformational leadership determined the probability of belonging to favourable profiles regarding to resources.

**Limitations:** Although we carried out two latent profile analysis in two samples to enrich the analyses, the results and the findings of the study, the reduced number of participants with biomarkers is likely to have affected the number of profiles in Sample 2. Moreover, workers' data were mainly obtained through self-report measures, except for the cholesterol biomarker.

**Conclusions – research and or practical implications/Originality/Value:** Transformational leadership was an important variable that increased the probability of pertaining to a more positive profile ( High-Spirited/Spirited vs. Spiritless ) and consecutively with better mental health. This research can provide to the health practitioners a guide to categorize the workers into different profiles and to boost changes in profile membership by fostering transformational leadership.

**Relevance to the Congress Theme:** The relevance of this study derives from the fact that the world of work and the types of workers are changing year by year. For that reason, we used a person-centred approach, analysing how variables fluctuate within people.

**Relevant UN SDGs:** This study contributes to the third goal (good health and well-being) of the Sustainable Development Goals.

**Keywords:** *personal resources, physical/psychological health, transformational leadership*

## Oral presentation OP223

### The impact of workplace stress, organizational commitment, and self-efficacy on burnout among Croatian workers

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science

**Research goals and why the work paid off :** The goal of this study is to examine the contribution of psychological demands and job control as variables of workplace stress and affective, instrumental, and normative organizational commitment in explaining disengagement and exhaustion as burnout dimensions among employees in Croatia. Additionally, the aim is to examine the mediating role of self-efficacy between psychological demands and job control as variables of workplace stress and disengagement and exhaustion as variables of burnout. This research represents a valuable contribution to explaining the effects of work and personal resources on mental health. The obtained results can contribute to the increase in the awareness of organizations about the importance of the mental health of employees, planning interventions for the prevention of negative health outcomes of employees, building resilience, and increasing commitment to the organization.

**Theoretical background :** The desire to achieve the best results combined with a busy lifestyle often leads to burnout symptoms in the workplace. This disrupts daily functioning and reduces professional efficiency. Burnout syndrome is the result of chronic workplace stress that has not been successfully managed (WHO, 2019). Research shows that workplace stress contributes to burnout (Khamisa et al., 2017; Varjačić, 2013). Individual health outcomes are also related to work attitudes, with organizational commitment being both a risk and a protective factor for burnout (Enginyurt et al., 2015; Sarisik et al., 2019). Furthermore, personal beliefs have a huge role in an individual's well-being and mental health. According to Yao et al. (2018) self-efficacy has the most important protective role in job-related burnout. It is a personal resource that can be used to cope as it is one's belief that one can achieve the goals one sets (eg. Schwarzer et al. 1995). Self-efficacy can mitigate the negative effect of stressors on burnout and prevent burnout (Makara-Studzińska, 2021).

**Design/Methodology/Approach/Intervention:** 135 employees (51 men and 84 women) from different industries participated in the research. 8.15 % of participants belong to the age range from 18 to 25 years, from 26 to 30 years 38.52 %, from 31 to 40 years 43.70 %, from 41 to 50 years 6.67 %, and from 51 up to 60 years 2.96 % of participants. The measuring instruments were the Job Content Questionnaire - JCQ (Scale of Psychological Demands and Job Control), the Three-Component Organisational Commitment Scale, the General Self-Efficacy Scale, and the Oldenburg Burnout Inventory. The participants received an online questionnaire via e-mail or social networks.

**Obtained results:** Two hierarchical regression analyses were conducted with dimensions of burnout as criteria. Demographic variables were included as predictors in the first step, dimensions of workplace stress in the second, and dimensions of organizational commitment in the third step. Affective commitment is obtained as a negative predictor and instrumental commitment as a positive predictor of disengagement. Job control and affective commitment are negative predictors, and psychological demands are shown to be positive predictors of exhaustion. In the relationship between the dimensions of workplace stress and burnout, self-efficacy is not a mediator in the dimension of disengagement. However, partial mediation was achieved between job control and exhaustion, while there was no mediation effect for psychological demands.

**Limitations:** The research was conducted on a small sample, and the respondents were not divided by industries, which can differ significantly in working conditions and job requirements. Also, some

authors point out three dimensions of burnout - emotional exhaustion, depersonalization/cynicism, and feeling of insufficient achievement, while in this research only two were measured.

Conclusions – research and/or practical implications/Originality/Value: Lower affective commitment and higher instrumental commitment predict disengagement. Lower job control, higher job demands, and lower affective commitment predict exhaustion. Self-efficacy is a partial mediator in the relationship between job control and exhaustion. The results contribute to the design of interventions aimed at strengthening self-efficacy as a protective factor. Interventions can be designed with a focus on leadership academies aimed at creating psychologically safe and positive working environments.

Relevance to the theme of the Congress: Unlike traditional organizations, today more employers recognize the importance of workplace well-being. The future of work is the well-being of employees. It is our duty to promote general health, the happiness of employees, and a supportive workplace.

Relevant UN SDGs: Our research is relevant to the goal Good health and well-being. We provide insight into the contribution of organizational and personal factors to well-being.

*Keywords: burnout, stress, organizational commitment*

## Oral presentation OP633

### The importance of a discrepancy between preferred and actual proportion of remote working in predicting intention to leave

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#### Purpose and goals

Organizations seek to reduce staff turnover. Previous research has shown intention to leave one's job can relate to factors such as managerial support, job satisfaction and work-life balance. However, now many organizations are planning a post-COVID return to the office, those who now remote or hybrid working may seek a new job. As part of a study into attitudes to remote, hybrid and non-remote work, this paper investigates factors underlying workers' intentions to leave their job. This is relevant to organizations considering a mandated return to the office, and for workers wishing to influence how such policies may be applied.

#### Theoretical background

Many enjoy working from home and may not wish to return to the office full-time. Where there is a mismatch between preferred amount of time in the office and how much time actually spent there, workers may consider leaving their job; the larger the difference, the more likely this is.

Personality differences exist between remote and non-remote workers, and these are likely important in understanding why individuals do or do not wish to return to the office, and in guiding organizations to shape effective strategy. Research using the Myers-Briggs (MBTI) model show that those with an Intuitive (N) and/or a Perceiving (P) personality preference are more likely to be looking to leave their jobs than those with a Sensing (S) and/or a Judging (J) preference.

#### Methodology

Data was collected online from participants who had previously completed the MBTI assessment. 405 people took part, representing a wide range of industries, job types and occupational levels. They were asked for their MBTI type, their views about their job, and both for the percentage of time they actually worked remotely and the percentage they would prefer to do so, in each case choosing one of 12 categories scored from 1 (0% remote working) and 2 (11-20%) up to 12 (100%) The difference between preferred and actual working was calculated (preferred category score – actual category score), resulting in a score from -11 (preferred remote working much greater than actual) to 11 (actual remote working much greater than preferred).

Other possible predictors of intention to leave included job satisfaction, feeling valued and included, work-related stress, managerial support and personality type.

#### Results

Fewer respondents wanted to work entirely remotely, or entirely non-remotely, than actually did so. 42% would like to work remotely more than they do now, 27% matched their preference, and 31% would like to work in the office more often.

Respondents with a mismatch between remote working preference and actuality were more likely to say they were looking for a new job, especially those working remotely much less than they

wanted. 57% of those with a (preference-actual) score of -11 to -6 agreed or strongly agreed that they were looking for a new job, compared with 20% of those with a score of 6 to 11.

Intention to leave correlated -.553 with job satisfaction, -.472 with feeling valued and included, .195 with work-related stress and -.440 with managerial support (all sig at the 0.01% level)

Those Intuition preferences were more likely to be looking for a new job than those with Sensing (chi-square 9.953, sig at the 5% level). There was no significant relationship with Judging-Perceiving or other MBTI dimensions.

A univariate ANOVA showed that both the discrepancy between preferred and actual amount of remote working and the Sensing-Intuition dimension showed a significant effect, though not as strong as job satisfaction, feeling valued and included, and managerial support. Work-related stress did not show a significant effect. A univariate ANOVA omitting work-related stress showed a Rsquare of .494 and adjusted Rsquare of .429.

#### Limitations

Due to survey space, some possibly relevant factors were not included, such as salary and work-life balance.

The data was self-report and correlational.

#### Conclusions

The discrepancy between preference and actuality in remote working accounted for unique variance in intention to leave, over and above job satisfaction, feeling valued and included, and managerial support. Those working remotely much less than their preferred level were more likely to say that they were looking for a new job. If an organization mandates that all employees return to the office, this could result in an increase in intention to leave and losing valuable employees. Organizations and individual managers avoid blanket back-to-office policies without very good reasons.

#### Relevance to Congress theme

Following COVID, many organizations opined that large-scale remote and hybrid working was temporary and showed an interest in reverting back to an office-based workforce. This is relevant to the congress theme of "The Future is Now: the changing world of work".

*Keywords: intention to leave, remote working, retention*

## Oral presentation OP305

### **The importance of being available: the consequences of working flexibly on team processes and team outcomes**

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science&practice

#### Research goals

Working from home has become an everyday reality for many employees. Although there is now a wide range of research on the advantages and disadvantages of flexible forms of work, these almost exclusively consider individual effects. The effects of flexible work on team processes and team outcomes have received little attention so far.

The point of connection between teams and flexible working arrangements usually occurs in the domain of virtual teams research. However, studies on flexible work and virtual teams have so far been two largely unconnected research streams. The aim of this work is, therefore, to connect these two research streams and to take the team level into account in flexible work. Specifically, we explore the effects of flexibility on team processes and team outcomes among teams who work flexibly. We operationalize flexibility through team members place and time overlap and through perceived team members' availability.

#### Theoretical background

Leaning on the adaptation of the Input-Process-Output (IPO) Model (Dulebohn & Hoch, 2017), we focused on the team level for input, process and output factors. With regard to input factors, we considered the composition of the team in terms of time and place overlap, as well as the perceived availability of other team members. To capture the team processes of teams working flexibly, we focus on team communication, team planning and coordination. Finally, we considered group outcome perceptions and team performance as relevant output factors. This model has been specifically adapted for studying virtual teams because it includes aspects relevant for virtual teams and their effectiveness and therefore allows us to identify factors that we consider important for success in teams that work flexibly.

#### Methodology

In total 94 teams (that work flexibly to some extent) and their team leaders answered the survey between May 2020 and February 2022. Teams ranged in size between 3 and 22 team members ( $M = 5.6$  team members,  $SD = 2.47$ ; team response rate 66.75%).

Team members' place and time overlap was assessed asking respondents to rate how often they usually worked at the same place and time with other team members and then aggregating these scores for each team. Aggregate team scores were also obtained for perceived availability of team members, three dimensions of team communication, team coordination and team planning. Managers' evaluations were obtained for group outcome perceptions and team performance.

Regression analyses were performed using SPSS PROCESS 4.1 Macro (Hayes, 2013) to test hypothesized mediations with team overlap and perceived team availability as independent variables, team communication (knowledge sharing, communication quality and spontaneous communication), coordination and planning as mediators and team outcome perception and team

performance (both assessed on the manager level) as dependent variables. Mediation analysis were performed for each mediator separately, because of their high bi-variate correlations which could cause problems of multicollinearity.

#### Results obtained

Results revealed no effect of team members' place nor time overlap on the team outcome nor the team processes. Perceived team member availability, on the other hand, predicted managers' outcome perceptions through team coordination ( $b=.23$ , 95% CI, .089 to .401), team planning ( $b=.15$ , 95% CI, .065 to .253), knowledge sharing ( $b=.16$ , 95% CI, .008 to .329) and communication quality ( $b=.18$ , 95% CI, .027 to .337), as well as team performance through team planning ( $b=.13$ , 95% CI, .006 to .249). All indirect effects represented full mediation.

#### Limitations

Even though we collected data on both employee and manager level, the data is still cross-sectional, and no objective indicator of performance was used. Furthermore, the question remains whether the conceptualization of team overlap adequately reflects team flexibility or whether a different way of measuring team members objective flexibility should be applied.

#### Conclusions

The main contribution of our work is to merge two separate research streams – flexible work and virtual teams (Raghuram et al., 2019) – and provide new insight into the effects of workplace flexibility among teams. Our results showed that perceived availability, but not time and place flexibility, are related to team processes and team results. It seems that for efficient teamwork, it is less important whether team members work flexibly but whether they are easily reachable and responsive to each other. Therefore, our main take home message for practitioners is to establish clear, uniform rules for availability/reachability among teams that work flexibly. Moreover, we contribute to the literature on teams by introducing a new team communication scale suitable to use for all teams but especially in the context of flexible teams.

*Keywords: flexible work, teams, availability*

## Oral presentation OP560

### **The importance of servant leadership features towards creating a conducive diverse climate: A dominance analysis**

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science&practice

Research goals and research importance: Leadership plays an integral role in creating positive perceptions towards diversity. Unfortunately, minimal research has been conducted to determine how leadership and primary features of servant leadership could enhance a conducive diversity climate. Consequently, the objectives of this research were twofold. The first objective was to examine the impact of servant leadership on diversity climate, and secondly, to determine which characteristic of servant leadership would contribute the most towards a conducive diversity climate.

Theoretical background: With workforces becoming more diverse, leadership and diversity will remain an important and relevant topic for any organisation. Servant leadership can be integral in organisations experiencing change due to increased diversity. One should keep in mind that a diverse organisation is a culmination of different races, cultures, nationalities, religions and even sexual orientations, which require specialist managerial knowledge.

In essence, servant leadership is a service to followers. Servant leaders would typically display behaviours of interpersonal support, building community, altruism, egalitarianism and moral integrity. In terms of diversity climate, organisations manage diversity through policies and practices concerning diversity to create an inclusive and diverse-friendly environment. Employees form perceptions of these managerial involvements and are known as diversity climate. Diversity climate is an essential facet for any organisation, mainly due to the associated benefits for both employees and organizations and therefore, organisations will strive to stimulate a conducive diversity climate.

Employees and managers in diverse organisations will require knowledge and skills to manage and lead heterogeneous work teams and groups. Servant leadership will be an essential leadership style due to its high emphasis on morality and contributing towards a sense of interactional justice, optimistic attitude and commitment to change. Although previous examinations have found positive relationships between servant leadership and inclusion, there seems to be a research opportunity to examine servant leadership and diversity climate.

Methodology: The quantitative cross-sectional study collected 230 responses from a convenience sample. Respondents from the South African financial, retail and manufacturing sectors completed measures for servant leadership, including characteristics of servant leadership (interpersonal support, building community, altruism, egalitarianism and moral integrity) and diversity climate. The statistical analysis included descriptive and reliability statistics, a confirmatory factor analysis, correlation analysis, standardised regressions and a dominance analysis to determine which feature of servant leadership would contribute the most towards a conducive diversity climate. A dominance analysis can demonstrate the relevant importance of each predictor (servant leadership characteristics) in a specific model.

Results: The results found evidence of a reliable (interpersonal support,  $\alpha = 0.92$ ; building community,  $\alpha = 0.86$ ; altruism,  $\alpha = 0.91$ ; egalitarianism,  $\alpha = 0.89$ ; moral integrity,  $\alpha = 0.92$ ) and valid model ( $\chi^2 = 22.64$ ;  $df = 5$ ;  $p < 0.001$ ; TLI = 0.96; CFI = 0.98; RMSEA = 0.01). The correlation analysis further revealed all features of servant leadership were significant and positively related to diversity climate. The results from the standardized regressions found an improvement in servant leadership

characteristics will result in an improvement in diversity climate. The dominance analysis further showed moral integrity to dominate as a predictor (41%) followed by building community (31%), altruism (11%), interpersonal support (10%) and Egalitarianism (7%).

Limitations: The research approach and design do not allow causality conclusions, while the sampling technique restricts conclusions to the sample group. Data were collected from South Africa, and future studies should consider including a wider audience with a longitudinal research design in order to examine the impact of possible interventions.

Research/Practical Implications: Organisations who wish to enhance a diversity climate with limited resources can adopt a focused strategy, emphasising developing moral integrity and a sense of building community.

Value: A study of similar nature does not yet exist. Therefore the findings contribute to the body of knowledge for servant leadership and diversity climate. The information can also be used to train managers tasked with managing diversity in organisations.

Relevance to congress themes: A conducive diversity climate is manifested in how well an organisation is able to manage diversity and create an inclusive environment. Knowledge of servant leadership features that can contribute towards a conducive diversity climate is beneficial towards both practitioners and scholars.

*Keywords: Diversity climate, servant leadership, dominance analysis.*

## Oral presentation OP498

### The importance of working models in the relationship between green tape and psychological safety

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The study has the main objective to test how green tape and psychological safety are positively related by the working models.

It was used the concept of psychological safety, as defined by Edmondson (1999), as well the working model that the workers have been adopting, namely regarding it being an in-person, fully remote or hybrid model, and asses the effect that the effectiveness of the rules of an organization (green tape) has in this relationship.

The data was collected from a convenience sample of workers that were employed by the time of the collection of the data. The collection happened between January and February 2022.

The sample was composed by 360 workers with different academic backgrounds, from Germany, Portugal, and Brazil, and aged between 20 and 69 years. The participants were from the different activities sectors.

The used protocol was formed by four questionnaires: sociodemographic questionnaire, working model questionnaire, green tape questionnaire developed by De-Hart Davis (2008) and the psychological safety questionnaire developed by Edmondson (1999), all of them validated in English and Portuguese.

Relatable to the hypothesis, were established the follows:

H1: There is a positive and significant correlation between green tape and psychological safety.

H1a: There is a positive and significant correlation between green tape and psychological safety for workers in an in-person working model.

H1b: There is a positive and significant correlation between green tape and psychological safety for workers in a remote working model.

H1c: There is a positive and significant correlation between green tape and psychological safety for workers in a hybrid working model.

H2a: There is a positive relation between green tape and psychological safety in an in-person working model.

H2b: There is a positive relation between green tape and psychological safety in a remote working model.

H2c: There is a positive relation between green tape and psychological safety in a hybrid working model.

H3: There are significant differences between the working models and green tape.

H4: There are significant differences between working models and psychological safety.

The main conclusion drawn from the study was that green tape always exists, regardless of the type of working model used, so if the requirements defined by DeHart-Davis (1999) are met, there will always be rule effectiveness.

Initially, it was expected that the effectiveness of the rules would always be higher when it came to in-person work context, than a remote or hybrid. That didn't happen, the green tape, exist in an equal way, regardless the working model. Such results can be explained by the timing of this research, post-Covid-19 pandemic. During the Covid-19 pandemic the world was forced to "shut-down" due to the rapid spread of the new deadly virus (Hatipoglu, 2020). This resulted in a need of adaptation of the world of work (Moens et al., 2012).

To test the first hypothesis established, it was essential to try to understand if the effectiveness of the rules (green tape) and psychological safety were correlated, something which was proved, so when exist green tape, exist psychological safety.

Then the need arose to test these two variables in relation to each type of working models and it was concluded that there were no differences between the effectiveness of the rules and psychological safety, regardless of the model of work. It is important to note that the correlation with the highest value was for remote work, which goes against all the previous covid ideas, that's prove my first thought about the theme.

There were differences between the various working models, but these was not statistically significant, this may be due the fact that the sample was not large enough to reflect larger differences. But the bottom line is that there were no differences, in this study, in the relationship between rule effectiveness and psychological safety, regardless of the working model.

The team work, only needs the five theoretical attributes of green tape to achieve a good and health environmental in the workplace: accountability and legitimate authority (promoted by written rules), the wise use of public resources (advanced by valid relationships between rule means and ends), managerial efficiency (facilitated by the optimal control), fairness in the distribution of the public resources (assisted by consistent rule application), and transparency (furthered by stakeholder understanding of rule purposes) (DeHart-Davis, 2008). That ends in a work design that provides proficiency and stakeholders acceptability.

With the use of an ANOVA, it was possible to prove that there really are no differences between the working models and the green tape, what emphasizes what was written in the forward paragraph.

Relatable to the differences between the working models and psychological safety, the same test, that was conducted before, showed that there existed differences between psychological safety and working models. The model that most proved to influence positively psychology safety was the hybrid model. With that was possible to verify that the workers that were working in-person tends to have lower levels of psychological safety. To reinforce this idea, a T-Test for independent samples was carried out in which in-person work and technological working models (hybrid and remote) were tested. The results showed that the working models mediated by technology have a greater impact on psychological safety than the in-person model.

This led me to reflect on the fact that workers need to feel safe sharing their ideas and opinions and contributing more effectively to the organization (Edmondson, 1999) when they feel that have more flexibility choosing and adjusting the working model to their personal and work needs.

Subsequently, others, equally interesting conclusions were reached. I was able to understand that the closer the green tape questionnaire was to the optimal response point, the greater the feeling of

effectiveness of the rules. The same happened when I studied the perspective of effectiveness of the rules independently of the working model. So, if the workers feel that the rules of organizations are adapted to their needs, and are effective, the workers tend to feel happier in the workplace.

Finally, it was concluded that neither nationality, age, organizational tenure, job tenure nor gender, influences the way workers perceive the effectiveness of the rules. With this I can conclude that doesn't matter what kind of sociodemographic variable I have, if the five theoretical requirements exist, green tape and effective rules, will exist.

This study has some rich and interesting information, even more so when the world is about to change. The human being's life, for the most part, is tied up with work. I have long argued that if a worker feels happy, connected to his/her organization, and fulfilled, there is a high probability that he/she will feel happiness and motivation in his/her life.

The biggest conclusion I can draw from the study is that there is always green tape when all the requirements about the rules are fulfilled, which reinforces the idea of De-Hart Davis (2008).

With this study it was also possible to realize that psychological safety tends to exist when green tape exists. In other words, a feeling of efficacy of the rules leads to sharing and greater participation, as well as the security to do so on the part of the workers. These variables translate into a healthier working environment and sharing, which leads to greater growth at a personal and organizational level.

The fact that the study was conducted after a pandemic, which forced an abysmal development of the world of work, proves that this world depends on all the surrounding variables and that organizations must have the ability to adapt and seek stability to survive. This also, I think, leads to changes in paradigms and to the recognition that all kinds of work are possible, in remote or hybrid conditions, and that this does not change the perspective of the effectiveness of the rules.

*Keywords: Green tape, Psychological safety, Working models*

## Oral presentation OP529

### The influence of Authentic Leadership and Organisational Justice on Commitment

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science

This paper delves into the relationship between Authentic Leadership and Affective Commitment of workers as well as the mediating influence of the perception of Organisational Justice, aspects linked to the competence of management policies. The notion of employer/worker reciprocity is a subject that has been raised by certain authors (Alfes et al., 2013; Leroy et al., 2012) who, based on the Social Exchange Theory designed by Blau (1964), suggest that relationships between workers and their leaders are characterised by dynamic interactions that seek reciprocal behaviour and trust that lead to mutual commitment. Hence when employees perceive these values from their leaders, they feel in debt, a sentiment which raises their commitment to the organisation (Xiong, Lin, Li, and Wang, 2016). The style of leadership in the development of attitudes of commitment among workers plays a major role from the perspective of morals and values. Furthermore, their perception of justice is another key element in the development of organisational commitment. This study therefore analyses the relationship between leadership style and the perception of organisational justice on the commitment of workers towards the organisation that employs them. To verify these relationships, this study sampled 302 employees of Spanish companies with the following three tools: the Authentic Leadership Questionnaire designed by Avolio, Gardner, Walumbwa, Luthans and May (2004), the Scale of Organisational Commitment of Meyer and Allen (1997) and the Organisational Justice Perception Scale of Niehoff and Moorman (1993). The results gleaned from different regression and mediation models confirm both the direct relationship of Authentic Leadership and the role of justice with Affective Commitment. In addition, the SEM analyses certified the goodness of the model for the three variables. Our results offer evidence of the relationships between the study variables and allow delving into each of the four working hypotheses. One of these is the influence of supervisor leadership style on worker commitment. The leader is a concrete, non-abstract incarnation of the image of an organisation that is key to the link between employees and the organisation. In this sense, the leader/follower relationship is crucial to grasp the influence of supervisors on employee organisational commitment (anonymized, 2018; Wallace, De Chernatony and Buil, 2013). The findings of this study also allow delving into the role of the perception of Organisational Justice as a mediating variable between leadership and commitment. OJ plays a pivotal role in worker management in that the relevance of the perception of OJ is a factor that affects their behaviour and performance and thus can have an impact on company success (Swalhi, Zgoulli, and Hofaidhllaoui, 2017). A limitation of this study is its number of participants which should in future work be expanded to go deeper into the conclusions. Another limitation is the influence of authentic leadership style over the other variables. It is true that there are different models and leadership styles that could result in redundancies (Banks et al., 2016). Hence a future line of research should independently analyse the influence that other styles (transformational leadership, empowerment, etc.) can wield over OJ and AC. Finally, we believe that the current study forms part of recent literature on the influence and significance of relations of social exchange between leaders and followers as well as on the perception and attitude of employees in the labour framework (Malmrud, et al., 2020; Van Knippenberg et al., 2015) as it offers strategies to administrators and supervisors to carry out optimal management of organisational human resources.

*Keywords: Authentic Leadership, Affective Commitment, Perception of Organisational Justice*

## Oral presentation OP251

### **The Influence Of Multitasking While Videoconferencing On Videoconference Fatigue. An Experimental Approach.**

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science

#### Introduction

Since the Covid-19-pandemic, employees had to work from home and were forced to use new communication technology to adapt to the new challenges. Employees started to report a massive raise in the use of videoconferences for work related tasks. In 2020 public media reported that employees and leaders were increasingly fatigued after workdays with multiple videoconferences (i.e., zoom fatigue). This expression describes symptoms of exhaustion and fatigue encompassing social, emotional, motivational, and physical aspects (Fauville et al., 2021). Meanwhile “zoom fatigue” has been replaced by the term “videoconference fatigue”.

#### Research question

Studies showed a connection between the use of videoconferences and videoconference fatigue (Bennett et al., 2021; Lestari et al., 2021). It is theorized that videoconference fatigue results from a higher cognitive effort to compensate for communication difficulties such as missing nonverbal cues or body language and eye contact (Bailenson, 2021). Companies reported that employees tend to multitask during videoconferences more frequently compared to face-to-face (f2f) meetings (Cao et al., 2021). In comparison to f2f meetings, working with remote meeting software entices the participants to engage in multiple tasks during the meeting (e.g., responding to e-mails, browsing the web, or working on other tasks). Persons who multitask often think, they are more productive (Cao et al., 2021), however there are less studies examining a relationship between multitasking and performance, especially not with an experimental design. Multitasking has been examined in traditional work context, but research on multitasking during videoconferences and a potential relationship to videoconference fatigue is rare. Therefore, we analyzed the effects of multitasking on videoconference fatigue and task performance.

Based on the Job Demands-Resources Model (JD-R; Bakker & Demerouti, 2007), multitasking behavior as a job demand can negatively influence work outcomes such as task performance or videoconference fatigue, as multitasking behavior might increase cognitive load which depletes cognitive capacities. Based on previous findings and the JD-R model, we expected the following hypothesis: Multitasking during videoconferences increases videoconference fatigue (a) and reduces task performance (b).

#### Design

To test the hypotheses, a two factorial (mt vs no mt) experimental pre post design had been chosen with a convenience sample of N = 98 German students with work experience between 20 and 34 years. After filling out a first questionnaire (pre), participants were randomly assigned to the experimental or control group. Participants had to imagine being an employee of a marketing company. Both groups watched a 20-minute prerecorded online meeting of the company which they were told it would be a life conference in a company in which they had to take notes for their team leader (task 1a). The experimental group was simultaneously instructed to correct a text from a new colleague (task 1b). After the videoconference both groups were told to correct another text from a

new colleague (task 2). After 20 minutes they had to stop correcting the text. After completing task 2, all participants completed a second questionnaire (post).

### Results

Regarding H1, a repeated measures ANOVA showed an increase of videoconference fatigue from pre to post for the experimental group but not for the control group. To test H2, we compared task performance (i.e., corrections made in text) of the experimental group in task 1b with the control group in task 2. Results showed a decreased task performance for the experimental group with multitasking in comparison to the control group. H1 and H2 are supported, indicating a negative effect of multitasking for videoconference fatigue and performance.

### Limitations

The generalizability is limited due to the experimental setting. Future studies should test samples in the work context to extend the generalizability. Nevertheless, due to the experimental design of the study our data provides strong evidence for the direction of the hypothesized relationships.

### Implications

This research contributes to the literature of videoconference fatigue, multitasking and performance by revealing their relationship. Future studies should focus on technological drivers of videoconference fatigue, such as software design and advanced technologies, such as virtual reality. Knowledge of effects of multitasking during videoconferences is important for organizations and researchers to find ways to minimize negative effects of multitasking (e.g., training, self-management).

The topic and results of this study contribute to the congress theme “The Future is Now: the changing world of work” as it reflects current problems with telecommunication technology use and problems with telecommunication technology itself and suggests further research to examine opportunities of new upcoming technology.

*Keywords: Videoconference Fatigue, Multitasking, Telecommunication*

## Oral presentation OP106

### **The interplay between protean and boundaryless career orientations: a person-centred approach**

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science

#### Aims

Protean and boundaryless career orientations (PCO, BCO) have been largely discussed and empirically explored separately in the literature, leaving us with a partial and biased perspective about contemporary career preferences. We address this limitation by adopting a person-centred approach to exploring the interplay between both orientations and offer a more nuanced approach to capturing the nature of contemporary careers.

#### Theoretical background

Over the last 25 years a burgeoning body of writing and research has furthered our understanding of PCO and BCO and extensively explored their key correlates. However, this line of inquiry also conveys a rather fragmented and incomplete perspective of contemporary careers and their implications for individuals and organizations. Both metaphors are constructive and capture potentially salient elements of careers that depart from the prototypical organizational career. Taken together they depict a career that is dynamic and fluid, driven by psychological proactivity, independence from any one organization and potentially involving multidirectional moves. However, in practice both metaphors have been used interchangeably in the literature and empirical research has explored their correlates in isolation producing a limited account of the way people make sense of and enact careers in the contemporary world.

We argue that protean and boundaryless careers should be seen two sides of the same coin – the former capturing aspects associated with the internal career and the latter describing more observable career patterns. We explore the interplay between PCO and BCO adopting a person-centred approach allowing us to capture additional complexity and nuances of careers that break away from the traditional organizational career model. Our paper has three aims.

First, we discuss and empirically explore new career orientations profiles among a sample of workers in different organizations. Second, we explore how key individual (self-efficacy, gender, age, education) and work experience factors (tenure, employment contract, salary) are associated with membership in different profiles. We therefore address calls to explore the role of more visible individual differences and aspects of the work experience in shaping career preferences. Finally, we contribute to the ongoing discussion about the implications of new career orientations for employers and explore the extent to which high-commitment HRM is associated with employee well-being and task performance across new career orientations profiles.

#### Method

Data were collected through a questionnaire of a sample of 1050 workers and respective supervisors in 28 SMEs in Portugal. Data were analysed using latent profile analysis.

#### Results

A four-profile solution fits the data best. Individuals in the first profile (76% of participants) have average levels of PCO and BCO and were labelled traditional careerists. Participants in profile 2 (3%

of participants) report lower levels of PCO and high levels of BCO and were labelled opportunistic. The third profile (17% of participants) is comprised of individuals who are self-directed but prefer a career within their organizations and were labelled proactive organizational citizens. The final profile (4% of participants) aggregates individuals who are high on PCO and BCO and were labelled new careerist.

Results confirmed significant differences in profile membership. For instance, in comparison with traditional careerists, new careerists report higher self-efficacy and are more likely to be younger. New careerists also report lower employer tenure and higher earnings when compared with individuals in other profiles.

Finally, results indicate that HR practices are associated with performance and wellbeing among traditional and new careerists. Investment in HRM does not seem to elicit desired outcomes among opportunists and proactive organizational citizens.

#### Limitations

The cross-sectional nature of our study limits our ability to discuss causality in profile membership and outcomes.

#### Conclusions

Our study shows diversity in the way people relate to key features of PCO and BCO. Moreover, it shows that most people still relate to the ideal-type of a traditional organizational career and that only 4% of participants seek to enact a self-driven and independent career. In addition, it shows the added value of considering profiles of new career orientations in understanding their impact on individual and organizational outcomes.

#### Relevance to the Congress Theme

Our paper shows diversity and complexity in the way people construe and enact their careers. Those interested in the future of work necessarily need to consider that change in work and career-related values is far from being consistent and wide-ranging and that organizations seeking to engage and retain talent need to understand and address this complexity.

#### Relevance UN SDGs

The study addresses concerns about balancing performance and employee well-being.

*Keywords: New career orientations, HRM, latent profile analysis*

## **Oral presentation OP503**

### **The latent functions of work and unemployment**

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science

According to Marie Jahoda, paid work, in addition to its manifest function (monetary returns), also fulfills numerous latent functions (e.g., social contacts). Empirical studies have examined the relationship between latent functions and unemployment. However, these studies often face shortcomings, such as small sample sizes, crude definitions of employment status groups, or survey data based on non-random samples. The goal of this paper is to empirically test the key assumptions of Jahoda's model using a representative sample. We analyze 2020 data from the Household Panel Study "Labor Market and Social Security" (PASS, N 10,210 individuals from 7,547 households), a survey investigating labor market and poverty in Germany (Trappmann et al., 2019). Compared to previous studies a large sample allows us a detailed analysis of the presumed effects.

*Keywords: latent functions of employment, Jahoda, labor market, unemployment*

## **Oral presentation OP295**

### **The lived experience of autistic adults in employment**

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#### **Background:**

In 2020 it was found that while 52.1% of disabled people in the UK are employed, only 21.7% of autistic people are employed (Office for National Statistics, 2021). This is despite having a positive perception from employers who have worked with them, and have perceptions of being trustworthy, reliable, efficient, and honest (Baldwin, 2014; Richards, 2012).

#### **Objectives:**

This research presents an exploration the employment experience for autistic adults, it does so by identifying the key themes and experiences an autistic adult has within employment. Additionally, it will provide a discussion of the implications this may have in both research and practice.

#### **Methods:**

A series of semi-structured interviews were conducted with 18 autistic individuals in full or part time employment. These interviews were analysed using a form Interpretative phenomenological analysis (Smith & Osborn, 2003), and provides a thorough analysis of what themes and experiences are key to the autistic working experience.

#### **Results:**

Three emergent themes have been identified: Navigating the Social Experience; Doing the job; your 'self' and the workplace. In addition to broad themes, key experiences have been highlighted such as consequences of manager changeover, disclosure makes you vulnerable, and being exploited at work.

#### **Conclusions:**

Taking these themes and key experiences we can learn better ways to improve the working experience. This research has large implications on practice as it provides insight on to how to create a positive working experience, and additionally has implications on research as it explores a growing method of exploring employment for autistic adults.

*Keywords: Neurodiversity, Autism, Career experiences*

## Oral presentation OP361

### The longitudinal impact of work-life interference on burnout among male and female physicians in Sweden during the COVID-19 pandemic

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science

In the aftermath of the COVID-19 pandemic, sick leave due to stress and exhaustion has increased in Sweden, especially among women (1) and particularly with a focus on healthcare workers (2–4). Besides the exasperated workload and increased number of work hours for healthcare workers during the pandemic, many also experienced increased levels of interference between work and private life (5). The theoretical background of this paper is the psychosocial model of work-life interference which can work as an explanation for this ongoing trend of ill health (6,7). Interference comprises of two directions work interfering on life (WLC) and life interfering on work (LWC) (8). It is based on the idea of an interrole conflict that can occur when demands from work and private life are incompatible creating strain and stress increasing the risk for exhaustion and burnout (9). Interference tends to negatively affect physicians' mental health (2,10–15) which in turn has the risk to negatively affect the quality of care and safety for their patients (3,16,17). Yet, in Sweden interference, especially in relation to gender and burnout among physicians, is an under researched area. Considering the context of Sweden with norms of dual-earners alongside a still predominant view of women being the primary homemaker (11) the goal of this paper was to study changes in work-life interference among physicians in Sweden in relation to their mental health between the years 2021 to 2022 as well as to explore possible gender differences affecting this relation. With regards to the COVID-19 pandemic the aim was also to explore if and how work-life interference has been affected by working with COVID-patients.

The study apply data from the Longitudinal Occupational Health Survey for HealthCare professionals in Sweden (LOHHCS) study. Questionnaires was distributed 2021 and 2022 to a representative sample of physicians working in Sweden. The study-sample included 1573 individuals. The main measurements used were WLC and LWC (8) adjusted for different life and work factors. Burnout was assessed through the Burnout Assessment Tool (BAT). Different statistical methods were used ranging from descriptive summary statistics to logistics regression.

The results are yet to be compiled and are expected in the end of November 2022. However, initial analysis indicates increase of interference and burnout between 2021 and 2022 among all physicians. Considering previous literature and findings of physicians having an increased risk for exhaustion and burnout in relation to interference, this study, set in a Swedish context with data including rank and gender, opens for a more specific analysis. Thus, there is the possibility to highlight more specific intersection of Swedish physicians and how their relation of interference and burnout differentiates from each other pinpointing if one group might be more exposed than the other.

Limitations include non-responses both external and internal for both data extractions. Another limitation, regarding the papers focus on physicians work with COVID-patients, is that no data was collected before the pandemic. Lastly, although the study has two points of extraction, they might be too close in time. Meaning that it might be hard to establish causal relations between interference and burnout.

The study has especial relevance to the 18th EAWOP topic "Well-being– work-life balance". Regarding the papers focus on mental health and gender differences in relation to interference

among physicians it is also relevant to the UN SDGs of good health and wellbeing, gender equality, and decent work and economic growth.

*Keywords: Work-life balance, Physicians, Burnout, COVID-19*

## Oral presentation OP582

### The moderating role of age and seniority on nurses' emotional dissonance and perceived health

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science

The emotional impact of working closely with suffering is an aspect that cannot be overlooked in studies that explore the stressors of the health sector (Happel et al., 2013). The emotional load is linked to the concept of emotional dissonance, i.e., the constant need to maintain an emotional state that is consonant with the situation, but not experienced as natural (Brotheridge & Lee, 2003). Furthermore, increasing importance is given to the evaluation of the different ways in which nurses face the burden of this complex profession in the different phases of their careers (Ryan et al., 2017). Therefore, the aim of the study is to evaluate the weight of surface acting (being forced to show an expression that is not consonant with one's emotions) in the relationship between emotional load and well-being and to evaluate the moderating effects of age and seniority on a sample of 359 nurses operating in public and private facilities throughout Italy.

The PROCESS macro (Hayes, 2018) of SPSS was used to test the moderated mediation model. We computed emotional load as the independent variable, perceived health as the dependent variable, surface acting as mediating variable, and age and length of service as the moderators. The model was tested twice, alternating moderators. The bootstrap method with 5,000 replications and 95% confidence intervals was used to verify the significance of indirect effects. Limitations of the study stem from the cross-sectional design, the use of self-report measures only, and the smallness of the sample.

The results show that the emotional load has a negative effect on perceived health both directly and indirectly, through the effect of surface acting. Moreover, both age and seniority have moderating effects so that in conditions of high emotional load, older and more experienced nurses show higher levels of surface acting, and in conditions of high surface acting, younger and less experienced nurses show lower levels of perceived health. The results suggest that nurses do not get used to the burden of emotional demands over time, making it necessary to resort to the surface acting to respond to the dissonance between felt and displayed emotions. On the other hand, over time the implementation of this strategy seems to be less and less connected to states of discomfort.

In conclusion, it would seem that the weight of the emotional load increases with age and seniority, while the effect of surface acting on well-being is more detrimental for younger nurses with fewer years in the role. Each result highlights the importance of providing emotional regulation skills training and supportive strategies to reduce the psychological impact of emotional demands on workers who have to deal with them on a daily basis.

Considering the variables taken into consideration, this study is in line with more than one Congress Theme, as it deals with workplace emotions, job demands, and work-related stress, but also the safeguarding and protection of workers. It also responds to Goal no. 3 of the UN SDGs, which promotes well-being at all ages.

*Keywords: Nurses, age, emotional dissonance*

## Oral presentation OP551

### **The moderating role of team psychological safety climate in the relationships between career ambition, job- and career crafting and thriving**

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science

Co-workers play a crucial role in shaping job and career crafting behaviours and its outcomes. In this study, we take an interactionist perspective on job and career crafting behaviours in teams and examine the moderating role of team psychological safety climate on the relationships (1) between career ambition and job and career crafting and (2) between job and career crafting and thriving at work.

Career ambition is an individual trait that comprises a consistent striving towards attaining success and accomplishment in one's career. We argue that career ambition may be expressed through engaging in job and career crafting, as these behaviours can serve to realize career ambition. Trait-activation theory suggests that the extent to which individual traits are actually expressed through behaviours is dependent upon contextual factors, like team climate. Team climate refers to the shared perceptions in a team regarding policies, procedures and practices. Hence, we expect that a supportive team climate in which challenging the status quo is perceived to be safe (i.e. team psychological safety climate) will weaken the positive relationship between career ambition and job and career crafting. This hypothesis may seem counterintuitive. However, we argue that ambitious individuals tend to engage in job and career crafting regardless of situational constraints, meaning that being ambitious will likely become more salient for these behaviours in the context of a psychologically unsafe climate. Team psychological safety climate may therefore play a compensatory role for career ambition in predicting job and career crafting.

Furthermore, we expect that team psychological safety climate strengthens the relationship between job and career crafting and thriving. Thriving comprises vitality and learning, respectively the affective and cognitive component of the experience of personal growth. Individuals can craft their job and career in such a way that enables them to thrive in their work. Social information processing theory infers that the affective outcomes of crafting behaviours are likely to be influenced by positive or negative reactions from co-workers. When taking risks is in general welcomed and perceived as safe, co-workers are likely to respond in a supportive way to crafting behaviours, strengthening the relationship between job and career crafting and thriving.

To test our model, we are going to collect two-wave survey data among teaching staff in education teams in the Dutch secondary vocational education sector. Each education team is responsible for providing one specific education program and these teams have considerable autonomy over how they divide their work tasks, making this an especially interesting study context to study job and career crafting. We strive for a level 2 sample size of 100 education teams, with an average level 1 sample size of 10 teachers per team. Data will be analysed using multilevel regression analysis. As job and career crafting may be hindered by rules and regulations and by one's leader, we will control for job control and team leader empowerment. We plan to collect this data in November and December 2022 and expect to have our results in March 2023, in time to present the results at the EAWOP 2023 congress.

With our study, we aim to add to the sparse research on the role of co-workers in shaping job and career crafting and its outcomes, answering calls for research on this topic. By studying the role of

team climate in job and career crafting, we aim to generate insights on how teams and their leaders can create an environment in which taking initiative is welcomed, thereby supporting job and career crafting and potentially optimizing its outcomes.

*Keywords: Crafting, Psychological safety, Thriving*

## Oral presentation OP787

### The Overlap between Occupational Burnout and Major Depressive Disorders in the Colaus|PsyColaus Cohort

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science&practice

**Research goals:** We aimed to investigate the relationship between occupational burnout and Major Depressive Disorders (MDD) in the population-based cohort Colaus|PsyColaus.

**Theoretical background:** There is no international consensus about how to assess or treat occupational burnout. World Health Organization (WHO) classified burnout as a factor influencing health in the eleventh edition of the International Classification of Diseases (ICD-11) and not as a health condition or disease. However, some researchers have shown that burnout could reflect a depressive state and not a distinctive entity. Additionally, the prescription of antidepressants is common for workers with “severe burnout”. Nevertheless, the issue of burnout–depression overlap remains unsolved. We, therefore, aimed to investigate the relationship between burnout and major depressive disorder (MDD) in a population-based cohort.

**Methods:** Data stemmed from CoLaus|PsyCoLaus, a prospective population-based cohort including a random sample of participants selected from the general population of Lausanne (Switzerland). After the baseline investigation between 2003 and 2007, the cohort was followed-up for approximately five (follow-up (FU) 1), 9 (FU2), and 13 years (FU3). From FU2 on, current workers and participants without occupational activity for one year or less were invited to fill in the Maslach Burnout Inventory-General Survey (MBI-GS) during the psychiatric evaluation. Diagnostic information and demographic characteristics were elicited through the semi-structured Diagnostic Instrument for Genetic Studies (DIGS). MDD diagnosis was assigned according to the DSM-IV. We defined MDD as current if the criteria for this diagnosis were met at the time of the MBI-GS assessment. Participants were included in the analysis if they replied to the MBI-GS either at FU2 or FU3 and were active workers at the time of the MBI-GS assessment. Due to the lack of valid and reliable cut-offs of MBI-GS, we decided to use the scores of the three dimensions (i.e., exhaustion, cynicism, and professional efficacy) of the MBI-GS separately instead of using a dichotomized outcome of burnout. We performed one logistic regression model with current MDD as an outcome and the three dimensions of burnout as predictors while controlling for age, sex, and the type of occupational activity.

**Results:** A total of 1299 participants (mean (SD) age: 56.20 (0.16) years; 49% men) completed at least once MBI-GS and were active workers. Among them, 8.4% (101/1299) people reported a current diagnosis of MDD. The scores of exhaustion and cynicism were higher in participants with a current diagnosis of MDD compared to participants with no current diagnosis of MDD (mean (SD) 2.86 (1.53) vs. 1.44 (1.16),  $p=0.00$ , and 2.68 (1.65) vs. 1.69 (1.34),  $p=0.00$  respectively). The score of professional efficacy was higher in participants without a current diagnosis of MDD compared to participants with a current diagnosis of MDD ((4.60 (0.94)) vs. 4.40 (0.87),  $p=0.01$ ). The logistic regression results showed that higher exhaustion increased the risk of current MDD (OR=2.00, 95%CI=1.65, 2.43).

**Limitations:** The self-reported measurement of burnout may be considered a limitation of this study. Future research may benefit from the use of hetero-assessment tools to measure burnout.

Conclusions: The results of this study show that only the exhaustion dimension of occupational burnout is associated with MDD. Based on the findings of this study, cynicism and professional efficacy are not associated with MDD.

Originality/Value: The need for studies investigating the relationship between burnout and MDD was highlighted in the literature. This study is the first Swiss study to use data from a large population-based cohort to illustrate the relationship between burnout and MDD where MDD was measured using semi-structured diagnostic interviews.

Relevance to the Congress Theme: Dissemination of the results of this study may be of interest to researchers and practitioners attending the congress. Additionally, the congress will provide an opportunity to discuss these results and receive valuable feedback.

*Keywords: Burnout; Depression; Regression*

## Oral presentation OP357

### The pro-endogroup bias in the binarity vs. non-binarity challenge: trough the perception of a CV sorting performed by a human vs. an algorithm

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science

The aim of the present study is 1/ to examine the perception of the selection of a binary vs. non-binary candidate by a human vs. an algorithm and 2/ to identify or not a pro-endogroup bias in the justifications of participants concerning this perception.

The pro-endogroup bias consists for individuals to favour the members of their respective categories to the detriment of others. In the context of recruitment, it leads recruiters to discriminate against candidates on the basis of criteria such as gender and ethnic origin (Petit et al., 2020). To tackle this subjectivity, algorithms have been developed (Amadiou & Roy, 2019). Are they perceived in this way? For some authors, they are effective (Lacroux & Martin-Lacroux, 2021) but not for others (Peña et al., 2020). Chen et al. (2018), for example, found that automatic CV sorting removed direct, but not indirect, discrimination that would relate information about an applicant to those of a category. Indicators such as hobbies (Delroisse, 2011) included in a CV can give information about belonging to a gender category. What then happens when that membership is ambiguous, such as non-binarity? Dovidio and Gartner (2000) suggest that this ambiguity is a source of discrimination. This raises the question of whether this pro-group bias is present in the perception of a decision about a CV sorting made by a human vs. an algorithm when heterosexual vs. LGBTQIA+ respondents give their opinions. It is hypothesized that binary/heterosexual vs. LGBTQIA+ respondents will agree more with a decision selecting the candidate of their group affiliation, when the CV sorting is performed by a human, rather than an algorithm. To deepen the understanding of the choices, it is relevant to look at the justifications given by respondents to explain a CV sorting decision. Indeed, as justification is at the heart of discrimination (Delroisse, 2011), it seems appropriate to study the content of the explanations provided in order to identify possible indirect forms of discrimination and therefore of pro-endogroup bias. For instance, a passive position in a sentence indicates an indirect discrimination and the individuals are perceived as enduring the action unlike ones in a subject position (N'Dobo & Gardair, 2006). In addition, it is expected that the content of the justifications will put the binary candidate in a more favourable position when produced by heterosexual/binary respondents than when produced by LGBTQIA+ respondents.

98 heterosexual/binary and 84 LGBTQIA+ individuals were presented vignettes relating a story of a CV sorting, performed by an algorithm vs. a human, involving a non-binary vs. binary candidate. Participants were asked to indicate on a 5-point scale their level of agreement vs. disagreement with the CV sorting performed by the algorithm vs. human. Then, they had to justify it in 100 words.

The data processed using non-parametric tests. They show that the heterosexual binary respondents agree more with a CV sorting selecting the binary candidate rather than the non-binary one, only when the CV sorting is performed by a human ( $p=.03$ ). LGBTQIA+ respondents do not make a difference. Explanations processed using the TROPES software (version 8.5). They indicate that heterosexual/binary ( $\chi^2(N=80) = 9.49; p=.02; V=0.20$ ) and LGBTQIA+ ( $\chi^2(N=75) = 4.25, p=.04; V=0.23$ ) respondents place the non-binary candidate in a passive position in the sentence more than the binary one, when the CV sorting is performed by a human or an algorithm.

Thus, heterosexual/binary respondents seem to agree more with a decision selecting the binary candidate over the non-binary one when a human conducts the CV sorting. This result appears to show the existence of a pro-endogroup bias. In contrast, the justifications indicate an indirect discrimination against the non-binary candidate, by all respondents, when the CV sorting is conducted by a human and an algorithm. This evidence may indicate that algorithms are perceived as addressing direct but not indirect discrimination, against non-binary candidates. Thus, these data do not support the results of the study by Hasselberger & Agnoletti (2022). This suggests differences in the CV sorting processes underlying sexual orientation and gender identity discrimination. This is the originality of our work.

Although the small number of participants seems to be a limitation of this study, it offers interesting perspectives to be communicated during this congress by exploring the perception of the use of algorithms in the face of crucial social changes: diversity management. This presentation is at the centre of new social concerns for companies, hoping to provide ideas to contribute to an egalitarian recruitment of non-binary candidates.

*Keywords: Pro-endogroup bias, Algorithm, Non-binary*

## Oral presentation OP85

### **The psychologist profession in Europe – legal regulations, scope of practice, mobility potential, and working context diversity**

Ole Tunold, EFPA

practice

Background

There is a widespread belief that the title 'psychologist' describes a homogeneous and relatively unambiguous profession in European countries. But that is not the case.

In 2013–2016, the EU implemented a large-scale mutual evaluation of regulated professions. The purpose was through deregulation in the labour market and thereby increased mobility for the professions to create new jobs and economic growth. The evaluation revealed a huge variation both in terms of regulations, educational structure (from 3 to 11 years) and the scope of psychologists' practice. The evaluation avoided the question of whether the individual countries' regulations are related to the role of psychologists in the various fields of practice. Unfortunately, because then one would have found the explanation for these large variations. It is imperative to secure that the professional standards are fit to cover the tasks and responsibilities entrusted to the profession in a given country.

A paramount question to address when settling the framework for mobility: Is it meaningful to establish a universal professional standard when the role of a psychologist could be so different across borders? In 2020, an EFPA project set out to gather information about legal regulations of the profession, mobility opportunities, bordering professions and professional context diversity in Europe.

Objective

The overarching goal of the project is to have an up to date, complete and objective overview of the psychologist profession in Europe. The overview should be on display and subject to amendments and corrections from the MAs.

Four sub goals are identified:

A model of legal regulation for Member Associations in whose country 'Psychologist' is not yet a regulated profession or will be revised (MODEL).

Identified mobility options (professional migration) in Europe (MOBILITY).

Identified boundaries and communalities between the profession of psychologists and that of psychotherapists, to demonstrate and promote the uniqueness of the psychologist profession (SCOPE).

A basis for development of the psychology profession to optimally serve society and psychologists in the national contexts (CONTEXT).

Method

Data are drawn from 4-6 available data bases. Data are compiled and displayed for each country in a sufficiently condensed format to make it accessible.

Each Member Association is invited to make amendments and corrections. Once the Member Associations have approved the overviews, they will go on display on a designated page at EFPA's website, to be regularly updated.

#### Results

Preliminary results and experiences from the project work will be presented.

*Keywords: Professional context diversity*

## Oral presentation OP17

### The psychology of cycling to work: Joy, well-being, and behaviour change

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The daily commute to work is an extension of the working day that has significant implications for healthy and sustainable ways of working. Motorised modes of transport are used for 84% of commuting journeys and create 93% of carbon emissions. The daily commute in its present form contributes to critical contemporary problems affecting health and sustainability: Environmental harm, congestion, poor public health, lack of exercise and adverse impacts on well-being at work.

The benefits of cycle commuting appear self-evident, with evidence of positive contributions to personal health, well-being, public health, and decreases in emissions and carbon. However, a recent systematic review identified that research examining the benefits of cycle commuting overlooked the psychological processes and individual differences that determine commuting mode choice.

Theoretical background:

This session describes the results of a systematic literature review, which identified the dearth of psychological research into what engages and sustains cycle-commuting behaviours. The review identified 456 papers using search terms relating to cycle-commuting. Papers were excluded on the basis of systematic criteria, and duplicates removed, leaving 24 studies for review. The synthesis of these papers identified 5 physical/objective determinants (Infrastructure, Environment, Trip qualities, Facilities/incentives, and Group membership) forming the basis of the research findings. Only a single psychological determinant, Attitude, was examined across the papers identified by the review. This review informed subsequent research to specifically investigate the wider psychological factors around riding to work, which explored the determinants of cycle commuting using a sample of UK cycle commuters using an inductive exploratory thematic analysis.

Results obtained:

The research identified themes that articulated the determinants that influence choices, decisions, habits, and perceived benefits associated with cycle commuting. The research identified core psychological themes relating to well-being, health, exercise, perceived control, and social attitudes relating to cycle commuting. The themes identified were I feel fantastic; I can do this; I belong here. Each theme included a cluster of sub-themes to provide greater clarity and meaning. These included Cost and environmental savings; Health & fitness; Wellbeing; Pleasure/ enjoyment; Maximising utility; Commuting strategies; Bloody-mindedness & grit; In-group-attitudes; and Out-group behaviours.

Limitations:

The results of this study were based on a small group of cycle commuters in the city of Brighton. While broadly representative of other urban centres in the UK, appropriate caution should be applied before generalising the results to other contexts. This study explored the experiences of people already engaged in a regular cycle commuting habit. It does not therefore explore the determinants of this mode choice in the context of commuters who use alternative commuting modes. While this was an exploratory qualitative study, its outcomes both corroborate and extend previous research in this area and resulted in the development of an initial model demonstrating the psychological

determinants of cycle commuting. This model could serve as the basis from which to test this empirically on a larger population in a quantitative study.

Research/Practical Implications:

This study describes the key determinants of cycle commuting based on the experiences of cycle commuters in the UK. This adds to current theory by developing our understanding of the interaction between objective/physical determinants and psychological determinants. The study developed a psychological model that can be used as a basis for subsequent actions and research to encourage uptake of cycle-commuting. From this study, recommendations can be made for behavioural change interventions relating to the COM-B model from three levels: Policy (local and central government), organisations, and individuals considering mode-switch.

Originality/Value:

The research is a novel contribution to our understanding of commuting choices, which can be used to inform the design of behaviour-change interventions to increase well-being and sustainability at work. This presentation will present an initial explanatory model describing the interaction between psychological determinants and physical/objective factors such as infrastructure that drives the behaviour change process away from motorised commuting modes to the healthier and more sustainable alternatives of cycling. The session will discuss potential change-actions for individuals, organisations and policymakers who want to foster healthy and sustainable workplaces, as well as directions for future research.

Intended audience:

Both Academic and Practitioner. The presenter is a practitioner with over 25-years of experience. The content is drawn from his doctoral research.

*Keywords: active travel, cycle-commuting, behaviour change*

## Oral presentation OP581

### The Psychosocial Risks of University Teachers: A bettersweet job

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science&practice

The working requirements, demands and conditions of university teachers in Spain have changed significantly over the last few years to adapt to the teaching quality demands, research competitiveness and management efficiency that arise from the society. As a result, this prestigious and socially-and-economically-recognized profession, which offered great and reasonable possibilities of career development and was healthy from a psychosocial point of view, has become, in a short period of time, a highly-competitive profession that has lost certain social status, its working conditions have clearly worsened (precariousness, instability, insecurity, etc.) and the academic, teaching, scientific and management demands have increased quantitatively and qualitatively, which causes high level of work stress and a large number of psychosocial risks.

Thus, taking as theoretical framework The Stress General Theory integrated by the conceptual models: “demand-control-social support” (Karasek, Theorell and Johnson, 1990), “effort-rewards” (Siegrist, 2002); and the transactional, mediational and interactional model of stress (Lazarus and Folkman, 1984, 1986); the psychosocial risks of university teachers in a University at the south of Spain (University of Granada) have been analyzed. For this purpose, The Psychosocial Risks Evaluation Methodology COPSQ-ISTAS 21 was administrated to a sample of teachers from University of Granada (Spain) 756 and a series of semi-structured interviews have been also conducted with a sample of 30 teachers from the former Spanish public university.

The main psychosocial risks suffered by university teachers in Spain are to work in a very fast way; emotional job demands; role strain and conflicts, bureaucratic fatigue; being constantly subject to external evaluation as a method of control; suffering career stabilization or development processes that are increasingly demanding and competitive; the tensions rising between teaching, management and research demands; increased psycho-pedagogical and teaching demands as a consequence of the adaptation to the European Higher Education Area (EHEA); challenges that they have to face during the internationalization processes of the Spanish public university system; the effort-reward imbalance in research; the taking on of management tasks without training or authority; the presence of some medieval hierarchical culture in the Spanish university noticeable in the criteria of “status and seniority” when taking decisions that together with the paternalistic and mentoring culture between mentors and students foster “invisible bonds” between the different groups of teachers and some sectarianism stemming from the relations of in-group favoritism and out-group discrimination and; finally, the demagogic promotion of the student discourse “customer-king”.

The final result is a feeling of ambivalence where an expecting, exciting and motivating idealization of the academic-scientific world contrasts with a pragmatic, frustrating and demanding social and labor reality that encourages disillusionment and lack of interest among a group increasingly oppressed and in worse working conditions that also has serious consequences for the mental health of university teachers.

*Keywords: Psychosocial Risks, Stress, Precariousness*

## Oral presentation OP681

### The Quality at Work Tool (AQ@workT\_S) to assess the quality of life at work in university staff

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science&practice

Theoretical background. The rapid changes that academics have experienced over recent years are resulting in several challenges for those who work in the University. These changes, which transversely affect all university workers, result in more significant work intensification, which may have adverse outcomes. On the topic, the JD-R model provides a simple but complete heuristic framework linking a wide variety of characteristics related to job content and a wide range of job results. This model was developed to provide a comprehensive framework to understand the factors that may challenge or enhance workers' physical, mental, and psychological well-being. The present study provides evidence for a valid and reliable tool, the Quality at Work Tool (Brondino et al., 2022) staff version (AQ@workT\_S), grounded in the job demands-resources model. The tool aims to investigate the quality of life at work in technical and administrative staff within the university sector. Methodology. The AQ@workT\_S was developed by the QoL@Work research team, namely a group of expert academics in the field of work and organizational psychology affiliated with the Italian Association of Psychologists. The psychometric properties were assessed in a study comprising a wide sample of Italian university staff, and analyses were carried out on a sample of 1820 technical-administrative staff workers. After appropriately calculating asymmetry and kurtosis indices, aggregate confirmatory analyses were proposed for demands, resources, mediators/moderators and output of the questionnaire constructs, according to the distinction arising from the Job Demands-Job Resources theoretical model. Missing data less than 10% were estimated by means of the FIML algorithm, while scales with missings greater than that percentage were processed keeping only the present ones. Results. Reliability and content, and construct validity were supported, as well as measurement invariance across gender and seniority of service. The results suggest that job resources (superiors and colleagues support, job autonomy, organisational identification, environment quality, distributive justice, organisational work-family support, meaning of work), demands (work intensity, workload, Conflict, work-family balance, out-of-hours demands), mediators/moderators (workaholism) and outcomes (work engagement, burnout, technostress) present acceptable fit indices, according to the criteria proposed by Kline (2016, CFI > .90, RMSEA < .08, SRMR < .08). Construct validity was finally measured by means of correlation analysis between the variables and revealed polarities and intensities consistent with the literature. Invariance was then subsequently tested for university, seniority, and gender. Future studies, such as longitudinal tests of the AQ@workT\_S, should test predictive validity among the variables in the tool. Limitations. Self-report questionnaire, convenience sampling strategy, and social desirability bias. Practical Implications. Evidence from the present study shows that the AQ@workT\_S represents a useful and reliable tool to assist university management in enhancing the quality of life, managing work-related

stress, and mitigating the potential for harm to technical and administrative staff, which also takes into account techno-stress and post-pandemic re-organization. Recommendations are offered for management on how academic staff can be maintained and supported to achieve well-being at work.

*Keywords: University workers, psychometric tool, JD-R*

## Oral presentation OP116

### The relationship between emotion inertia and burnout

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science

Research goals and why the work was worth doing

The goal of this study was to examine whether emotion inertia—i.e., the extent to which one's current emotional state can be predicted by past emotional state (Kuppens et al., 2012)—relates to burnout. Past research has demonstrated that high emotion inertia is maladaptive and relates to the development of depression (Kuppens et al., 2012). However, how emotion inertia links to burnout has not been explored to date.

Theoretical background

Burnout can be considered a syndrome consisting of core (exhaustion, mental distance, cognitive impairment, emotional impairment) and secondary dimensions (psychological complaints, psychosomatic complaints) (Schaufeli et al., 2020). While several personal and environmental factors have been linked to the development of burnout (Crawford et al., 2010), it remains unclear how one's emotional experiences may predispose them to burning out. In this study, we address this gap by focusing on emotion inertia, which captures a dynamic characteristic of emotional experiences. Emotion inertia is defined as the extent to which past emotions tend to persist over time, and high inertia—meaning that emotions change slowly—has been theorized to be maladaptive (Kuppens et al., 2012). The main reason for this is that high emotion inertia signals that individuals are unable to regulate their emotions in response to external and internal influences. Empirical studies confirm that emotion inertia positively relates to depression and negatively to self-esteem (Kuppens et al., 2012). Likewise, our central research question is therefore whether a positive relationship exists for emotion inertia and burnout.

Design/Methodology/Approach/Intervention

We used an experience sampling design to collect data from 220 participants. Each participant first completed a general survey, measuring burnout with the Burnout Assessment Tool (Schaufeli et al., 2020). Next, participants completed 84 short ESM surveys measuring positive and negative discrete emotions (12 measurement moments per day for 7 days). We used a multilevel autoregressive model to estimate emotion inertia (for each discrete emotion) from the ESM data (de Haan-Rietdijk et al., 2016). Emotion inertia was then used to predict burnout dimension scores using multiple regression analysis. We explored whether the effect of emotion inertia was moderated by the average level of affect.

Results

No significant direct effects of emotion inertia on any of the burnout dimensions were found. However, we did find that the effect of emotion inertia depends on the average level of affect. This interaction effect mainly emerged for the discrete emotion of sadness. In particular, high emotion inertia in sadness was positively related to exhaustion, mental distance, emotional impairment, and cognitive impairment, if the average level of sadness was low.

Limitations

As burnout was only measured once, we cannot relate emotion inertia to change in burnout or to the onset of burnout. Moreover, other emotion dynamics may relate to burnout and need to be explored.

#### Conclusions

We draw attention to the relationship between emotion dynamics and burnout. In particular, we reveal how individuals who generally do not experience high levels of sadness yet experience an episode of persistent sadness over time tend to report higher levels of burnout. This may help in early detection of burnout, as maladaptive emotion regulation may act as an early warning signal.

#### Relevance to the Congress Theme

This presentation is relevant to the congress theme, as burnout has been called an epidemic and affects around 10% of the European workforce according to recent figures.

#### Relevant UN SDGs

This presentation is relevant for the “Good health and wellbeing” and the “Decent work and economic growth” UN SDGs.

*Keywords: burnout; emotion inertia; experience sampling method*

## Oral presentation OP423

### **The relationship between organization's internal ethical context and subjective well-being – the role of socially responsible HRM and ethical leadership**

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Research goals and why the work was worth doing: This study sought to understand how organizations' internal ethical context (IEC) relates to employees' subjective well-being (SWB) and satisfaction with life (Diener, 2012). Two potential mediating variables were examined, namely socially responsible HRM (SRHRM) and ethical leadership. The study contributes to increase current understanding of the effects of IEC on employees' SWB, a neglected research topic (Schwepker et al., 2021).

Theoretical background : Organizations' IEC is part of the "ethical infrastructure" (Tenbrunsel et al., 2003) which includes formal and informal ethical systems (Kish-Gephart et al., 2010; Treviño & Weaver, 2001). One way to communicate formal norms is having an ethical program that presents the expected conduct, reward, and sanctioning system.

Ethics programs' dynamics are extremely important in impacting individual ethical awareness and, consequently, their ethical behavior (Kaptein, 2015). Previous research suggests that organizations' IEC is relevant to employees' well-being, being associated to diminishing levels of distress (Schwepker et al., 2021). Organizations with strong IEC strive to treat employees with justice (Vitell & Singhapakdi, 2007), which influences their job satisfaction (Valentine & Fleischman, 2007) and quality of life (Kim et al., 2017). Satisfaction with work is an important consequent of ethical context as well as an important predictor of employees' happiness with life in general (Lee et al., 2015). So, the first hypothesis (H1) is that organization's IEC will be positively related to employees' levels of SWB.

IEC's impact on SWB might be explained by how organizations manage their members. Specifically, it is proposed that a stronger IEC is associated with a firmer adoption of SRHRM practices, i.e., HRM guidelines involving concerns for corporate social responsibility practices focused in promoting employees' quality of life (Sancho et al., 2018). The investment in such practices increases employees' SWB (Zhang et al., 2021). Accordingly, we posit that SRHRM mediates the relationship between IEC and employees' SWB (H2).

Ethical leadership might also help explaining how IEC promotes employees' SWB. Leaders can translate organization's ethical concerns into workers' daily lives, serving as role models, by giving salience to ethical issues, rewarding and sanctioning (un)ethical behaviors. Since ethical leaders contribute to higher job satisfaction (e.g., Sarwar et al., 2020), we predicted that ethical leadership mediates the relationship between IEC and SWB (H3).

The existence of a strong SRHRM system can enhance stronger ethical leadership. As SRHRM improves employees' behaviors and adherence to ethical practices (Podgorodnichenko et al., 2021), it is also expected to foster ethicality of leaders' behaviors. Leaders might serve as ambassadors of ethical and socially responsible practices in the workplace, communicating and promoting those practices (Brown & Treviño, 2006). Therefore, we propose that SRHRM and ethical leadership sequentially mediate the relationship between IEC and SWB (H4).

Design/Methodology/Approach/Intervention : A quantitative correlational, survey-based study was developed with 315 workers. It included instruments selected from the relevant literature (e.g.,

Brown et al., 2005; Diener et al., 1985; Kaptein, 2015; Sancho et al., 2018). The data were analyzed using multiple regression analysis using PROCESS macro.

Results obtained or expected : Three mediation models were examined, one for each SWB indicator. The results indicated significant total effects of IEC (measured by the scope of the ethics program) on positive and negative affects but not satisfaction with life, partially supporting H1. Furthermore, SRHRM mediates the relationship between IEC and the three indicators of SWB, supporting H2. H3 did not received support as ethical leadership does not mediates any of the relationships. Finally, findings provide support to H4, with the sequential mediation being significant for all SWB indicators.

Limitations : The convenience sample limits the results' generalizability. Common method bias is a potential threat given the study's cross-sectional, single source use.

Conclusions : Literature had previously confirmed the effect of IEC in the reduction of unethical behaviors. This study has look to the IEC with a different lens, examining its effect on employees' SWB and satisfaction with life. The findings indicate that a stronger IEC, promotes employees' SWB both directly and indirectly by fostering SRHRM, and, subsequently, enhancing ethical leadership.

Relevance to the Congress Theme : Promoting people's well-being inside and outside work is a key challenge of today's organizations. This study shows how organizations' IEC can contribute for this endeavor by fostering SRHRM and ethical leadership.

*Keywords: internal ethical context, subjective well-being, socially responsible human resource management*

## Oral presentation OP610

### The relationship between organizational factors and mental health stigma at the workplace

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science

**Research goals:** The aim of this study is to investigate the role of organizational factors on mental health stigma at the workplace.

**Theoretical background:** The high prevalence of mental health issues among the working population leads to severe challenges for many OECD countries since it creates costs, lowers well-being and harms employment. Although people with a mental health issue are both able and willing to work, empirical evidence indicate these people are more likely to be un- and underemployed compared to people without a mental health issue. One important reason concerning the issues of work participation among people with mental health issues is stigma. Stigma is a devaluation of a group of persons often part of a minority group leading to their exclusion and discrimination. Although there is empirical evidence of the severity of mental health stigma at the workplace, up to now, there is lack of research that has investigated the role of organizational factors (such as organizational culture, leadership and the working conditions) to address mental health stigma.

**Design:** Data from the general working population from Switzerland, Austria and Germany will be collected (expected sample size: N = 700) in November 2022. Participants will be recruited via Respondi (respondi.com) a high-quality panel provider based in Germany. It should be emphasized that the sample from the online panel is highly representative in terms of demographic factors, such as gender, age or level of education. Respondents will be randomly presented with two of four vignettes. These vignettes will show a person with a mental health issue (depression, burnout, schizophrenia, and alcohol addiction) who has been treated in a clinic and wants to return to work. After presenting the vignettes, the respondents will answer an online questionnaire with regard to stigma-related attitudes and organizational factors (i.e. organizational culture, leadership and the working conditions)

**Results:** We don't have the results yet but we will be able to present the results at the conference.

**Limitations:** Although we consider four different mental health issues, we are not able to cover the whole spectrum of different diagnoses. Moreover, our study was limited by self-reported information.

**Conclusions:** This project gives a novel, different perspective on how mental health stigma at the workplace could be addressed by improving organizational and contextual conditions. This would be a first important step to adapt existing and to develop new stigma interventions suited to workplace-related contexts. This, in turn, has an important public and organizational health impact since tackling mental health stigma could reduce societal and organizational costs, prevent turnover and promote healthy and productive workplaces.

**Relevance to the Congress Theme:** This research fits the congress theme "The Future is Now: the changing world of work" as it addresses societal and work-related challenges due to the high prevalence of mental health issues. To prevent further social inequalities, we need knowledge about how workplaces should be designed to support employees with mental health issues.

**Keywords:** *mental health stigma, occupational health, organizational design*

## Oral presentation OP680

### **The Relationship between Psychological Contract, Work-life Conflict and Burnout: The moderating role of Mindfulness**

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science

Research goals and why the work was worth doing

This research tested (i) the mediating role of work-life conflict (WLC) in the relationship between Psychological Contract breaches (PCB) and Burnout (B) and (ii) the moderating role of Mindfulness (M) in the same conceptual relation.

Theoretical background

The PC is an implicit relationship between the Worker and the Employer tending to align expectations on both sides of the work relationship, assuming a regulatory dimension (Kotter, 1973, Argyris, 1962; Rousseau, 1989; Rousseau, 1995). It consists of a set of individual beliefs about the terms and conditions of a reciprocal exchange. The PC breach occurs when workers consider that the organization has failed to fulfill its obligations (Coyle-Shapiro & Kessler, 2000; Robinson, 1996; Rousseau, 1995). When this happens, individuals experience a feeling of violation; that is, an emotionally strong response (Morrison & Robinson, 1997; Zhao et al., 2007).

The concept of burnout as a chronic occupational stress syndrome, occurs when workers are unable to effectively manage the demands of their work (Dormann and Zapf, 2004). Freudenberger (1975) associated burnout with emotional exhaustion that materializes symptomatically with emotional changes that materialize in physical impacts.

Greenhaus and Beutell (1985) defined WLC as an incompatibility of social roles with responsibilities in opposite dimensions. WLC arises from permeable barriers between the family and organizational spheres (Barnett, et al., 1992).

Mindfulness has been studied as a strategy to increase productivity, manage stress levels, and assist workers in management efforts to balance work and family (Morganson, et al., 2015; Miller, et al., 1995). Mindfulness allows the individual to face the context with greater positivity (McCraty, et al., 2003), positively influencing job satisfaction, and negatively influencing stress, burnout and emotional exhaustion (Hülshager, et al., 2013). At work, where change prevails, mindfulness can be a resource for the individual as it can help to manage and accept emotions (Troy, et al. 2013). Thus, mindfulness can be a condition that facilitates positive attitudes towards adverse events or conditions (e.g., Junça-Silva, et al., 2021). There is theoretical and empirical support for mindfulness as a personal resource. Resource conservation theory (Hobfoll, 1989) suggests that individuals strive to maintain and acquire more resources as a strategy to deal with negative working conditions and consequent work demands, such as PCB and WLC (Hobfoll, et al., 2018).

Design/Methodology

The present study was based on the Job Demand-Control (Support) Model and the Job-Demands and Resource Model. To this end a daily study was developed over five consecutive days with 67 workers ( $N=67*5=335$ ).

Results obtained

Results showed: (1) that the breach of the psychological contract negatively influenced the work-family conflict and this, in turn, presented a positive relationship with burnout at the intra-individual level; (2) that the work-family conflict was a mediator of the relationship between the psychological contract breach and burnout also at the intra-individual level. In addition, results showed that this relationship seems to be conditional on the levels of mindfulness, since it proved to be a moderator of the previous mediation relationship, in a unexpected form, that is, the indirect effect of the psychological contract breach and burnout via work-family conflict was shown to be stronger for those individuals with lower levels of mindfulness (versus more mindful individuals).

Conclusions – research and or practical implications/Originality/Value

The conclusions allow us to delineate preventive strategies (on the breach of the psychological contract) and intervention (to reduce signs of emotional exhaustion) in organizations. Furthermore, these findings open the door to future studies that focus on the explanatory mechanisms of the relationship between the psychological contract and the development of burnout, as well as the analysis of the role of mindfulness in this relationship.

Relevance to the Congress Theme

Changes in the world of work introduce potential alterations in the psychological contract that thus deserve to be revisited in the light of the work-life conflict. Potential coping mechanisms should be studied preventively in order to guide future study and action.

*Keywords: Psychological Contract; Work-Life Conflict; Mindfulness*

## Oral presentation OP379

### **The relationships of cobot operators' core self-evaluations and PsyCap with human-cobot interaction fluency. The role of emotional wellbeing**

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science

In recent years, rapid changes fueled by the Fourth Industrial Revolution have led to the creation of Industry 4.0. A principal aspect of this transformation is the emphasis on advanced robotics and human-robot interaction (HRI). In fact, HRI, with a human-centered approach, has become an essential resource in Industry 4.0. Human centrality allows for a paradigm shift from automated and independent human activities to human–automation symbiosis characterized by the cooperation of machines with humans, therefore enabling new means to increase competitiveness. In light of these changes, the deployment of collaborative robots (cobots) has changed the game in modern factories. Cobots are devices supporting mutual and direct interactions with human operators while actively cooperating with them in the shared workspace, production activities, and working time. Because cobots are designed to be more co-workers than tools, fluent interaction between the operators and their robotic counterparts is critical for employees' task accomplishment and high performance. As a quality of interaction, fluency in joint action refers to a highly coordinated cooperation between the human and the robot who form a well-synchronized synergy-driven team, adapt to each other, and perform together to complete the task. Continuous fluent interaction requires the team members to jointly understand the capabilities of the others and is necessary to perform shared tasks.

In light of the human-centered approach to HRI, the current study investigates the dispositional and state-like human factors of fluency in human-robot interaction. Therefore, the first aim is to verify the relationships of operators' core self-evaluations (as a personality trait that pertains to one's worthiness, effectiveness, and capability) and psychological capital (as a state-like personal capacity encompassing self-efficacy, hope, optimism, and resilience) with four perspectives of human-robot interaction fluency (i.e., the human emotions-oriented, the human contribution-oriented, the robot-oriented, and the team-oriented fluency). It is hypothesized that both trait-like core self-evaluations and positive state-like Psychological Capital will be positively related to human-robot interaction fluency. The second aim of the study is to answer why personality and personal state-like factors might relate to fluency in HRI. Based on the broaden-and-built theory of positive emotions, the mediating role of operators' job-related affective well-being (i.e., positive and negative emotions) at work with cobots is investigated. Here, it is assumed that core self-evaluations and Psychological Capital are associated with human-robot fluency due to their relationship with positive job-related affective well-being, which in turn relates to HRI fluency.

The structural equation modeling performed on data from 200 male and female cobot operators working on the shop floor showed that the model fit the data well ( $\chi^2 = 18,80$  ( $df = 17$ ;  $p = 0,34$ ); CFI = 0,99; NNFI = 0,99; RMSEA = 0,02). Obtained results suggest that core self-evaluations positively correlate with robot-oriented fluency. Among the capacities of psychological capital, hope is positively related to human contribution-oriented and team-oriented fluency. The analyses also revealed that positive and negative emotions mediate the relationships between several human operators' dispositions and state-like capacities and their fluency in interacting with cobots.

The results of the study will be discussed within the theoretical framework of the human-centric approach to automation and the broaden-and-built theory of positive emotions. For a human-robot interaction to be successful, positive emotions are crucial. However, until recently, not enough

attention has been given to human emotions in the research on the human-machine system. Therefore, this study also adopts the perspective of hedonomics - focused on the enjoyable aspects of human-technology interaction - in order to explore how emotional states are involved in the process between the cobot operator's dispositions, state-like capacities, and HRI fluency. Suggestions of implications for the design of human-robot interaction stations will be given.

*Keywords: human-robot interaction fluency, cobot, personality*

## Oral presentation OP686

### **The Right To Do Wrong: Compulsory citizenship behavior and unethical pro-organizational behavior: the role of psychological entitlement**

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science

This study is testing a moderated mediation model linking Compulsory Citizenship Behavior (CCB) and Unethical pro-organizational Behavior (UPB) through the underlying mechanism of Psychological Entitlement, considering the role of moral licensing as a moderator. Previous studies focused on organizational identification, ethical leadership, and social exchange relationships to understand the driving forces of UPB. However, research on moral regulation as an alternative process explaining UPB is still in a nascent stage. Drawing on moral licensing theory, we test whether employees engaging in CCB are more likely to conduct UPB via a psychological entitlement mechanism, and whether this mediated relationship is moderated by perceptions of moral credit. Based on the attribution theory, psychologically entitled individuals are more likely to commit unethical acts as it is characterized as an inflated sense of self-deservingness and seeking special treatment. As individuals may offset or balance the previous good deeds with future unethical behavior, we hypothesized that the relationship between CCB and UPB mediated by PE is stronger for individuals with high moral credits. We conducted an experimental study manipulating CCB as focal predictor. The results based on 200 full-time white collar employees from Istanbul, Turkey, supported the moderated mediation relationship. The findings indicate that the strength of indirect effects varies depending on employees' moral credits. As there are several corporate greenwashing scandals, including Volkswagen, Nestle, Starbucks, and Ikea, against sustainable production and consumption is a crucial term for executing United Nations (UN) Sustainable Development Goals in the organizational context. As part of UPB, employees may deceive the public by misrepresenting data causing environmental harm to the customers and stakeholders, financial fraud, or selling medicine that can be dangerous to health. Poor population is especially vulnerable to the consequences of UPB as people from poorer countries may be subjected to products that do not meet the quality standards of Western countries. This increases the gap between the quality of life of the poor populations and the richer ones. Overall, it is crucial to analyze the antecedents of UPB as it creates a competitive advantage for organizations to make more profit by deceiving the public. This deception may harm vulnerable populations and the environment that accentuates the inequalities among people. The theoretical and practical implications of these findings are discussed further.

*Keywords: psychological entitlement, moral credits, unethical pro-organizational behavior*

## Oral presentation OP400

### **The road to inclusion: Which factors contribute to feeling included in the workplace and what good does it bring?**

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**INTRODUCTION :** Our world today is characterised by globalisation and changes, which are accompanied with great complexities and many insecurities. This is no different in the labour market. The complexities in the workplace call for different perspectives and talents. In addition, an ageing population challenges the labour market with a shortage of workers. These challenges make it important to strive for an inclusive workplace where there is room for everyone, regardless of gender, age, skin colour, disability, etc., where everyone feels welcome and where anyone can bring in their unique perspective. In this study, we aim to gain insights into predictors of workers' feeling of inclusion, as well as its outcomes in terms of work-related well-being. Such insights may inform policy makers on the different actions they can take to improve workers' feeling of inclusion and well-being at work.

**THEORY :** In the organisational literature on diversity and inclusion, there has been a recent shift from diversity to inclusion (e.g., Ikeije & Lekan-Akomolafe, 2015; Shore et al., 2011, 2018). Although the potential of a diverse workplace to foster organisations' productivity and innovativeness has been recognized by scholars, the empirical results are mixed: A diverse workplace does not always lead to positive (organisational) outcomes (e.g., Williams & O'Reilly, 1998). Just bringing in diverse profiles does not seem to be enough. And this is where the idea of inclusion comes in. In order to flourish, workers need to feel welcome in the organisation and need to feel they can make a unique contribution to the whole (Shore et al, 2011).

The job demands-resources (Bakker & Demerouti, 2007) model posits that workers' well-being depends on job characteristics that motivate and energize them (job resources) or that demotivate them and take away energy (job demands). In the current study, we aimed to investigate how different aspects of the organisational culture (both job resources and demands) may predict workers' feeling of inclusion, which in turn may benefit well-being outcomes at the individual and organisational level. Following the logic of positive psychology, studying how growth can be achieved by nourishing positive experiences (Fredrickson, 2001), we focus mainly on positive organisational culture characteristics.

**HYPOTHESES :** As such, we hypothesize that positive organisational culture characteristics (participation in decision making, communication, supervisor involvement, supervisor diversity competence, diversity climate and diversity management) are positively associated with positive job outcomes (job involvement, extra-role behaviour, net promotor score, performance, innovative behaviour and intention to stay) and negatively with negative job outcomes (job stress). We expect the reverse associations between conflicts at work and the different job outcomes.

**METHOD & (PRELIMINARY) RESULTS :** We investigated work characteristics and job outcomes in relation to feeling included in the workplace in a three-wave online survey study. At this moment, the data collection is ongoing. In the first wave, 1342 Belgian workers completed the questionnaire. Respondents were recruited independently of their employer. Consequently, they hold different positions in their organisation (blue-collar workers: 5.2%; white-collar workers: 72.7%; managers:

22.1%) and worked in various sectors (care: 29.4%; public sector: 14.9%; offices: 13.4%; education: 13.1%; and industry: 9.5% as most common sectors). Overall, there were many highly educated respondents (77.0%), and only 2.7% labelled themselves as a member of a minority group.

Preliminary analyses from the first wave provide evidence for the hypothesized associations. We will use cross-lagged path analysis on the three waves to examine the predicted associations over time and to test for the directionality of the effects.

DISCUSSION : Although we aimed to recruit a heterogeneous sample for this study, participants were relatively homogeneous in terms of level of education and ethnic minority. Future research may investigate whether the same patterns hold true in a sample with more variation on these factors.

Our findings contribute to the scientific knowledge on inclusion in the workplace and inform policy makers about strategies to improve inclusion at work.

In order to deal with the complexities and challenges that go along with this changing world, we need all people to join forces and to work together in an inclusive way, counting on the individual strengths of everyone.

*Keywords: inclusion, well-being, organisational culture*

## Oral presentation OP64

### The Role of Country-Level Individualism in Strategic Career Behaviours in Flexible Working Arrangements

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science

The recent covid-19 pandemic has put teleworking into the spotlight. Yet, minimal focus has been placed on teleworkers in previous studies on strategic career behaviours. Furthermore, cultural differences, particularly levels of individualism vs collectivism, can play an important role in the effects that the isolation of teleworking can have on the career development of individuals. This study extends work developing a model of the antecedents and consequences of SCB using the Kaleidoscope Career Model (KCM), which has shown to interact with the career-relevant constructs of perceived self-efficacy (PSE), desire for career control (DCC) perceived organizational support (POS), perceived career control (PCC), objective and subjective career success (OCS; SCS), and career satisfaction (SAT). The present study extends this work by investigating these variables in a European sample and comparing country-level differences in these outcomes based on Hofstede's Individualism/Collectivism scale (IDV). A total of 739 employees (Male=442, 59.8%), with a mean age of 27.64 years (SD=8.48; Range=[18, 70]), working mostly full-time (N=398, 53.9%) and with 46.35% of their work being done remotely, completed a questionnaire on a number of demographic variables and SCB and on the career-relevant variables. Participants were included if they were both resident in and working for a company in continental Europe, including the UK, Turkey and Cyprus, but excluding Russia, and were split into two groups based on their residence country's score on Hofstede's Individualism/Collectivism scale (Low[<50]=286, 38.7%; Range=[27, 89]). Correlation and regression analysis tested the antecedents PSE, DCC and POS as predictors of SCB, and tested SCB as predictors of the consequences PCC, OBC, SCS and SAT. Mediation analysis tested the SCB as a mediator between the antecedents and consequences. T-tests compared the low and high IDV groups for significance of differences on variables in the model. Results indicated that OCS was not related to the antecedent variables or SCB and hence was removed from the model. For both low and high IDV countries: PSE and DCC were good predictors of the use of SCB, but POS was not; SCB were reasonable predictors of PCC, and very strong predictors of SCS and SAT; PSE had a direct effect on the consequent variables; POS had a significant effect on PCC and SAT, but not on SCS; and DCC had a significant effect on SCS but not on PCC, and only for high IDV countries on SAT. Significant differences were found between the groups' mean scores on PSE, DCC, SCB, SCS and SAT, but not POS or PCC. Although this study was intended to include a wider European sample, the majority (57.9%, N=428) resided in either Portugal or Poland. This may indicate a limitation in the methodology of using paid online questionnaires and limits the generalisability of the findings to other European countries. However, this suggests the need for further research that includes a larger sample more representative of remote workers on the European continent and further analysis to make pairwise comparisons between countries. The significant shift to teleworking and other location-flexible work arrangements will be important factors in the changing world of work. The results of this study will contribute to the UN SDG of decent work and economic growth by supporting the development of career management programs for employees to manage their career goals, accounting for advantages and difficulties specific to teleworking, while also catering for possible cultural differences that may play a role in the impact telework has on career management.

*Keywords: strategic career behaviours, flexible working, European workers*

## Oral presentation OP425

### **The role of educational-job match in the relationship between career adaptability and career success**

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#### Purpose

The aim of this study is to analyze the relationship between career adaptability on career success (objective and subjective), through the match between the educational level obtained and educational level required by the job (vertical match) and the relationship between graduates' field of studies and job (horizontal match).

#### Theoretical background

In a context characterized by faster changes in the labor market, career adaptability has emerged as a personal resource that helps individuals effectively manage career-related tasks throughout their working lives. Although empirical studies have demonstrated the positive relationship between career adaptability and career success, there are mechanisms mediating this relationship that have been little explored, such as the educational-job match, both horizontal and vertical.

#### Design/methodology/approach

An online survey was answered by 984 Chilean graduates from a large non-selective higher education institution that enrolls a significant number of first generation, and lower socio-economic background students. Structural equation modeling was used to examine the mediating role of educational-job match.

#### Findings

The results of structural equation modeling showed that career adaptability was positively related to objective and subjective career success. Also, the results showed that both vertical and horizontal match partially mediate the relationship between career adaptability and objective and subjective career success.

#### Originality/value

This study contributes to improving the understanding about how different resources, such as career adaptability and education-job match influence career success. Testing the utility of these relationships on a group that has been underrepresented in career development studies is also relevant, particularly, the use of the gain spiral concept from Conservation of Resources theory.

#### Research limitation

The study made use of a cross-sectional design, which hinders the identification of causal direction.

#### Practical implications

Universities, organizations, and career counselors might need to focus on career adaptability to promote career success. Moreover, considering that resources do not exist in isolation, but act in

caravans and influence each other, it is important to consider other resources such as education-job match.

#### Relevance to the congress theme

Nowadays, careers and work itself are radically changing, due to the transformation of the work context. This implies, more than ever, the need to study personal and organizational resources that can promote the development of satisfactory careers. In that vein, this research contributes by analyzing the role that personal resources, such as career adaptability, and organizational resources, such as educational-job match, in enhancing the favorable perception of career achievements that contribute to work and general well-being.

#### Relevance UN SDGs

Career research is facing new challenges, particularly, when looking for new contexts in which to test these relationships, in order to identify potential resources in specific social groups, such as first-generation professionals. This group of professionals has developed their careers with certain disadvantages, such as lack of social capital and family support. This social group represents, on average, 75% of all the graduates from OECD countries (OECD, 2017). Therefore, a better understanding regarding the role of educational-job match to improve career success could help educational centers and organizations to develop policies and practices to promote this match.

*Keywords: career adaptability, career success, vertical match, horizontal match*

## Oral presentation OP136

### The role of implicit leadership and followership theories in abusive supervision perceptions and outcomes

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science

The role of employees' individual leadership schemas in shaping their perceptions of supervisory behavior has been acknowledged by many organizational scholars (e.g., Foti & Lord, 1987; Lord, 1985; Lord, Foti, & De Vader, 1984; Lord & Maher, 1993). However, little research attention has been devoted to employees' implicit leadership theories as an antecedent of abusive supervision perceptions. Specifically, we suggest that the prototypic dimensions (sensitivity, intelligence, motivation, and dynamism) are positively related to abusive supervision perceptions, contrary to the antiprototypic dimensions (tyranny and masculinity). Additionally, we suggest that implicit followership theories act as a moderator in the relationship between abusive supervision and deviant behaviors, since beliefs about followers' personal attributes and characteristics affect the way subordinates behave, even when they are victims of supervisory abusive behaviors. Thus, we propose that prototypic followers are less prone to retaliate directly against abusive supervisors, however, they retaliate indirectly through turnover intentions.

Participants were 367 supervisor-subordinate dyads from different organizational settings. Bootstrapping results indicate that the prototypic dimensions are significantly related to abusive supervision perceptions and that abusive supervision is significantly related to deviant behaviors when prototypical or positive second order IFTs factor was low ( $t = 3.15$ ;  $p < .05$ ), but not when it was high ( $t = -.52$ ;  $p > .05$ ). Contrary, abusive supervision is significantly related to turnover intentions when prototypical or positive second order IFTs factor was high ( $t = 4.22$ ;  $p < .05$ ), but not when it was low ( $t = -.34$ ;  $p > .05$ ).

Research results indicate that employees' prior expectations and cognitive prototypes influence not only abusive supervision perceptions, but also abusive supervision outcomes. Specifically, the current study provides support for Lord and Maher's (1993) suggestions that employees use implicit leadership theories as an uncertainty reduction mechanism and compare their actual supervisor with their implicit profile in order to evaluate his/her behavior (Epitropaki & Martin, 2005).

One limitation is related to common method bias, since employees provided ratings of implicit leadership theories, abusive supervision, implicit followership theories and turnover intentions. Because our design is cross-sectional, we cannot infer causality.

This research makes several contributions for theory and practice. Firstly, it expands the content domain of abusive supervision research and highlights the relevance of employees' schema to abusive supervision perceptions and consequences. Secondly, it is useful for managers to know that abusive supervision may affect employees differentially, depending on employees' prior expectations and schema.

This research contributes to the better understanding of abusive supervision, mainly by shedding some light concerning abusive supervision antecedents and individual factors that could buffer or exacerbate the negative effects of abusive supervision on organizational functioning.

*Keywords: implicit leadership theories; implicit followership theories; abusive supervision*

## Oral presentation OP596

### The Role of Job Insecurity in Predicting Multiple Jobholding

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science

This study looks at how perceived job insecurity (JI), representing the level of perceived threat to the continuity of one's job or employment, affects employees' likelihood of taking on more than one paid job, i.e., entering multiple jobholding (MJ). MJ has had longstanding importance in advanced economies thanks to the growing prevalence of work flexibility, platform technologies, and gig work. MJ is now an increasingly touted way to generate additional income, learn skills, and enlarge one's professional network. Thus, research in economics theorizes MJ as a hedging strategy allowing employees to distribute risks, including those associated with JI, across jobs. We challenge this notion by arguing that MJ represents a double-edged sword for job-insecure employees. Though these employees can benefit in certain ways from taking on additional jobs, the potential gains come at the cost of significant resource investments. Accordingly, our paper offers a longitudinal investigation of how JI impacts the propensity to enter MJ.

Drawing from conservation of resources (COR), we develop competing hypotheses that link JI and MJ. JI poses a threat to the resources associated with one's job, such as income and status. First, relying on the "resource conservation" tenet of the theory, we argue that perceived JI can reduce the likelihood of MJ entry (Hypothesis 1a). Based on this tenet, employees faced with high levels of JI may adopt a defensive orientation to protect against the threat of net resource loss and thus strive to conserve existing resources. Accordingly, they may avoid taking on side jobs to preserve resources such as time and energy and safeguard resources derived from the primary job. Second, based on the "resource acquisition" tenet, we posit that perceived JI increases the likelihood of MJ entry (Hypothesis 1b). Based on this tenet, employees may invest resources to acquire resources to buffer against the threat of resource loss. Thereby, they may enter MJ to acquire additional resources, such as income, knowledge, and networking opportunities, that replenish the ones at risk because of the threat of losing the primary job.

We use secondary data from 1999 to 2019 included in the German Socio-Economic Panel, a longitudinal survey of German individuals. The survey collects individuals' perceptions of JI and details on both primary and secondary jobs, among other information. Our sample consists of 3,140 job spells for 819 German individuals (50.92% female, 49.08% male) and 106 MJ entries. We use Cox proportional hazards models to estimate how perceived JI affects the likelihood of an employee who hitherto does not have additional jobs to enter MJ. Supporting Hypothesis 1a, higher levels of perceived JI significantly reduce individuals' propensity to enter MJ ( $b = -.105$ ,  $p = .019$ ; hazard ratio: 0.90). Thus, a one-unit change in perceived JI decreases the likelihood of entering MJ by 10.00%. Our results are robust to several alternative specifications. Plus, we examine potential moderators of this relationship.

We use COR theory instead of other common perspectives in JI research (such as social exchange theory) to offer a more comprehensive theoretical explanation for how JI might impact the propensity to take on work outside of the primary job. So far, scholars have theorized a positive link between precarious workers and MJ, and findings have been equivocal. We expand this research by developing a framework that, by including conservation and acquisition mechanisms from COR theory, holistically explains how JI relates to MJ while answering the call to simultaneously theorize about competing mechanisms that relate JI to its outcomes. Our findings are important given that we

longitudinally investigate individuals' actual entry behaviors in response to perceived JI (as opposed to entry intentions or purely cross-sectional analyses typically used in existing research). Moreover, we add to the studies in the field of JI that have started to examine how JI affects "extra-organizational behaviors", revealing that increasing levels of perceived JI limit MJ entries.

The changing world of work is creating new pressures and opportunities when it comes to employment conditions. Employment is becoming more precarious due to pandemics, economic crises, automation, among others. At the same time, new forms of work arrangements are on the rise thanks to the growing influence of gig work and remote working technologies. Our paper brings together both issues by investigating how JI affects workers' chances of entering MJ. Accordingly, our research is relevant to a broad audience, including individuals, organizations, and policymakers, and to the UN SDG of promoting full employment and decent work for all.

*Keywords: Perceived job insecurity, multiple jobholding, conservation of resources*

## Oral presentation OP113

### The role of online platforms as sources of daily social support for gig workers' in- and extra-role performance

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science

#### Research Goals

Due to the advancement of platform economies as well as the growing desire for “on demand” work, the number of gig workers has increased drastically in recent years (Sessions et al., 2021). Gig workers are independent workers contracting directly with customers for a short-term gig, for example, via online platforms (Ashford et al., 2018). Extant research has proclaimed that gig workers – especially those on crowdworking platforms such as MTurk – suffer from a lack of social support by others (e.g., co-workers, supervisors) as these gig workers are not part of a “real” organization but instead work alone at home (Watson et al., 2021). We challenge this notion by arguing that theory on traditional OB phenomena (such as social support) needs to be updated to incorporate new forms of social exchange. Specifically, we focus on informal online platforms (i.e., Turkerview) as a potential point of contact that gig workers can consult, and argue that seeking social support from other gig workers on such platforms can help to deal with the inherent daily challenges of gig work (i.e., emotional and cognitive demands of flexible work) in order to stabilize their in- and extra-role performance.

#### Theoretical Background

We integrate the transactional stress theory with the social support literature to propose that gig workers engage in emotion- and problem-focused coping in reaction to daily gig work-specific demands by seeking social support on informal online platforms. Specifically, we propose that daily gig work-specific cognitive and emotional demands predict gig workers' emotional and instrumental support seeking as situational (i.e., within-level) and dispositional (i.e., between-level) coping mechanisms that stabilize gig workers' effectiveness (i.e., the money they earn on MTurk) and allow them to engage in extra-role behaviors.

#### Study Design

We first conducted a pilot study with 102 MTurkers to collect qualitative descriptions of social support on online forums. We categorized the responses and identified four specific forms of emotional (e.g., seeking motivation) and instrumental support seeking (e.g., seeking advice on problems with specific HITS), respectively. We used the insights for the development of items to capture these constructs during a workday. Study 1 served as a first test of our research model with regard to gig work-specific demands, social support seeking, and extra-role behaviors. Study 2 further examined downstream consequences on gig workers' monetary performance. Moreover, in Study 2, we could disentangle rather stable between-person effects from daily within-person effects.

#### Results

In Study 1, we found that gig-specific emotional demands predicted emotional support seeking on informal online platforms. Moreover, gig-specific cognitive demands predicted both emotional and instrumental support seeking. Subsequently, emotional support seeking was positively associated

with emotional support providing. Similarly, instrumental support seeking was positively related to instrumental support providing as well as OCB-O towards the crowd working platform.

Study 2 explored our research model on both the within- and between-person level. With regards to the between-level, we replicated the between-person findings from Study 1 showing that emotional demands predict emotional support seeking and cognitive demands predict instrumental support seeking. We further found again that emotional support seeking is associated with emotional support providing and instrumental support seeking is related to instrumental support providing and OCB-O towards MTurk. However, Study 2 does not find that cognitive demands lead to more emotional support seeking. Instead, we found that instrumental support seeking is additionally associated with emotional support providing and that emotional support seeking is also related to OCB-O towards MTurk on the between-level. Further, we do not find an effect of emotional and instrumental support seeking on monetary performance between persons.

#### Limitations

We rely on self-reported data and cannot claim causality of our model. In the future, within-person field experiments redirecting participants to specific MTurk-related forums and asking them to engage in social support seeking could address these limitations.

#### Implications

Our research challenges previous assumptions regarding the loneliness of gig workers (Caza et al., 2022) by demonstrating that gig workers can receive social support related to their work. We also expand the transactional stress theory (Lazarus & Folkman, 1984) by suggesting that emotional and instrumental support seeking reflect forms of emotion- and problem-focused coping in the gig context.

#### Congress theme

Gig work is a phenomenon of the 21 st century, with MTurk being founded only in 2005 and growing ever since. Thus, studying the work experiences of people working on MTurk is of inherent relevance to the congress theme.

#### UN SDG

#### Decent work and economic growth

*Keywords: Gig work, Social Support, Work Effectiveness*

## Oral presentation OP140

### The Role of Working Conditions in the Emergence of Technostress Among Legal Professionals

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science

Recent technological advances and applications have transformed professional practices in transmitting and processing information. However, the widespread implementation of these technologies presents a paradox: increased flexibility and accessibility lead to an intensified pace and workload to reduce the professionals' performance. The challenge resides in organizations' inadequacy in adapting professional working conditions to these technological environments. Furthermore, these advances and their implementation have been linked to psychological risk factors for wellness, such as technostress. Technostress refers to the stress experienced by an individual due to information and communication technologies (ICT) usage to perform their work. This phenomenon is widely observed among knowledge workers, including legal professionals, university professors, and librarians. These professionals have a symbiotic relationship with their organization; their wellness at work, the evolution of their careers and their organization's progress are entwined.

Technostress has given rise to multidisciplinary attention, providing various paradigms and measurements to advance the technostress literature. To that extent, occupational stress theories have provided a solid theoretical background for emerging studies on technostress. Our research draws on the transactional stress and coping (TSC) theory and the job demands-resources (JDR) model propositions. The TSC theory states that job risk factors result from a disturbed person-environment equilibrium. The JDR model argues that each profession may have specific risk factors associated with occupational health, i.e., job stressors. In doing so, it provides an investigation framework to examine the influence of these risk factors on stress reactions, such as burnout. Therefore, our research model is grounded in that framework to explore the working conditions, demands and resources associated with the experience of technostress.

The context of abundant information transfer requires knowledge workers, such as lawyers, to acquire new techniques to process knowledge in their expertise. Through a mixed-method approach (interviews and surveys), prior research found technostress prevalent among lawyers. Interview analyses reported that 32% of statements regarding sources of stress are related to the difficulty of adapting to ICT in an organizational setting. Their results indicated that technostress dimensions (technostressors) are significantly associated with increased psychological distress and burnout. The acceleration of the pace of work induced by ICT, the information and communication overload, and the replacement by artificial intelligence are just a few examples of technostressors that affect lawyers. However, this prior research has not examined the association between working conditions and technostress.

Our research aims to understand the relationship between psychological working conditions and the experience of technostress among legal professionals, using a secondary analysis of data obtained through a survey distributed to Canadian legal professionals in 2021 after the third COVID-19 wave. The data subset includes 3,850 completed and useable responses from lawyers, notaries, and paralegals. A hierarchical analysis is carried out, using the enter method, to reveal the effect of working conditions on technostress. The results reveal three models sequencing the interaction of job demands (entered first) and job resources (entered second) while controlling for age and gender. The analysis consistently shows that quantitative psychological demands, lack of resources, and emotional demands significantly exacerbate technostress. Additionally, consistency of values and

social support from colleagues are significantly associated with technostress mitigation. The presentation will detail which working conditions exacerbate and mitigate the experience of technostress.

Legal professionals whose work has seen many changes through ICT usage are a group of knowledge workers in the grip of technostress. Examining working conditions is a worthwhile approach to ensure technostress prevention. This research contributes to the technostress literature and the study of knowledge workers' wellness by highlighting the decisive role of demands and resources in the experience of technostress and therefore provide insight for recommendations. The study's limitations stem from the cross-sectional design of the survey. In addition, the dataset was collected during the COVID-19 pandemic, a period characterized by massive transitions toward teleworking and ICT. In alignment with UN sustainable development goals, adjusting professional work settings and job characteristics promotes good health and wellness, preventing professional burnout (the third goal). A well-rounded ICT implementation process that considers technostress prevention also ensures sustainable performance expectations (the eighth goal).

*Keywords: working conditions, technostress, legal professionals*

## Oral presentation OP248

### The State of a Nation: The Prevalence and Correlates of Employee Anxiety in the UK

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science

Research goals and why worth doing

We examine the prevalence and correlates of employee anxiety during the 2008-2011 recessionary period in the UK following the 2008 Global Financial Crisis using an authoritative nationally representative multilevel dataset.

Countries throughout Europe have been profoundly challenged by major crises in the last 15 years (Global Financial Crisis 2008; COVID19; Ukraine war 2022). These and other events have led researchers to claim we live in an age of anxiety. Our focus here is employee anxiety, which has been under-researched and is worth studying because of its implications for employee health and workplace behaviour (Cheng & McCarthy, 2018). Our focus on the recession following the 2008 financial crisis offer insights into more recent crises.

Theoretical background

While there are many organizational studies on stress and negative affect, and on anxiety in the broader psychology literature, there has been a neglect of research on workplace anxiety (Cheng & McCarthy, 2018). We develop a wide-ranging model of antecedents to and consequences of workplace anxiety drawing on Cheng and McCarthy's Theory of Workplace Anxiety (2018) and Kensbock, Alkaersig and Lomberg's (2022) social contagion model of anxiety.

Method

We use the authoritative Workplace Employment Relations Survey (WERS, 2011), consisting of a large-scale UK nationally representative dataset of 14,804 full-time employees nested within 1,752 workplaces. The publicly funded survey is designed to cover a broad range of employee and workplace issues and includes items measuring institutional factors (e.g., governance structures), organizational factors (e.g., HR practices), employment contract types, job characteristics, work attitudes, affective wellbeing, and performance outcomes.

Anxiety was measured using the three negatively worded items from Warr's (1990) measure of anxiety–contentment (i.e., 'tense', 'worried', 'uneasy'). Antecedents to workplace anxiety drew on items capturing demographic differences (e.g., gender), perceived competence, job security, job characteristics (e.g., autonomy, demands), and a series of items capturing how the recession affected employees' jobs. Measures of consequences to workplace anxiety included attitudes (e.g., job satisfaction) and behaviours (e.g., overtime hours). The role of anxiety will be contrasted with depression (three item measure: 'depressed', 'gloomy', 'miserable') to examine the unique effects of workplace anxiety.

Results obtained

The dataset is publicly available and therefore already obtained. About 15% of the sample reported feeling anxious most or all of the time. Preliminary regression analyses show support for the Theory of Workplace Anxiety and the social contagion model where, for example, anxiety was strongly associated with antecedents including disability, workload increases attributed to the recession, job

insecurity, high job demands and low manager support; anxiety associated with the outcomes of lowered job satisfaction, decreased organizational commitment, and working more overtime hours. The strongest effects of all were found for social contagion where the employee with the highest anxiety within the work unit were found to be the carrier of anxiety, with the line manager being a carrier to a lesser extent.

#### Limitations

Cross-sectional and self-report data. WERS is a broad purpose survey and therefore necessarily uses short-item scales (ranging mostly between single to five item measures).

#### Conclusions – research & practical implications/Originality

There is limited research on anxiety in organizations (Cheng & McCarthy, 2018), and we offer one of the first studies to investigate the incidence and correlates of employee anxiety at the national UK-level. We test a wide range of explanations that suggest implications for interventions at the level of organizational practices and social policy.

#### Relevance to Congress Theme

We examine one of the most important crises in recent history, namely, the recession following 2008 Global Financial Crisis. Our discussion will contextualize our findings alongside other national studies of anxiety and other global crises (e.g., COVID19).

#### Relevant UN SDG

Our study of employee anxiety provides national level evidence relevant to the SDGs of ‘Good health and wellbeing’ and ‘Decent work and economic growth’.

*Keywords: employee anxiety; recession*

## Oral presentation OP515

### Three pillars of onboarding – conceptualization and measurement proposal

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science

#### Research goal

Onboarding process becomes increasingly important in modern HRM due to accelerating employee turnover (Semenza et al., 2020) and a great need for employee development (Karambelkar & Bhattacharya, 2017). Organizations design more suitable implementation programs so that new employees are ready to fully function in their work positions without loss of time (Becker & Bish, 2019). Yet, up to date, onboarding has not received a lot of scientific attention. We believe that one of the reasons behind it is the lack of reliable measures that would enable the study of cognitive and behavioural consequences of onboarding, such as psychological capital or organizational citizenship behaviour. The purpose of the paper is to develop such measure.

#### Theoretical background

The current research on onboarding is focused mostly on the levels of implementation that an employee can achieve after completing the program (Bauer, 2010). Moreover, the only measure of onboarding is a short scale consisting of three open-ended questions which reliability has not been thoroughly tested (Meyer, Bartels, Lynn, 2017). The literature however suggests that three factors matter in onboarding process: interactivity, proactivity and community.

Interactivity is the response of HRM departments to the needs of young generations of employees who are used to acquire knowledge and experience through movies, websites and other interactive formats. It has already been established that interactive solutions have a greater impact on young generations (Ferri-Red, 2013). Interactivity also gains importance in post-pandemic reality and with the increase of remote work with considerable share of onboarding taking place online.

Proactivity plays a key role in smooth and comprehensive implementation. Previous research emphasizes the importance of the proactive attitude of managers responsible for onboarding (Saks et al., 2011; Jeske & Olson, 2021). Dekas (2013) highlights that managers, characterized by a proactive approach to sharing knowledge, increase the chances of success of the process.

Community brings together all the people, their competences and skills used in the implementation of onboarding. Bradt and Vonnegut (2009) emphasize the special role played by mentors who are an extremely helpful source of information and support for new employees (McKimm et al., 2007) and buddies who can be described as friends of newly hired. Also others (Karambelkar & Bhattacharya, 2017; Caldwell & Peters, 2018; Bhakta & Medina, 2021) stress the fact that assigning a patron is an excellent idea to support individualized forms of implementation. Graybill and colleagues (2013) include mentors and buddies among the necessary components of any onboarding.

#### Method

We follow the literature to propose a three-dimensional measure of onboarding that will enable to explore the psychological effects of onboarding process and, in consequence, create more effective implementation programs. The first stage of the research was to find items categorized into three pillars of onboarding in the process of literature review of over 100 peer-reviewed journal articles.

In the next stage, 23 interviews were conducted with people holding middle and senior managerial positions in the HR area. During the interviews, experts were asked what activities they would classify under each of the pillars. The comparison of the results from the two stages of the procedure made it possible to compare the most common activities. In the next stage, the three-dimensional measure of onboarding with 31 items (11 for interactivity, 10 for proactivity and 10 for community) was tested on a group of 556 employees using factor and reliability analyses.

### Results

In factor analysis the number of items was reduced to 3 (interactivity,  $\alpha=.801$ ), 4 (proactivity,  $\alpha=.867$ ) and 3 (community,  $\alpha=.708$ ) to form 10-item scale. Confirmatory factor analysis produced the RMSEA value of .071 which indicates that the models falls between close and acceptable fit (Pituch & Stevens, 2016). The values of CFI (.967) and TLI (.954) indicate a very good fit (Schumaker & Lomax, 2016). Also the value of SRMR (.039) indicates a close fit (Pituch & Stevens, 2016). For comparison we tested the fit of one-dimensional model which is significantly lower (RMSEA .110, CFI .915, TLI .890, SRMR .050).

### Implications

The effect of the described work is a research tool covering the area of the 3 pillars of onboarding. The developed tool can be used by both the scientific community to study psychological consequences of onboarding and managers to create onboarding programs and improve existing implementation programs.

### Relevance to the Congress Theme

With increasing importance of onboarding, our study contributes to potential positive change in the world of work reducing inequalities between employees and increasing their performance and satisfaction with work.

*Keywords: onboarding, interactivity, proactivity*

## Oral presentation OP265

### Time to CHAT? A concise risk assessment tool for workplace bullying and harassment

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science&practice

#### Purpose

While scholars and practitioners have repeatedly underscored the importance of a thorough risk assessment for effective prevention of workplace bullying and harassment (WBH), the current status regarding such assessments shows some obvious gaps. First, from a scientific perspective, most of these instruments are developed by instances (e.g., consultancy firms) applying a more commercial angle to the assessment. Consequently, many of the tools at hand lack a sound underpinning in terms of their psychometric qualities. Most of them lack a validation procedure and some of them even fail to adhere to item-theory standards. And, many tools apply outdated or inadequate statistical methods, therefore providing inaccurate feedback for risk prevention. Moreover, many of the existing tools miss out on crucial risk factors because they were not developed based on a scientific research protocol. Notably, also, they predominantly look at risk factors within the job or organization, missing out on the interpersonal, social context displayed in personal relationships between team members. Consequently, the instruments tend to explain rather low variance in WBH. Second, from a practical perspective, the tools that do aim to respect psychometric and statistical requirements are often lengthy, time consuming, and costly. Moreover, they can often only provide feedback after weeks to months, which challenges a swift prevention program from assessment towards interventions. In reply, we developed CHAT (i.e., Combat Harassment tool) that is (1) valid and (2) short, (3) includes the interpersonal aspect of WBH, (4) applies adequate statistics and (5) provides direct feedback.

#### Methodology

First, potential risk factors of WBH and its measurements were identified based on a thorough review of the current literature, including more recent publications tapping more social and interpersonal factors. Second, a pilot study (N = 354) was conducted to assess the psychometric properties of the preliminary questionnaire (EFA, CFA, reliability). Then, a two-wave data collection (N = 77648) was used to identify the prominent risk factors WBH using regression analyses. Through ROC-analyses we calculated their cut-off points in terms of primary prevention (i.e., incivility) and secondary prevention (i.e., LCA-determined victims). We collected input from practitioners' stakeholders as to develop the online tool and support (N = 27).

#### Results

CHAT entails seven risk factors, being role conflict, workload, task-related conflicts, personal conflicts, laissez-faire leadership, quantitative job insecurity, and qualitative job insecurity. It also includes measurements for experiencing and witnessing bullying, sexual harassment, and violence as well as who enacted these behaviors. Finally, it also assesses burnout. The Cronbach's Alfa of the scales reached between .75 and .93. From the ROC-analyses we established green, orange, and red zones for each of the risk factors. An online tool was programmed allowing organizations to log in and distribute the CHAT questionnaire among pre-defined groups of employees. After finishing the survey, they can directly upload the results to start 'chatting' about what is going on.

#### Limitations

The longitudinal study was carried out during the pandemic. Therefore, we are following up the data collected currently through the CHAT surveys as to recalculate potential shifts in the green, orange, and red zones.

#### Conclusion

The results allow determining the relative importance of work-related antecedents of WBH. This fosters the development of adequate interventions for the prevention of WBH. In all, CHAT aims to be the first of its kind risk assessment for WBH specifically, by combining current voids from both a scientific as a practical angle.

#### Relevance

This presentation suits the congress theme in terms of contributing to science-based practice, applying an innovative approach as an online tool to support practitioners in WBH prevention. WBH are notable issues in our workplaces, and through CHAT we can deliver direct insight in the situation allowing organizations to act in urgency .

*Keywords: bullying, risk assessment, evidence-based tool*

## Oral presentation OP348

### Title **Scratching the Glass Ceiling in Academia by Rebranding Top Positions' Identity Discourses**

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science&practice

Research goals and why the work was worth doing

The goal is to increase the proportion of women in top positions at a university of applied sciences in Switzerland. The research question was: Which obstacles stand in the way of women attaining professor and leadership positions and how can these professions be rebranded so that they are attractive for all genders?

This research is important to provide equal opportunities and to counteract the skilled labor shortage.

Theoretical background

The goal is to increase the proportion of women in top positions at a university of applied sciences in Switzerland. The research question was: Which obstacles stand in the way of women attaining professor and leadership positions and how can these professions be rebranded so that they are attractive for all genders?

This research is important to provide equal opportunities and to counteract the skilled labor shortage.

Theoretical background

One reason why women are progressively lost from senior positions in academia is the role that socio-cultural constructions play in the development of scientific careers (Avolio et al., 2020). Scientific careers are strongly associated with men (Miller et al., 2015) which influences women's perceived fit (Heilman, 1983) and consequently their scientific self-concepts, their self-efficacy and ultimately their science career choices (Deemer & Thoman, 2014; Ertl et al., 2017; Ramaci et al., 2017). So far, too little has been done to analyze how these gender-stereotypes can be dissolved. One approach that can be used to frame the often-unconscious images as gender inclusive is branding (Lundkvist, 2015). To date, the focus of branding was on the organization, but branding theory can also be applied to study courses or professions (e.g. Resch et al. (2020) used this approach to rebrand the image of ICT study programs and increased the proportion of women by 73%).

Methodology

To identify (gendered) identity constructs about academic top positions, a qualitative approach based on a social constructionist perspective was used. Data were collected through document analysis (career site of the university, LinkedIn profiles of professors, internal HR documents), problem-centered interviews (Witzel, 2000) with HR managers and institute/university directors (n=25) and nine group discussions among professors (n=37). A discourse analysis was performed. Based on the identified discourses, professor and leadership professions were rebranded in a way that enables all individuals to identify with them more strongly.

Results

The following discourses were identified:

The university of applied sciences is unique in its function as it operates at the interface between universities and industry.

Gender and profession are identity-creating features, which means that no one can escape its effects.

The job profile of a university of applied science professor is much unknown.

The requirements that applicants must meet are very high.

The job of a professor is characterized by creative freedom and interdisciplinary exchange.

These interpretative repertoires are used as explanations why women drop out on the way up: male dominated cultures, skepticism about equality policies, assumption that women do not want to occupy high positions, viewing gender inequalities as a societal problem.

Based on these discourses a reconstruction was developed forming a more inclusive brand identity.

#### Limitations

This qualitative study was focused on producing insides in a specific context. More research is needed to evaluate the implementation.

#### Conclusions

Overall, the unique combination of a discourse analysis with branding theory achieves novel results. Based on the identified discourses academic top positions could be rebranded to make them more attractive for all genders, therefore enforcing a more diverse image of “a professor”. The next step is to launch the new brand in the form of revising job websites and job advertisements, offering courses about gender-sensitive recruiting and promoting the new professional brand to target groups (e.g., through career events).

Especially interesting is the discourse about gender. Many respondents were reasoning that the agency solely lies with women or society in general. The strong association of scientific careers with men (Miller et al., 2015) did not get reflected. So, if universities want to attract a more diverse workforce they have to actively counter gender stereotypes of the profession. Furthermore, the role of internal stakeholders concerning these matters should not be underestimated since it addresses identity-forming aspects relevant to them.

#### Relevance to the Congress Theme

As an institution, one must be aware of the impact one has on society and take effective steps to fulfill this responsibility. By actively addressing gender stereotypes, universities contribute to supporting gender diversity.

#### Relevant UN SDGs

The research project aims to improve gender equality at universities top positions.

*Keywords: gender stereotypes, branding, discourse analysis*

## Oral presentation OP111

### To be or not to be a perfect parent? How the striving for perfect parenting harms employed parents

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science&practice

Managing multiple roles in the work and in the family domain can be difficult, especially for employed parents. Nowadays, managing one's roles as an employee and a parent has become even more demanding as more and more employees aim to be perfect parents. In line with this notion, parenting perfectionism (i.e., striving to achieve extremely high standards for one's performance as a parent coupled with a tendency to overly criticize one's parenting abilities) has recently received increasing attention in the media. However, despite this growing public interest and obvious need to understand perfectionism in the parenting role and its implications, this phenomenon is – from a research perspective – not well understood to date. Therefore, our study addresses this issue. Specifically, we investigated how employees' parenting perfectionism relates to overprotection in their role as a parent (i.e., an inappropriate, excessive provision of protection that involves smothering and constant worries about child welfare) and whether this overprotection, in turn, relates to conflict between family and work life as well as to co-parenting conflicts with their intimate partners. Moreover, we examined possible implications for employees' own and their partners' well-being and satisfaction.

Toward this aim, we drew on theoretical approaches stemming from family-work and perfectionism research. That is, we integrated the conflict perspective and the principle of resource drain stemming from family-work research with the Expanded Social Disconnection Model stemming from perfectionism research to develop a comprehensive conceptual model that considers intraindividual, interindividual, and domain-crossing (i.e., from the family to the work domain) processes driven by perfectionism in the parenting role. To test our hypotheses, we used multi-wave (T0, T1 = one year later, T2 = two years later) survey data collected via interviews of 541 employed couples with parental obligation participating in The German Family Panel pairfam. In line with our hypotheses, path analytic results showed that parenting perfectionism was indirectly related to a decrease in employees' well-being and partnership satisfaction from T0 to T2 via overprotection at T0 and family-work conflict at T1. As expected, parenting perfectionism was also indirectly related to a decrease in partners' well-being and partnership satisfaction via overprotection and co-parenting conflicts. Contrary to expectations, parenting perfectionism did not relate to a decrease in job satisfaction from T0 to T2 via overprotection and family-work conflict.

Our study has some limitations that need to be considered. First, albeit being conceptualized as a multidimensional construct, parenting perfectionism was assessed with a shortened overall measure that did not differentiate between its various dimensions. Second, (co-)parenting and related conflicts might also be affected by partners' personality and ways of parenting. Unfortunately, these constructs were not assessed from partners. Third, because most of the couples in our study represent the "traditional" family type (i.e., heterosexual, married, cohabitating with two children), it is unclear whether our results are transferable to other family types.

Our results highlight the impact parenting perfectionism can have: It might not only ultimately impair one's own and others' well-being and satisfaction but can also permeate boundaries between family and work life. Consequently, scholars should consider perfectionism's intra- and interindividual as well as domain-crossing effects in the future. We conclude that parenting

perfectionism is a problematic phenomenon that is on the rise among employed parents. Accordingly, it is important to examine parenting perfectionism more closely and to find ways how employees and organizations can effectively handle it. For instance, organizations might support perfectionistic parents by providing flexible work arrangements, high-quality corporate day-care centres and kindergartens, homework supervision, tutoring, or supervised leisure time activities.

Our study is of special relevance to next year's congress theme "The future is now" as it deals with a recently arising and likely further increasing phenomenon that has the potential to deeply affect many employees – now and in the future. Accordingly, the time has come to discuss whether increasing perfectionism in employed parents is a desirable change or not. Furthermore, our study aligns well with the UN SDG of "Good health and wellbeing" as it points out processes that might impair long-term wellbeing.

*Keywords: perfectionism, family-work conflict, parenting*

## Oral presentation OP279

### **Too Vulnerable to Engage at Work: The Individual Differences in Vulnerability to Diseases, Rumination, and Work Engagement**

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science&practice

Too Vulnerable to Engage at Work: The Individual Differences in Vulnerability to Diseases, Rumination, and Work Engagement

The COVID-19 pandemic poses a serious and prolonged global health threat, dramatically affecting working patterns worldwide and changing people's work experiences fundamentally. In line with recommendations from the World Health Organization, various key health measures to protect against COVID-19 have been applied at workplace to avoid contracting and spreading infection in organizations. However, it is yet unclear to what extent employees have complied with these tighter rules and regulations on their initiative, especially whether they vary in coping with those health threats at workplaces regarding their dispositions. More importantly, the psychological impacts of COVID-19 on their work engagement are still underappreciated, which has been acknowledged as the most significant indicator of desirable work outcomes. Furthermore, managers are always expected to effectively navigate the crisis. Nevertheless, it is unknown if managers who are always expected to have prototypical qualities can effectively cope with the downsides of health threats. Top amongst those is the directive and dominant instead of prestigious leaders, which have been evidenced as one of the most effective roles in the crisis, but we do know little of these leadership qualities in the nascent health crisis.

In the present research, we argue that a fundamental factor in the way employees cope with the health crisis is the extent to which they perceive themselves to be vulnerable to infectious disease threats, that is perceived infectability. Accordingly, we aim to examine whether employees with a high vulnerability have experienced lower levels of work engagement during the pandemic, and how they adaptively respond to these diseases at workplaces. Moreover, we further investigate if the dominant versus prestigious leadership of the supervisor mitigates the negative impacts of infectability.

Theoretically, the behavioral immune system (BIS, Schaller & Park, 2011) provides an appropriate theoretical framework, arguing that individuals, besides the physiological immune system, have evolved psychological mechanisms enabling them to detect infectious pathogen threats in their social environment, and these mechanisms trigger a suite of adaptive responses that prevent them from getting infected. Besides, a specific feature of the BIS argues that BIS is supposed to react in accordance with these individual and contextual factors. Drawing upon BIS, we propose that during the pandemic employees who believe they are especially vulnerable to getting infected are more concerned about work-related rumination, resulting in lower levels of work engagement. Furthermore, we explore whether the negative impacts of infectability on engagement are buffered by a particular leadership style from their supervisors.

We conducted a multi-wave field study early in the pandemic to test the hypotheses. We adopted a three-wave field survey with one-week intervals collecting data from 260 UK-based employees. The results support the primary assertion that perceived infectability of employees was negatively associated with their work engagement on a time-lag basis. We also examined the processes of disease-avoidance activation and revealed that employees high in infectability were more concerned with work-related rumination, in turn decreased their work engagement. Last, results revealed that

the impact of infectability on work engagement would be less pronounced among employees who perceived their supervisor as prestigious rather than dominant.

Our research makes three theoretical contributions. First, by linking individual differences in infectability to work-related outcomes, we focus on a factor that has been neglected in past research by adopting an evolutionary approach but has come to the fore since the COVID-19 crisis. Second, we reveal that perceived infectability can be a crucial indicator of employees work engagement and suggest that a lower work engagement may be an adaptive avoidance response. Lastly, we contribute to COVID-19 workplace research by investigating the important role of dominant leaders who navigate the health crisis less effectively than expectations in other economic and political crises, but prestigious ones matter. Our research also offers timely practical implications. Organizations would acknowledge the role of individual differences in infectability to help understand why some employees have fared worse than others during the pandemic. Moreover, managers should consider how their leadership style can worsen employees outcomes. Obviously, there are also several limitations. First, given the correlational nature of our research, we are unable to completely erase the common method bias. Second, we focus on lower work engagement as an adaptive disease-avoidance response, but other types of responses also warrant attention. Third, it would be a significant extension to evaluate how employees high in infectability are managing after the crisis.

*Keywords: perceived infectability, work engagement, rumination*

## Oral presentation OP63

### Towards promoting detachment: insights from a four-arm randomized control trial

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science

Research goals and why the work was worth doing: Blurred work-life boundaries contribute to increasing difficulties in „switching off“ after work, and separating work from leisure seems even more challenging when job demands are high. Psychological detachment—the ability to mentally disengage from work during non-work times—is crucial for counterbalancing employees' reactions to job demands, thereby maintaining employee well-being and health. Acknowledging the importance of psychological detachment for critical work-related outcomes, several interventions aimed at improving psychological detachment have been developed in recent years. However, these interventions exhibit considerable heterogeneity in their effectiveness. It is also unclear which within-person processes contribute to improved detachment. Therefore, the present study aimed to compare the effectiveness of two six-week interventions directly. In addition, to examine changes in within-person processes, we combined a pre-post-follow-up design with phases of experience sampling (measurement burst design).

Theoretical background: By applying interventions based on the DRAMMA model (Newman et al., 2014) and mindfulness-based approaches (Goldberg, 2022), the study contributes to a better understanding of the dynamic processes suggested in the stressor-detachment model (Sonnentag & Fritz, 2015).

Design/Methodology/Approach/Intervention: We conducted a four-armed randomized control trial. In our sample ( N = 393, 76% female, 24% male, N = 2 did not disclose their gender; M\_age = 40.56; SD\_age = 10.93), the majority of the participants were teachers or employed in other areas of public service.

Results: Based on latent change models, we found substantial pre-post improvements in detachment in both intervention groups ( d = 1.06 and 1.33) that were maintained at follow-up ( d = 1.21 and 1.39). Notably, in line with recent meta-analytical findings showing substantial measurement reactivity effects in experience sampling studies, our control group also reported considerable improvements in detachment ( d = 0.72). Applying multilevel structural equation models, we elucidated the role of daily negative activation as a factor linking daily job demands with (low) detachment and how its detrimental effect of prolonging the adverse effects of job demands into leisure time could be modified through training.

Limitations: All data were self-reported.

Conclusions/Research & Practical Implications: Both interventions provide a valuable approach for organizations that wish to promote employee detachment.

Originality/Value: The study is one of the first to directly compare the effectiveness of two interventions focusing on promoting detachment. In addition, due to the measurement burst design, the study provides unique insights into both short-term fluctuations and long-term changes in detachment.

*Keywords: detachment, intervention, measurement burst design,*

## Oral presentation OP548

### Tracking individual trajectories of perceived shared mental models: A 12-week longitudinal study

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science

Drawing on the shared mental model literature and interdependence theory, this study aims to analyse whether individuals perceive similar or distinct trajectories of shared mental models over time and test whether those trajectories relate to different individual antecedents and outcomes. This study questions the common (implicit) assumption that individuals perceive and develop shared mental models uniformly.

Successful teamwork is crucial to solve many of today's key problems. Yet, to effectively perform the tasks assigned to the team, team members have to build and be aware of a shared mental model (i.e., a shared understanding about who does what, when, and with whom) successfully and in a timely manner. Within the shared mental model literature, the idea that each individual team member can perceive the shared mental model that consists of several dimensions has taken root in recent years. The state-of-the-science is that there are five dimensions of perceived shared mental models, namely equipment, execution, composition, interaction, and temporal. However, most research has focused on one or a few of these dimensions and has focused on aggregated (team-level) conceptualizations of shared mental models. Therefore, research has overlooked the possibility that individuals might have different perceptions of the various shared mental model dimensions. Furthermore, individual-level longitudinal studies on shared mental models have never been attempted. Therefore, it is currently unknown whether and how individual perceptions of shared mental models change over time, and whether the development of perceived shared mental models is similar or dissimilar for the five dimensions.

We collected data across six-time points from more than 300 participants who assessed their perceived shared mental models in their first 12 weeks of working in a new project team. Initial latent class analyses showed there are distinct trajectories for each of the shared mental model dimensions. This showed, for instance, that individuals can have different starting points as well as ending points and that those can differ per shared mental model dimensions. Moreover, the temporal process between these starting and ending points also had different shapes, as, for instance, some lines stayed uniformly high or low, whilst others grew or declined and then stabilized, whilst yet other lines first raised and then fell down again. We will analyse the antecedents and outcomes of the trajectories and share the updated results during the EAWOP 2023 Congress.

Although individual beliefs and perceptions are the foundation of shared mental models, in this study we focus only on the individual trajectories of perceived mental models, and not on the trajectories within teams. Overall, this study advances the shared mental model literature, as our analysis of the individual trajectories of perceived shared mental models show that the common assumption that individuals develop shared mental models uniformly needs to be revisited. Thus, our work provides a starting point to develop new theoretical and empirical knowledge on how the different dimensions of shared mental models start and develop by taking a more fine-grained look at the individual level of analysis.

Overall, this study is relevant to the Congress Theme "The future is now: The changing world of work" and to the UN SDG "Decent work and economic growth", as this study contributes to the development of a sustainable workforce from a bottom-up micro perspective by providing managers,

team members, and team leaders – as well as consultants and other decision-makers – with knowledge and competences that aim to increase cooperation and collaboration, which ultimately contributes to individual and team effectiveness.

*Keywords: teams, shared mental models, longitudinal study*

## Oral presentation OP798

### Transformational Leadership and Followers' Narrow Personality Traits

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science&practice

#### Research Goals

The present study examines how followers' narrow personality traits are associated with subdimensions of transformational leadership behavior.

#### Theoretical Background

Wang et al. (2019) conducted a meta-analysis and found that followers' overall ratings of TFL were associated with their scores on the Big Five. Moreover, Wang et al. (2019) also showed that followers' personality may influence both the perceptions of, and the actual behavior of their leader, using an overall score of transformational leadership. The present study, however, will assess whether followers' personality is differentially related to their ratings of subdimensions of transformational leadership. Previous studies have found that subdimensions of transformational leadership are differentially associated with various antecedents and outcomes of transformational leadership. For instance, Deinert et al. (2015) found that subdimension of transformational leadership were differentially related to leaders' personality. Moreover, Arnold (2017) suggested that future research should investigate subdimensions of transformational leadership as they might be differentially related to followers' well-being. When it comes to personality, recent research suggests that narrow personality traits may outperform the broad Big Five domains in predicting various outcomes. Thus, to better understand the influence of followers' personality on ratings of transformational leadership, we need to investigate subdimensions of transformational leadership and narrow personality traits.

#### Methodology

In an ongoing data collection, Norwegian executives (N=187) rated their transformational leadership behavior (MLQ-5X) toward two of their immediate subordinates (N=371). They also rated each of these follower's personality, using the BFI-2. The BFI-2 measures the Big Five and fifteen narrow personality traits. Moreover, 92 of the executives were rated by an average of 2.9 followers (n = 267) on transformational leadership. The same followers also completed the BFI-2-S. The scores were analyzed with Mplus in a multilevel framework.

#### Results

The results revealed that leaders' ratings of followers' transformational leadership behavior were significantly associated with their ratings of the same followers' personality traits. Ongoing analyses will assess how followers' ratings of transformational leadership are associated with followers' self-rated personality traits. To the extent that the pattern of findings converges, they will shed light on to the extent to which followers' personality traits might influence leaders' transformational leadership behavior. The data collection is ongoing, and data will be further analyzed, and results will be presented and discussed.

#### Limitations

The leaders selected two subordinates and rated their own transformational leadership behavior toward each of the subordinates, along with ratings of the same subordinate's personality traits.

These ratings, however, were not matched with followers who provided ratings of transformational leadership and their own personality.

#### Conclusion

Followers' personality traits seem to play a role in ratings of transformational leadership, and the present study sheds light on which facets are important. It is important to know to what extent different ratings of leadership are due to perceptual differences or occur because leaders behave differently toward followers with different personalities. The present study provides new knowledge regarding which personality facets are important.

*Keywords: Personality, Transformational Leadership, Narrow Traits*

## Oral presentation OP419

### Transportation safety and organizational demands: the role of recovery on reducing distractions while commuting

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science&practice

Research goals and why the work was worth doing: The increasing availability of social media and technological devices provides people continuous stimuli for distractions while commuting (e.g., posting on social media, messaging, checking work notifications etc.), making the associated risks for the user significantly greater. Beyond knowledge about individual dimensions (e.g., risk perception), such distractions may be related to work. On the one hand, people may use distractions to recover from work when commuting to home. On the other hand, engaged individuals may start focusing on their even during their commuting. The present study aims to provide empirical knowledge on the relationship between recovery, sleep quality, exhaustion, and work engagement and the assumption of distracting behaviors while commuting.

Theoretical background: According to the literature, there is a strong association between recovery and JD-R dimensions, with recovery as an antecedent of positive effects on work engagement and negative effects on exhaustion. Nevertheless, the literature around commuting and recovery is still sparse. Although there is a relationship between exhaustion and cell phone use as a form of recovery strategy, the literature lacks evidence about the association between work engagement and smartphone use while commuting.

Design: The study hypothesis were tested using a diary study design. Daily diary data were collected for five consecutive workdays, twice a day: one for commuting from home to work and one for commuting from work to home. Accidental non-probability method was used to recruit employed individuals. In the questionnaire administered after work-home commuting, recovery from the previous workday and sleep quality were investigated. In the questionnaire administered after work-home commuting, dimensions of JD-R (i.e., job demands, job resources), and their outcomes (i.e., work engagement, work exhaustion) were investigated. In both questionnaires, information was collected regarding the intake of distracting behaviours while commuting (i.e., posting on social media, messaging, checking work notifications) and information regarding the means of transport used while commuting (i.e., by feet, by car, by bicycle, public transport). total 148 Italian employees who commuted to and from work completed the diary study.

Results obtained or expected: Recovery, specifically psychological detachment and relaxation, had a negative correlation with exhaustion and a positive correlation with work engagement. Mastery also had a positive correlation with work engagement. Work engagement had a positive correlation with daily mobile phone use while commuting from work to home, particularly with text messaging, talking on the phone, and using social media. In contrast, exhaustion had a positive correlation only with using social media while commuting from work to home.

Limitations : One of the main limitations is the use of self-reported measures to assess the study variables. Also, The possible individual difference in terms of „distractibility” or otherwise any form of propensity to use technological devices that, if used while commuting, can become risk factors was not considered at the time of data collection. In addition, to make the data collected more generalizable, it is necessary to repeat the study with a larger sample. Future studies should also consider replicating the present research model in different socio-cultural and socio-economic

contexts, in order to consider the influence given by risk perception and different program of transportation safety.

Conclusions – research and or practical implications: The results provide valuable insights into the relationship between recovery, work engagement, and distractions while commuting, and could help identify factors that contribute to distraction-related accidents during home/work and work/home commuting. The study highlights the importance of managing the relationship between resources and work demands at work and its role in the risks of accidents while driving.

Relevance to the Congress Theme: The present research is situated within the themes of well-being and health. Indeed, aspects of well-being in the workplace are highlighted, as well as the consequences that work has on well-being outside of it. Safety, psychological and physical, are the focus of interest in this research.

Relevant UN SDGs: Good health and wellbeing

*Keywords: Recovery, Commuting, JD-R*

## Oral presentation OP766

### Trauma-informed Compassionate Leader Behaviors: Compassion in the workplace for traumatized employees

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science&practice

#### Research Goals:

The present study sought to develop a measure of Trauma-informed Compassionate Leader Behaviors (TICLB). Specifically, we identify the positive behaviors leaders can enact when dealing with employees—especially following trauma—to ensure employee well-being. Additionally, we demonstrate the relationship between TICLB and important employee outcomes such as psychological safety, well-being, and post-traumatic growth.

#### Theoretical Background:

The vast majority of people experience some form of trauma during their working years (e.g., death of a family member, divorce), a fact exacerbated by the COVID-19 pandemic (Duane et al., 2020). To mitigate the effects of trauma on employee outcomes such as well-being, perceptions of workplace, and performance, leaders may extend compassion to those who have suffered trauma. Indeed, experiencing compassion in the workplace following a hardship reduces anxiety (Lilius et al., 2008), and encourages psychological healing (Bento, 1994). Despite the benefits of compassion at work, research has yet to identify how leaders can demonstrate compassion to their employees (Way & Tracy, 2012). Furthermore, compassion research (e.g., Lilius et al., 2008) has failed to incorporate a trauma-informed approach, which is unfortunate given the success of trauma-informed approaches used by service providers for traumatized clients in other fields (Ward-Lasher et al., 2017). Integrating the literature on compassion and trauma-informed care is a fundamental starting point to better understand the positive behaviors leaders can enact to mitigate the disproportionate influence trauma has on employees .

#### Design:

In Study 1, semi-structured interviews were used with 22 employees who live and work in the U.S. and have experienced severe trauma (e.g., combat, human trafficking) to discover what trauma-informed compassionate leader behaviors were. Items were created based on content from interviews. In Studies 2 and 3, data were collected via online survey from two groups, 21 graduate students attending U.S. universities and five subject matter experts (SMEs). To provide evidence of content validity, students rated how well the items measured TICLB (Hinken & Tracey, 1999) while the SMEs rated how essential items were to measure TICLB (Lawshe, 1975). In study 4, data were collected at two time points via online survey from 1000 participants who live and work in the U.S. to investigate factor structure, convergent/discriminant validity, and predictive validity.

#### Results:

Content analysis in Study 1 produced 51 items that capture TICLB. In Study 2, the item set was reduced to 30 items; items were then edited for clarity and one new item was written. In Study 3, SMEs reduced the item set to 17 items. The EFA in study 4 revealed a two-factor structure after 3 items with cross-loadings were removed. The CFA provided evidence for a bifactor model structure with two subfactors and one general factor. Regression analysis showed that TICLB predicts

employee well-being (self-compassion, psychological well-being, and posttraumatic growth), psychological safety, and job performance. Multiple regression analysis suggests that TICLB predicts these outcomes above and beyond general compassion and compassionate leader behaviors.

Limitations:

Sample sizes for studies 1-3 were relatively small, however, this is not uncommon when investigating difficult to reach/recruit populations (Ellard-Gray, 2015). Additionally, all participants lived and worked/studied within the U.S. which may limit the generalizability of the results to other cultures. Data were also collected at least 6 months after the most recent traumatic event, which could limit participants' recall of helpful/harmful leader behaviors.

Conclusions:

Given the current state of the world it is imperative that leaders understand how to best interact with and support employees, especially when they are dealing with trauma. By merging a well-known tactic used in clinical services (trauma-informed care) with a well-known concept in the business industry (compassion), this study enables conversations about the role leaders can play in supporting employees through trauma.

Congress Theme:

It is no longer enough for leaders to simply manage employees' work and productivity. A major concern for organizations now, and moving forward, is employee mental health and well-being (SHRM, 2022); however, many leaders may not be equipped to support employees' mental health and well-being. This project begins the conversation about the behaviors leaders can adopt to help traumatized employees experience posttraumatic growth and well-being as organizational priorities shift.

UN SDGs:

This project aligns with UN SDG 3, health and well-being. The purpose of this project was to identify leader behaviors that positively impact employee well-being, especially after trauma.

*Keywords: Leadership, Well-being, Trauma-informed Compassion*

## Oral presentation OP120

### Trends in the Study of Paternity Leave: a State of the Art using a Systematic Literature Review

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science&practice

**Research goals.** The current study aims at clarifying past, current and future directions of research regarding paternity leaves, using a Systematic Literature Review (SLR). In particular, we analyze the trends in the study of paternity leave over time, the main thematic areas and the extraction of primary conclusions, putting together existing knowledge into a common framework that can inform future research in this area.

**Theoretical background.** Inequalities and resistances to successfully implement actions to promote gender equality are still common. Remaining challenges behind these trends are the domestic division of labor and women's greater dedication to care work and education of underage sons and daughters, as well as care for people who are in situation of dependency (Eagly & Carli, 2007; Doucet & McKay, 2020).

Among the measures that have been implemented internationally to overcome the domestic division of labor, policies and legislation around absence care leaves is common, and in particular paternity leaves (ILO, 2014; EIGE, 2021).

Scholars and policymakers have underscored the necessity of going deeper into the design of specific leaves for fathers internationally, in order to generate more egalitarian workplaces and promote greater assumption of caregiving functions by men and fathers (ILO, 2014; EIGE, 2021; Lammi-Taksula, 2008). Therefore, it is necessary to better understand current approaches, categorizations and dissimilarities in parental and paternity leave research, in an attempt to capture the unique key elements of paternity leave policies and current challenges.

**Methodology** We carried out our SLR search in ISI Web of Knowledge, including its related databases, Elsevier Scopus and PsycInfo databases.

The search was restricted to peer-reviewed articles in English or Spanish containing the words "paternity leave", either in the title, abstract or author keyword section. No restriction was placed on year of publication.

Once all possible studies had been identified, we conducted a second screening to assess eligibility against inclusion criteria and then full text articles were retrieved for those that met the inclusion criteria. These criteria required that the published peer-reviewed article meet all of the following three specifications: (i) be in the English or Spanish language; (ii) be an empirical study or a literature review (i.e., not an essay, book review, letter, editorial, opinion, journalistic article); and (iii) discuss paternity leaves as the central element.

**Results.** Once the corpus of study was defined, a process of analysis and synthesis was envisaged that was based on keywords. Keywords were uploaded into an ad hoc database and categorised into thematic groups. This inductive process was iterated three times, until the final categories for study emerged. In total, seven areas of research have been identified and the principal conclusions of each of them have been collated.

Several descriptive data about the sample were extracted and commented concerning, among others, the geographical dispersion of the papers, the method of analysis or the type of sample.

Limitations. The analysis presented is the result of exploiting the data obtained solely through references available online and corresponding to scientific articles indexed in the indicated databases.

Regarding the origin of the references, a geographical bias towards studies centred on North America and Europe was identified.

Conclusions. The current research evidences the growing interest of academics in the topic of parental leave and in particular fathers' use of domestic measures at work. Furthermore, a framework is presented that aggregates previous findings and clarifies the main research areas within paternity leaves, as well as the methodologies used, providing a comprehensive compilation for future studies. Finally, the study provides a systematic review with practical information for policymakers and employers willing to more effectively develop paternity leave policies, identifying the elements they should take into consideration. Future lines of research, in particular concerning several challenges for the implementation of policies in organizations, are also identified.

Originality/Value. The study contributes to the methodology for conducting Systematic Literature Reviews in the field of organizational psychology, specifically in the design and implementation of paternity leave policies. It presents an effective method for the mapping and classification of existing knowledge and the identification of emerging trends.

Relevance to the Congress Theme. The changing nature of the work environment cannot be analyzed without understanding the new demands of workers for reconciliation, as well as the existing gender differences in this work-life balance policies and the impact that these differences can originate on the organizations of the future and their adaptability.

*Keywords: paternity leaves, domestic work, systematic literature review*

## Oral presentation OP68

### Trickle-Down Effects of Organizational Dehumanization: A Social Information Processing Perspective

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science

#### Research Goals

In exploring the dark side of the employee-organization relationship, scholars (e.g., Nguyen et al., 2021) have recently begun to pay attention to the concept of organizational dehumanization (OD), defined as the experience of an employee who feels treated like a tool or instrument for the organization's ends (Bell & Khoury, 2011). While there exists converging evidence that OD has negative consequences for employees' well-being, attitudes and behaviors (Brison et al., 2022), it is still unclear whether employees' interpersonal relationships at work may also be impacted. Interestingly, research on trickle-down effects (Wo et al., 2019) showed that a treatment from the organization as perceived by a supervisor can in turn influence the treatment that the supervisor provides to their subordinate, thereby affecting their interpersonal relationships.

Integrating trickle-down effects with the OD literature, this research investigates the extent to which supervisors who feel dehumanized by their organization will engage in dehumanizing behaviors toward their subordinates who will, in turn, display lower levels of in-role and extra-role performance and creativity.

#### Background

To explain these relationships, we draw upon social information processing theory (SIP; Salancik & Pfeffer, 1978), which holds that employees' behaviors cannot be separated from the larger social context in which they take place. Specifically, SIP posits that "individuals, as adaptive organisms, adapt [their] attitudes, behavior, and beliefs to their social context and to the reality of their own past and present behavior and situation" (Salancik & Pfeffer, 1978, p.226). Stated differently, individuals use social cues from their environment to interpret events and develop expectations about the appropriateness and consequences of their behaviors (Salancik & Pfeffer, 1978).

In the context of our research, we argue that OD acts as a social cue that shapes how supervisors interact with their subordinates. Precisely, when supervisors are dehumanized by their organization, they may perceive that dehumanizing treatments are normative and expected in the organization, which would eventually lead them to adopt dehumanizing behaviors directed toward their subordinates. We further hypothesize that dehumanizing behaviors from supervisors will detrimentally affect subordinates' work behaviors. Indeed, because being treated as a tool or instrument used for the supervisors' ends is likely to engender a loss of resources for the subordinates, we expect them to display lower levels of in-role and extra-role performance and creativity. Overall, we hypothesize that dehumanizing organizational treatments trickle down to influence subordinates through their effects on supervisors.

#### Design

Our hypothesized predictions were tested across two studies involving supervisor-subordinate dyads ( N Study1 =211; N Study2 =199). Supervisors reported their perceptions of OD and rated their

subordinates' levels of in-role and extra-role performance and creativity. Conversely, subordinates reported their perceptions of dehumanizing behaviors from their supervisors.

### Results

The results of SEM and latent bootstrap analyses of both studies indicated that OD trickles down to affect subordinates' performance and creativity. Precisely, the results showed that dehumanizing organizational treatments were positively associated with supervisors' dehumanizing behaviors toward their subordinates. In turn, supervisors' dehumanizing behaviors were negatively related to the subordinates' in-role and extra-role performance and creativity.

### Limitations

Both studies adopted cross-sectional designs and causal relations among the variables cannot be drawn. Data were also collected among samples of Belgian employees, which may limit the generalizability of the findings.

### Implications

By demonstrating that dehumanizing organizational treatments can detrimentally impact subordinates' performance and creativity through dehumanizing supervisory treatments, our work meaningfully extends previous work by showing that (1) OD influences how supervisors and subordinates interact and (2) the consequences of OD go beyond the focal actor (i.e., the supervisor) who feels dehumanized by their organization.

### Originality

Using matched supervisor-subordinate data, our research is the first to examine the trickle-down consequences of OD.

### Congress Theme Relevance

OD is of particular interest for this year's congress, which focuses on a better understanding of the future of work. Indeed, as the COVID-19 pandemic forced organizations worldwide to adopt cost-cutting policies and/or rely on new technologies, employees "face a substantial risk of being brought closer to the status of instruments and further away from humanity" (Brison et al., 2022, p.1). Thus, OD is more relevant than ever, and will be even more so in the (near) future. Therefore, having a broad overview of the consequences of OD warrants empirical attention.

*Keywords: Organizational dehumanization, trickle-down effects, social information processing theory*

## Oral presentation OP324

### Trust and Reciprocity within Workplace Relationships: A Dyadic and Longitudinal Study of Top Management Teams

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science

Research goals and why the work was worth doing

Trust is generally recognised as a reciprocal process between two parties leading to mutually beneficial outcomes such as interpersonal cooperation and is critical to the success of organisations. However, the examination of both parties in a trust relationship is uncommon in empirical studies. Ignoring this relational context can lead to an incomplete understanding of the nature of interpersonal trust and can result in misunderstanding the true impact of trust in practice. Recent trust reviews have called for more examination of the dynamic nature of trust and the reciprocal interplay between two parties simultaneously (Dirks & de Jong, 2022; Korsgaard, 2018; Möllering, 2019). This study considers both parties in a dyadic work relationship and examines how the trustworthiness perceptions and trust intentions of each party influences the other over time.

Theoretical background

Interpersonal trust is commonly conceptualised as a psychological state within an individual directed at a specific trust referent (Rousseau et al., 1998). It occurs within a relationship where both parties engage in an ongoing interactive process of trusting and being trusted. This is frequently explained by social exchange theory (Blau, 1964), the norm of reciprocity (Gouldner, 1960), and to a lesser extent, interdependence theory (Kelley & Thibaut, 1978). However, a dyadic level of analysis remains relatively uncommon in organisational research (Tse & Ashkanasy, 2015) and in trust research (Korsgaard et al., 2015; Krasikova & LeBreton, 2012). While it has long been acknowledged that trust elicits trust reciprocity and that trust can change over time (e.g., Lewicki et al., 2006), the dyadic patterns of reciprocity and change are not well understood. Korsgaard et al. (2018) suggest that three key facets of reciprocal trust over time remain unclear. Explanations for the direction of trust spirals (increases or decreases) over time, understanding the strength of relationships between variables over time, and understanding the rate of change over time all require further research attention. In addition, while it has been found that dyadic trust levels can assume a variety of configurations involving high to low levels of convergence or asymmetry (Tomlinson et al., 2009), a better understanding is needed of the patterns of dispersion within a trust dyad and the resulting behavioural impact.

Design/Methodology

Participants were members of the top management team of small and medium sized enterprises who attended a 6-month executive development programme. Five waves of data were collected using quantitative self-report survey methods. The final sample consisted of 90 firms and 230 dyadic relationships. Structural equation modelling was chosen for data analysis based on the sample characteristics and the nature of the hypotheses.

Results

Results provides evidence for reciprocal influences between the two parties by modelling the bidirectional patterns of influence of distinct trustworthiness components (ability, benevolence, integrity) and distinct trust components (reliance, disclosure), and their subsequent impact on

person- and task-focused interpersonal citizenship behaviour. In particular, the results draw attention to the reciprocal influence between benevolence and disclosure, and between reliance and interpersonal helping (both task-focused and person-focused). The results also provide evidence of the development of trust over time and the impact of trust incongruence within the dyad.

#### Limitations

As the sample of this study consisted of top management team members of small and medium sized enterprises in one country, the results might not generalise to other types of work relationships, larger organisations, or other cultures. Further insight could be gained by collecting objective performance data and examining how dyadic trust patterns are related to individual and organisational performance.

#### Conclusions – research and or practical implications/Originality/Value

This research extends the current understanding of trust within organisational relationships by taking a dyadic and longitudinal approach, which is relatively uncommon. The results of this study provide evidence for reciprocal influences between the two parties and provide a more nuanced understanding of the components and dynamics of interpersonal trust.

#### Relevance to the Congress Theme

This research highlights how encouraging and developing mutual trust relationships is valuable for both task performance and for promoting social connection and support within the workplace. In the current era of knowledge-based work characterised by high levels of role interdependence, the promotion of positive work relationships with high levels of mutual trust is fundamental for organisations and individuals seeking to benefit from enduring cooperative behaviours within the workplace.

*Keywords: trust, interpersonal, quantitative*

## Oral presentation OP602

### Unconsciously Paying People Based on their Gender? The Relationship Between Implicit Stereotypes and the Gender Pay Bias

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science

**Research Goals:** In 2022, men still make more money than women (Destatis, 2021; Proctor et al., 2016). In addition to structural factors—job choice, part-time work, parental leave—the gender pay gap is caused by women achieving worse outcomes in salary negotiations than men (Mazei et al., 2015). The negotiation discrepancy might be due to gender differences in candidates' behaviour or recruiters' implicit gender negotiation stereotypes (GNS). This study aimed to reduce the influence of males' implicit GNS on the gender pay bias (GPB) by providing participants with feedback on their implicit GNS.

**Theoretical Background:** Following social role theory (Eagly, 1987), females ought to show behaviours (e.g., caring about others) that are inconsistent with effective negotiation strategies (e.g., assertiveness). Therefore, we expect women to receive lower offers in a salary negotiation. Related to the expectations tied to social roles, stereotypes are overgeneralised and socially shared assumptions about members of social groups (Greenwald & Banaji, 1995). They influence our actions towards other individuals (Major & O'Brien, 2005), even while being unaware of these stereotypes (Greenwald & Banaji, 1995). Previous studies show the negative relationship between males' implicit GNS and females' negotiation outcomes (Pardal et al., 2020). Hence, we suggest that males' implicit GNS partly explain the GPB. Lastly, drawing on the idea that people must become aware of their attitudes to adjust their behaviour, the intervention groups completed an implicit association test and received feedback on their implicit GNS. Here, we suggest that males in the intervention group will be less affected by their stereotype and therefore exhibit a smaller GPB.

**Design/Methodology/Approach/Intervention:** This preregistered online study (N = 359) investigated the effect of males' implicit GNS on the GPB in a 2 (candidate's gender : male vs. female) x 3 (intervention : control vs. IAT vs. IAT+feedback) design. Males in the intervention groups completed an implicit association test measuring their GNS resulting in a D- score similar to a Cohen's D (Greenwald et al., 2003; A score above 0 indicates associating men more than women with successful negotiating and vice versa for a score below 0). Then, everyone obtained identical information regarding education and work experience of an either male or female candidate and received an identical non-numerical envisioned salary of the candidate on a visual sliding scale (no currency and industry effects). We measured the GPB by comparing participants' counteroffers and maximum willingness to pay to male and female candidates. Lastly, they completed additional measures including explicit sexist beliefs, and explicit GNS as well as competence ratings and the likelihood to hire the candidate. This enabled us to obtain a clearer picture of the relevance of implicit GNS above and beyond explicit measures.

**Results:** The results revealed a partly reversed GPB (i.e., male participants offered female candidates higher salaries than male candidates). However, moderation analyses underscored the importance of implicit GNS; IAT scores 1 SD below the mean ( $d = 0.13$ ), and at the mean ( $d = 0.51$ ) predicted a significant GPB favoring women (not significant for participants with IAT scores 1 SD above the mean [ $d = 0.90$ ]). The intervention had no effect on the GPB. Additionally, females were rated as significantly more competent and more likely to be hired. This resulted in a sequential mediation of

the candidate's gender on the GPB via perceived candidate competence and likelihood to hire. Explicit measures related to sexist beliefs did not play a role.

Limitations : Possible limitations include the potentially unrealistic computerised design and missing personal information about the candidate. These features of the study might limit the generalisability to real negotiation settings, but they eliminated variance due to factors such as attractiveness and likeability of the candidate.

Conclusion and Implications : Males with low to medium implicit GNS favouring men exhibited a GPB favouring female candidates. Additionally, the results are in line with research showing that females are increasingly associated with competence (Eagly et al., 2020). Lastly, implicit stereotypes measured in this study affected participants' explicit behaviour which challenges the understanding that implicit attitudes mainly affect subtle, as opposed to explicit behaviours (Quillian, 2006).

Relevance to the Congress Theme : This study fits to the congress topic of diversity and inclusion. Especially the areas of sexual and gender identities and unconscious bias are covered by advancing the understanding of gender roles and by elucidating the role of implicit stereotypes in the GPB.

Relevance UN SDG: By providing insights on the influence of implicit GNS on the GPB, this study tried to advance decent work and gender equality (while reducing inequalities).

*Keywords: gender pay bias, gender stereotypes, implicit stereotypes*

## Oral presentation OP491

### Under what circumstances does leadership training work?

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science

Research goals and why the work was worth doing

There is a need for knowledge about what constitutes effective leadership training. Intervention researchers have pointed out the importance of going beyond effect studies by broadening the perspective to examine the context and process of the interventions being studied. The purpose of the current study was to examine variation in outcomes among managers who undergo leadership training.

Theoretical background

Leadership training can be viewed as an organizational intervention. Nielsen and Randall (2013) proposed a framework for examination of organizational interventions with three perspectives. We used this framework to analyse the variation in outcome of a leadership training intervention. The first aim was to investigate which contextual circumstances facilitate or hinder the development of leadership behaviour and performance. The second aim was to investigate the importance of the managers mental models for the development of leadership behaviour and performance. The third aim was to identify implementation elements of importance for development of leadership behaviour and performance.

Design/Methodology/Approach/Intervention

Managers in local government municipalities (n=59) participated in managerial behaviour training consisting of six 90 minutes training sessions during a period of six months. Leadership behaviour and performance were assessed by subordinates of these managers before (n=406) and after (n=377) the training period. The participating managers reported on contextual information and their mental models before the training started by means of an online questionnaire. Data on implementation was collected at the end of each of the six training-sessions; participating managers as well as the trainers independently assessed properties of the session. Outcome data from the employees were nested within the managers that underwent training; hence, multilevel modelling (MLM) was used for the analysis.

Results obtained

The results showed that several context variables and the manager's readiness for change were important, but we could not find evidence of a moderating effect of the intervention implementation variables. The leadership training was facilitated when the managers had favourable resources in terms of support from their superior management and from managerial colleagues. The leadership training was hindered by taxing job demands in term of role stressors. The participating managers mental models in terms of readiness for change had a moderating effect on leader performance but not on behaviour. Participants' and supervisors' assessments of the process showed that the training worked very well throughout; that is, the average ratings of the process variables were very high. Thus, there was no opportunity to detect any impact of specific process elements.

Limitations

The study was conducted on municipal managers in a few municipalities in Sweden, which may restrict the generalizability of the results. The participating managers were also highly motivated to participate, which may also restrict generalizability. There were conditions that may have limited the ability to detect the effects of context and process elements on intervention outcomes.

Conclusions – research and or practical implications/Originality/Value

The study shows the importance of managers' working conditions for them to have good opportunities to develop as leaders. Organizations wanting to increase the competence of their leaders by offering leadership training need to be aware of what is required to achieve favourable results. Senior managers who provide good and genuine support are one such prerequisite. Managers who are going to train their leadership also need to have reasonable working conditions without too much stress; they also need to have a willingness to enter into a process of change. Overall, organizations need to create favourable conditions for leaders' change and development.

Relevance to the Congress Theme

Leadership is a key process for organizations in a changing world of work. The development of leadership skills is therefore an urgent task.

Relevant UN SDGs

Leadership training aims at better functioning leaders which can be expected to lead to good health and well-being of employees as well as to decent work and economic growth.

*Keywords: leadership training, context, process evaluation*

## oral session OP81

### **Understanding hybrid work: Quantitative diary study as the gold standard for research purposes and organizations - with examples**

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science&practice

Research goals and why the work was worth doing

This contribute aims to present the potential of the diary study as a key tool for analysing hybrid work, both for research and organizational purposes. Its specific objectives are to: 1) present some research evidence carried out found through quantitative diary studies; 2) provide examples of diary applications as a tool for organizational diagnosis.

The highlighting of this dual capacity and the presentation of concrete examples from both the science and practitioner perspectives constitute important elements of this study.

Theoretical background

Recent times have increased the interest of researchers and practitioners in remote ways of working. As a result of this, on the one hand, researchers have produced a large body of papers on the subject, and on the other hand, practitioners have worked copiously with organizations interested in processes for diagnosing the well-being of telecommuters and making remote work more efficient. For both research and practical purposes, the one-shot survey technique was the preferred one. It is a very advantageous tool in terms of study feasibility, cost, and descriptive power of the processes studied.

On the other hand, remote work today is mostly hybrid work, i.e., taking place partly on the site and partly in the worker's home or other places. Therefore, it is necessary to broaden the investigative power of our action of diagnosis and inference and, to avoid confusion in workers' memories and responses, it is crucial to identify assessment strategies that accurately distinguish what happens when working in the workplace and what happens when working outside. This is what the diary study does. This is what both research (e.g., Anderson et al., 2015; Charalampous et al., 2019) and companies interested in high-level consulting are asking for. This is the motive behind this contribution intended for researchers and practitioners.

Methodology

Adopting data collected in 2021 and 2022, this study will provide some examples where diary study is used for research and practical purposes. The diary studies that will be shown were conducted for Italian organizations in administration periods of 5-10 consecutive working days.

Through these diary studies, both strictly work- and task-related variables (e.g., hours worked, task autonomy, task performance etc.) and personal perceptions (e.g., perceived self-efficacy, engagement, family-work conflict) were measured. All diary measures refer to data referring to the day of compilation, that is, they are daily-centred. In some cases, one-shot questionnaires enriched the data collection, capturing variables not changing day by day. The discriminant variable for the analysis of the responses received was in each case whether workers were working in the office or outside in each day, to appreciate the differences between the perceptions received in the two contexts (on-site and outside) investigated.

Results

A selection of research results will be presented. They will mainly compare the positive and negative processes involved in working in the office and working at home, highlighting pros and cons of each work arrangement. We will also present some examples of analyses and reports provided to organizations, for organizational consulting purposes.

#### Limitations

For the multi-objective purposes of this study, the psychological mechanisms found through diary studies will be described only superficially, and more emphasis will be given to presenting the method of investigation applied to hybrid work, in the dual perspective of scientists and practitioners.

#### Conclusions

From a theoretical perspective, this study adds knowledge about hybrid work as a still understudied work arrangement, by punctually distinguishing employee perceptions when working on-site or outside. From a practical point of view, this contribution promotes the use of diary study as a powerful, albeit complex, organizational diagnostic tool, so that consultants can provide their clients with tools to optimize hybrid work, punctually understanding the situations it generates in the office and other places where employees work.

#### Relevance to the Congress Theme

This study provides some research results and practical examples related to hybrid work. This is a way to know more about this work arrangement, a work arrangement between present and future, as the theme of the congress recalls.

*Keywords: hybrid work, diary study, telework*

## Oral presentation OP153

### Understanding the next talent wave: Career expectations of graduates in turbulent times

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science&practice

Young graduates are the talent of the future, and they will become an important group in organisations in the next decennial. Whilst the inflow of graduates in the European labour market is increasing yearly (Green & Henseke, 2021), recent years have been characterised by economic uncertainty. The recession caused by the COVID-19 pandemic had a temporary yet detrimental effect on the labour market (Lee et al., 2020), and the question arises whether this led graduate students to lower their career expectations or whether the imprint of this generation is so strong that their expectations remain high. To gain more insight into how organisations can attract, develop and retain graduates according to their current needs, our study examines the impact of economic uncertainty on the career expectations of graduates.

Contextual forces such as globalisation, technology, organisational restructuring, and the growth of services have altered the way we look at careers and challenge what older generations have taken for granted (Barley et al., 2017; Dries et al., 2008; Rousseau, 1990). We also know contextual influences are likely to have a stronger impact than the generational cohort to which one belongs (Deal, 2007; Wong et al., 2008). To our specific interest is the impact of the COVID-19 recession on individual factors influencing the psychological contract beliefs that precede the employment relationship, i.e., the anticipatory psychological contract (APC) (De Vos et al., 2009; Rousseau, 2001). One considers this as the lens through which graduates view their future employment relationship and could be seen as the foundation for the development of their future psychological contract. Our study elaborates on three types of individual factors that are expected to impact their anticipatory psychological contract expectations: optimism, careerism and the desire for future job security (De Vos et al., 2009; Rousseau, 2001).

We report data from three matched samples of advanced master students surveyed a few weeks before graduation. Sample 1 (N = 110) was surveyed in June 2017, whilst sample 2 (N = 125) and sample 3 (N = 97) were surveyed in June 2020 and 2022 respectively. Data were obtained using self-assessment questionnaires measuring optimism (De Hauw & De Vos, 2009), careerism (Rousseau, 1990), and expectations about employer inducements (job security). All responses were provided using five-point Likert scales.

One-way ANOVA analyses and post-hoc comparisons reveal significantly lower levels of optimism concerning the economic situation in graduates from 2020 compared to those graduating in 2017 and 2022. However, in comparison to previous graduate cohorts, each new cohort reports significantly higher levels of optimism concerning the jobs available given their skills and diploma. Our findings for careerism partially support the literature that this is rather a stable individual factor, not so much influenced by the socioeconomic situation (De Hauw & De Vos, 2009; Rousseau, 1990). Only when comparing graduates from 2020 and 2022, significant lower levels of careerism are reported by the latter. Lastly, master students graduating in 2020 attach more importance to job security than the ones graduating three years ago and in 2022.

These findings demonstrate the impact of contextual factors on the career expectations of graduates. Students graduating in a period of recession report lower levels of economic optimism and a higher preference for job security than students graduating in a period of economic growth. The research presented adds to the existing literature on what new cohorts of graduates expect from

their future career and employer. In terms of practical relevance, our aim is to contribute to the research on the expectations and intentions of graduates towards their future employment relationship as it can provide important information for the development and implementation of effective human resources (HR)-practices towards new employees. As such, the intended audience can be both academics and practitioners.

In conclusion, we hope to contribute to the 'Decent work and economic growth' Sustainable Development Goal as described by the United Nations with this research.

*Keywords: anticipatory psychological contract, career expectations, career management*

## Oral presentation OP383

### Uneventful days? A cautionary tale about the underestimated role of triggering events in employee silence research

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Research goals, relevance, and background

Employee silence, i.e. withholding work-related information that could be relevant or useful (suggestions, ideas, concerns; Morrison, 2014), is connected to a multitude of important organizational phenomena, from learning and error management (Li & Tangirala, 2021; Morrison & Milliken, 2000) to individual well-being and burnout (Sherf et al., 2021).

A core tenet of silence research is that employees must have relevant input to share (Morrison, 2014), i.e. they must have encountered some form of triggering event, e.g. coming up with an idea, experiencing conflicts, observing inefficiencies, or encountering injustice (Brinsfield, 2013; Milliken et al., 2003; Pinder & Harlos, 2001). We argue that this central role of triggering events in silence research is not reflected in empirical studies:

First, studies are often conducted with survey instruments (cf. Sherf et al., 2021), which do not measure the presence of preceding events. If such information is available (e.g. Knoll et al., 2019, 2021), up to 60 percent of participants did not encounter relevant situations to speak up or remain silent about.

Second, the aforementioned events affect the same outcomes that are attributed to silence. For instance, there is a positive association between silence and burnout (Sherf et al., 2021), and between perceived injustice and burnout (Robbins et al., 2012). Given that cases of injustice can be triggers of silence (Pinder & Harlos, 2001), studying silence effects without controlling for event effects is prone to confounding.

Methodological approach and results

Study 1 is a re-analysis of a cross-cultural dataset (N = 8222 from 35 samples; Knoll et al., 2021). We use this data to highlight the large number of persons who do not encounter events to remain silent about at work, and their highly ambiguous answer patterns: For instance, 40.9 % of participants who did not encounter relevant events in the past six months still said that they remained silent about them. They also stated different motives for remaining silent, despite claiming that they did not encounter situations where they could have remained silent.

Study 2 is another re-analysis of data from two large German organizations (energy provider, N = 675, 75 work groups; public administration, N = 894, 107 work groups; Zill et al., 2020). Using multilevel models, we first tested whether the frequency of silence predicted an outcome of interest (exhaustion), which it did in both samples (standardized  $b = 0.22$ ,  $se = 0.05$ , 95 % bootstrap CI: 0.13, 0.31 and  $b = 0.22$ ,  $se = 0.04$ , CI: 0.15, 0.29). However, adding the frequency of events to remain silent about as a predictor weakened the relationship between silence and exhaustion ( $b = 0.15$ ,  $se = 0.05$ , CI: 0.05, 0.24 and  $b = 0.13$ ,  $se = 0.04$ , CI: 0.05, 0.20). Removing persons who never encountered events to remain silent about reduced the estimated effects further ( $b = 0.11$ ,  $se = 0.06$ , CI: -0.01, 0.22 and  $b = 0.11$ ,  $se = 0.04$ , CI: 0.02, 0.19), which would be compatible with a null effect in sample 1.

In Study 3, we simulated data where the effect of silence on an outcome variable was held constant. We then varied the frequency of events to remain silent about, the frequency of silence itself, the correlation between event frequency and silence frequency, and the size of the sample. When event frequency and silence both had an effect on the outcome variable, but only the silence effect was estimated in a linear regression model, the estimated coefficient for the silence effect could be severely overestimated due to confounding. In the worst scenario we tested, the estimated effect of silence was three times as large as the true parameter value (unstandardized  $b = 0.31$  vs.  $0.10$ ).

#### Limitations and conclusion

The samples re-analyzed in Studies 1 and 2 provide only limited information outside the event frequency (e.g. content, severity etc. are unknown). Study 3, as a simulation study, requires many decisions about parameter values, model choices etc., introducing researcher degrees of freedom (to limit this issue, we derived most parameters from Studies 1 and 2).

Methodologically, the implications of these results are troubling: Many questionnaire studies on employee silence do not include the information we have available here, i.e. it is unclear if participants encountered events to remain silent about at all; and how strongly these events affect the outcomes attributed to silence. Based on our simulations, published silence effects without control of preceding events are likely to be overestimated. An important implication is therefore to adapt the way survey studies on silence are done, e.g. by measuring and controlling for the frequency of preceding events. However, our results also open up interesting new possibilities for theories about the consequences of silence, e.g. developing a framework that explicitly models the interplay of workplace events and remaining silent about them.

*Keywords: employee voice and silence, psychological well-being, simulation study*

## Oral presentation OP824

### Unfolding presenteeism – applying the Health-Performance Framework of Presenteeism in practice

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Goals. By applying the 'Health-Performance Framework of Presenteeism' (HPFP) to practice, we seek to unfold context-specific practices that influence presenteeism with a focus on the presentee.

Background. Presenteeism is a neutral but adaptive purposeful behavior that employees do because they expect its benefits will outweigh its costs (Lohaus et al., 2021; Ruhle et al., 2019). The HPFP describes the health and performance of the individual presentee and has four categories.

Therapeutic presenteeism with optimal health and poor performance, functional presenteeism with optimal health and performance, overachieving presenteeism with poor health and optimal performance, and dysfunctional presenteeism with poor health and performance (Karanika-Murray and Biron, 2020; Kirkegaard et al., Under review).

Methodology. We explored presenteeism among blue-collar employees in food-processing facilities. The employees work in production lines that make up the workgroups. The employees experience physical demands and time pressure, which is correlated with presenteeism (Miraglia and Johns, 2016). We conducted 47 semi-structured interviews with employees, administrators, and managers from six slaughterhouses, asking about attendance behavior and occupational health and safety. We applied the HPFP as a coding framework in a deductive thematic analysis and ordered the results using the Individual, group, leader, and organization (IGLO) model (Nielsen et al., 2017).

Results. Individual: The employees found individual strategies like exercising to eliminate pain and obtain functional presenteeism. "It depends on how you maintain your body [...] if you just return home and lay on the couch, you will be worn down quickly."

Group: The groups would help each other job-craft to achieve therapeutic presenteeism by temporarily limiting performance demands by switching the presentee to less straining tasks in the group or finishing a colleague's task.

Leader: Managers can move employees temporarily, allowing for therapeutic presenteeism. A manager on the strategic level said, "I know that there is an expense with a guy [...] who isn't productive, but I am completely convinced that the period will be shorter," referring to the period of poor health. Sometimes, a manager would relocate a presentee permanently, letting the presentee perform different tasks optimally without straining their health, thereby enacting functional presenteeism.

Organization: The organization had set up procedures for employees returning after long-term sickness absences. The slaughterhouses would start the employees with fewer working hours in a short period to reduce the performance needed, supporting therapeutic presenteeism. Some slaughterhouses had a physical therapist employed to treat the employees and give them exercises to maintain their health while keeping up their work, who had "[...] exceptional abilities to heal people .

The employees, groups, managers, and the organization had strong financial incentives for employees to practice presenteeism by working in pain, when slightly ill, or with minor injuries. Dysfunctional presenteeism was unfeasible because the employees worked in production lines with

complete intragroup dependence on pace and quality. In cases where the employees, groups, managers, and organizations could not or were not willing to successfully install changes, the employees would try to keep up with the performance to the detriment of their health, stating, "A butcher does not get sick. He dies."

Limitations. The results primarily pertain to blue-collar work.

Implications. The study presents a clear case for understanding presenteeism by combining context awareness with a focus on the presentee. It shows that context-specific practices on an individual, group, leader, and organizational level influence how employees enact presenteeism. For work to be sustainable, it needs to support the employees on different organizational levels in maintaining their health while upholding performance.

*Keywords: Blue-collar workers, presenteeism, flexible work resources*

## Oral presentation OP484

### Unpacking Emotional and cognitive responses to feedback in teams

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science

A small but growing body of literature suggests that providing teams with feedback about their performance is a powerful intervention to steer, motivate, and support future behaviour. However, although team scholars and practitioners seem to agree that feedback processing is crucial to understand its effectiveness, it has largely remained a black box. Very few scholars have zoomed in on the processes occurring after team feedback delivery. Importantly, team members' emotions can hamper cognitive processing of feedback. Despite widespread recognition that emotions play a significant role in learning and performance, emotional and cognitive processing of feedback are still insufficiently explored in individual situations, and research is even scarcer in team contexts. Understanding and specifying emotions, cognitions, and behaviours following team feedback reception is hence crucial to extend our knowledge about why not all feedback is beneficial in teams. The aim of the present paper is to explore the extent to which members of high vs. low performing teams express (a) (de)activating positive or negative emotions and (b) feedback processing behaviours (i.e., reflective statements and formulation of a general vs. specific focus and/or a general vs. specific strategy) when prompted to react to team-level feedback.

The participants (N = 111) were last-year business students working in units of a fictitious company over three days. On day 2, they received feedback from customers about their team products. We used microanalytic protocols, a type of structured interview, to access team members' emotional and cognitive responses to this team-level feedback.

Q1: You have just received customers' feedback on the product that your team has been crafting for the last two days. What was your immediate reaction to this feedback?

Q2: Moving forward, how will you use this feedback to improve your team performance? Please be as specific as possible).

To understand how team members perceived their team feedback, meaningful units of analysis were coded using two coding schemes to affective and cognitive dimensions of feedback perception: team reflexivity coding scheme from Gabelica et al. (2014), and the taxonomy of academic emotions from Pekrun (2006).

Each team members' response to Q1 was coded as 0 (absence of reflective behaviour), 1 (evaluating), 2 (looking for alternatives), 3 (making decisions).

Each response to Q1 was also coded as depicting: (1) positive activating, (2) negative activating, (3) positive deactivating, (4) negative deactivating, or (5) mixed emotions (when emotions of opposing valence were expressed by the same subject).

Finally, we examined 'feed-forward'. Team members' response to Q2 were coded using Cleary et al. (2012) and Cleary and Zimmerman (2001) microanalytic self-regulation coding schemes. We coded responses as expressing (a) a general focus, (b) a specific focus, (c) a general strategy, (d) a specific strategy.

The results of our explorative study reveal that members of high-performing teams predominantly express activating positive emotions. Additionally, they provide little evidence of initial team

reflection in the first place (Q1). However, it seems that when they are asked to think about how to use their team feedback for enhancement purposes, they start processing it cognitively. When prompted to strategic planning, they predominantly state (general) strategies to act on feedback. Low-performing teams show more complex patterns of feedback processing. Half of those teams express positive, activating emotions. There are no teams that express team reflexivity statements and negative emotions. Further, team reflexivity rather occurs in teams that have most members expressing positive emotions. Half of those teams already engage in cognitive thinking/processing of feedback at the first stage (Q1). However, after Q2, even teams expressing deactivating negative emotions state a focus and a strategy. Half of those teams even express a specific focus for their next team task. It appears that members of those teams resolved their negative emotions and moved on to cognitively assessing and integrating data from their feedback.

In sum, our study shows that there seems to be a complex interplay between feedback valence and affective and cognitive reactions to team feedback, while team feedback research has mainly focused on the dimensions of feedback interventions. Shedding light on the receivers' reactions would allow to better tailor feedback interventions to increase the chances of constructive uptake of feedback by each member.

The limitations of the study are the limited sample size (and the number of teams in each feedback valence group) and the use of graduate student teams.

*Keywords: teams, feedback, emotions*

## Oral presentation OP694

### Unpacking the Employability Paradox: Commitment Systems, Employability and Sustainable Work

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The debate around the employability paradox is recurring. Particularly with tight labor markets, it is key to find out if investment in workers' employability is a worthy organizational investment. Is it true that organizational investment in employability leads to knowledgeable employees leaving as soon as they see better chances elsewhere? The so-called management paradox (De Cuyper & De Witte, 2011) or the employability paradox (De Cuyper et al., 2011) refers to the (potential) trade-off effect between employability investment and increased turnover (Benson, 2006). The overarching goal of this study is to systematically unpack the theoretical grounding of the employability paradox and to assess the conditions under which this phenomenon is more likely to occur.

On the one hand, human capital theory (Becker, 1962) and conservation of resources theory (Hobfoll, 2001) highlight that employability, i.e., the continuous fulfilling, acquiring or creating of work through the optimal use of competences (Van der Heijde & Van der Heijden, 2006, p. 453), contributes to employees being fit for the external labor market, which comes at the cost of commitment to the current organization (Philippaers et al., 2016). Consistently, employability has been related to increased marketability (Nelissen et al., 2017) and turnover intentions (De Cuyper et al., 2011). On the other hand, organizational investment in employability is likely to be part of the reciprocal social exchange process between the employee and the organization, which is likely to result in increased commitment (De Cuyper & De Witte, 2011). Accordingly, it has been related to a variety of organizationally beneficial attitudes and behaviors, principally to the increased performance and intention to stay (Stanley et al., 2013). In sum, the current theoretical grounding and empirical evidence of the employability paradox are inconclusive (Nelissen et al., 2017).

To provide deeper analysis of these differences we perform systematic literature review and a meta-analysis which jointly aim to provide three main contributions. First, the study offers an integration of the existing evidence against the dominant theoretical frameworks providing more general conclusions about how and why of the employability paradox. Second, through meta-analysis, the study provides critical evaluation of the strength of the evidence pro and contra employability paradox. Finally, comparing the findings from multiple primary studies and examining moderators, the study contributes to explaining the current inconsistencies.

To identify the primary studies to be included in the current systematic literature review and meta-analysis, we conducted a comprehensive search for relevant publications across different databases (i.e., PsycINFO, Web of Science, Business Source Premier). We used combinations of keywords pertinent to the employability, commitment and turnover. Next, we scanned the studies against the set of inclusion criteria, coded the information in a standardized coding scheme, and performed qualitative and quantitative analyses of the key relationships.

Here, we outline the main preliminary results from both systematic literature review and meta-analysis. First, the systematic literature review provides deeper insight into the theoretical underpinnings of the employability paradox, and the preliminary results show: (1) a severe lack of theoretical diversity (mainly social exchange theory), (2) a lack of insight into the "how" of the theoretical framework, the actual social exchange has rarely been examined, (3) neglect of theorizing of the paradox, including theory missing or misfit to the paradox, (4) both employability and

commitment are measured inconsistently, and (5) studies relate employability to commitment to the organization, while commitment to the profession and/or career are neglected. Second, preliminary results of the meta-analysis of the relationships between employability, commitment, and turnover intention shows little evidence for the employability paradox. Specifically, the positive, instead of a negative, effect of employability on commitment is substantiated by empirical evidence, while no significant relationship is found with turnover intention. The results do substantially vary across studies depending on the specific conceptualization of employability, measurement, and commitment target.

In conclusion, we unpack the employability paradox increasing insight into the complexity of the organizational investment in employability. From the societal standpoint, this is relevant because organizations are in the position to stimulate or prohibit workers from a broader development by making them skill-dependent, which might inhibit their contributions to resolving societal issues. With the current labor shortage in key societal sectors (healthcare, education, social work), societies need workers to develop beyond organizational boundaries.

*Keywords: Commitment, Employability, Sustainable Work*

## Oral presentation OP222

### Unravelling the Interplay of Innovation Culture Elements With a Paradox Lens

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science&practice

**Goals:** Organizational culture (OC) is a powerful context variable, playing a key role in companies' innovation efforts. However, OC is a multidimensional phenomenon and our understanding of the dynamics within the OC is still limited. We apply a paradox lens to investigate the persistent contradictions and interrelations between cultural elements to better understand how culture affects innovation.

**Theoretical background :** OC research calls to go beyond the predominant focus on OC's effects on organizational outcomes. Instead, we need to better understand how OC itself operates, surfacing how multiple cultural elements interplay to jointly impact outcomes such as innovation. This configurational perspective might be particularly relevant for innovation culture, since innovation is characterized by tensions between contradictory yet interrelated elements (e.g., exploration-exploitation, passion-discipline). For instance, research considers a culture that hosts dual value combinations (e.g., values encouraging flexibility and clear structures) as helpful to integrate exploration and exploitation. As paradox theory suggests, focusing on only one element of these tensions might stifle innovation, while embracing them with a both/and approach sparks innovation. Further, recent paradox research points out that multiple tensions may be interrelated ("knotted"). Since the paradox lens allows for a deeper understanding of complex relationships, it might be particularly helpful to enhance our understanding of how multiple culture elements jointly affect innovation.

**Methods:** Within a family-owned Swiss engineering company, we conducted 54 semi-structured interviews with employees in innovation-related roles (e.g., executive board, senior managers, R&D heads, specialists). Mean interview length was 43.6 minutes (std=8.3). We asked about interviewees' innovation definition, innovation examples and related learnings about corporate's culture, values, tensions, and suggestions for innovation culture development. We transcribed the recorded interviews verbatim and analyzed the data following Gioia et al. (2013). We created first-order categories capturing interviewees' descriptions, which we combined into more abstract themes by iterating between data and literature. We then developed propositions regarding cultural elements' interplay.

**Results:** In this particular company, we identified three cultural dimensions containing six dominant cultural elements. The first cultural dimension characterized the company's identity (who are we?: one good family; diverse family ), while the second dimension captured valued working modes (how do we function?: discovery; discipline and endurance ). The third dimension summarized cultural drivers (why do we do it?: higher purpose; business relevance ). These paradoxical cultural element sets resemble organizational tensions between unity and diversity, creativity and discipline, purpose and profit, which are already established in the literature. For instance, the company's higher purpose stimulated innovations whose market success was not guaranteed, contradicting the need for solutions with business relevance. Further, employees belonged to different units with their own approaches and perspectives (diverse family), which competed with the felt need to stick together as one good family. We provide propositions for how cultural elements interrelate with each other in an intensifying and/or alleviating way across these innovation-related tensions, such as: " purpose

enables identification with the company, uniting diverse family parts under one good family”—where a cultural element from one tension helps integrating both cultural elements from another tension; “acting as one good family inhibits discovery (i.e., by tediously involving everyone) and stimulates discovery (i.e., by leveraging trust and openness)”—exemplifying polarizing effects from one cultural element to another across tensions.

Limitations: Our work is based on a single case with its historically built cultural elements. Future studies might investigate non-family or non-profit organizations to investigate the transferability of our findings.

Conclusions: With our work, we unravel how cultural elements work together to affect innovation. Specifically, our findings suggest that cultural elements reflect typical innovation-related tensions and are knotted to each other across them, unfolding their combined power on innovation by fueling and easing entangled tensions. Thereby, we contribute to a better understanding of how an innovation culture operates. From a practical view, considering the competing and interrelating relationships across cultural elements might help managers to understand innovation culture as a system of interacting elements.

Relevance to Congress Theme: Our insights on tensions in OC add to our understanding of the increasing complexity of our world of work and what to consider when attempting to navigate it.

*Keywords: organizational culture, innovation culture, tensions*

## Oral presentation OP661

### Using VR-Avatar Videos to support Business Process Understanding and Learning Motivation of Employees in the Context of Digital Transformation

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science

Research goals: Digital transformation requires employees to constantly adapt to new business processes. Currently, business processes are mainly communicated by means of paper-based process models using modeling grammars that are difficult to understand for employees due to their abstract and context-free nature (Poehler & Teuteberg, 2021). Thus, there is a strong need for new instructional methods presenting business processes in a more comprehensible way (Aysolmaz & Reijers, 2021). Virtual Reality (VR) arises as a possible answer to this challenge as it allows creating realistic and context-based visualizations of business processes and work environments. However, the use of VR relates to high costs (e.g., quantity of hardware required for broad communication). Instructional videos can function as a more (cost-) effective medium for broad application while still offering the ability of shifting learning environments from theoretical to practical (e.g., Köse et al., 2021). When it comes to choose the appropriate visual presentation format (e.g. animation vs. static pictures), current research provides a rather scattered picture (Hattermann et al., 2021). In the context of business process training, animated VR-avatars have found to be an effective format for communicating business processes providing high representational fidelity (e.g., Leyer et al., 2021). Additionally, VR-based visualizations increase learning motivation (Huang et al., 2022), which can mediate learning by increasing or decreasing learners' cognitive engagement (affective mediation hypothesis, Mayer, 2014). Against this background, the potential of VR-avatar-videos to support employees' business process understanding and learning motivation is investigated in comparison to voice-over-slides-videos using abstract and static pictures. In addition, it is explored whether learning motivation in turn affects learning outcomes and whether employees' prior content knowledge may function as a moderator in this context.

Theoretical background: Referring to the cognitive theory of multimedia learning (CTML; Mayer, 2005) and cognitive affective theory of learning with media (CATLM; Moreno, 2005), we hypothesize that VR-avatar-videos will be more effective in supporting business process understanding and learning motivation than voice-over-slides-videos. According to CTML, VR-avatar-animation provides dynamic and thus more explicit information about the execution of working steps which may facilitate process understanding. According to CATLM, VR-avatar-animation appears more appealing and thus can increase learning motivation (Mayer, 2014).

Methodology: We carry out an online experiment (N = approx. 150 participants, power analysis suggesting a total sample size of at least 129 participants) using a between-subject design. Participants are randomly assigned to the VR-avatar-video group or the voice-over-slides-video group. Both videos show the same business process. After watching the video, participants answer knowledge questions and assess their learning motivation based on the instructional materials motivation survey (IMMS; Keller, 2010). Group differences concerning business process understanding and learning motivation are investigated using one-way ANOVA. The effects of learning motivation and demographic variables on business process understanding are calculated with regression-based analysis using PROCESS.

Expected Results: Data analysis will be completed in March 2023. We expect that the VR-avatar-video leads to better process understanding and higher learning motivation than the voice-over-slides-video. Further, we expect that motivation has a positive effect on business process understanding and thus mediates the effect of instructional video design on process understanding. Finally, we assume that employees' prior knowledge functions as a moderator in this context.

Limitations: Instead of a real learning environment, a fictional experimental setting is applied. Further, a convenience sample is used which mainly contains students.

Conclusion: This study contributes to research by providing first empirical results concerning the effectiveness of VR-avatar- videos to enhance employees' business process understanding in the context of digital transformation. These insights support organizations in preparing effective instructional methods and instruments for prospective business process training.

Relevance to the Congress Theme: This study takes up the central congress theme "the changing world of work" and provides new scientific and practical insights with regard to the effectiveness of video-based process trainings.

Relevant UN SDGs: Our study addresses the UN SDGs of supporting inclusive, equitable and quality education and of promoting lifelong learning opportunities for everyone.

*Keywords: VR-based learning, instructional video, business process understanding*

## Oral presentation OP676

### Validity Evidences of the Brazilian Leaders Competencies Scale Aimed to Promoting Work-Family Balance

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science

During the COVID-19 pandemic, leaders had to learn to deal with the unforeseen and impactful consequences that the new virus caused across the planet. Understanding which competencies can contribute to balance and adaptation to the new scenario imposed by the pandemic has become very relevant. The personal space at home has become the same professional space at work. Conflicts in both family and work were very common, considering the invasion of one over the other. Many leaders lacked certain competencies, especially those related to promoting work-family balance. These competencies had to be quickly developed because of the compulsory home office, considering the social isolation. There has never been so much need for clever leaders, developing capacity of planning and support actions considering the dynamics dyad between work and family. This research aims to present evidence of validity of the Brazilian scale of leaders' competences aimed at promoting work-family balance. The first version of this scale was built based on a systematic survey considering the existing literature. The main theoretical categories related to the topic were identified by the research team. Afterwards, 4 focus groups were carried out (N=21 Brazilian leaders), in addition to 3 individual in-depth interviews with other Brazilian representative leaders. The focus group and interviews aimed to map the strategies of action of leaders in the leadership of their teams during the pandemic. We also identify what type of leaders' competencies they developed during the pandemic period. All leaders who participated in the qualitative step were intentionally chosen for accessibility and convenience. Semantic and judges validation procedures were also performed (N = 12). After the qualitative step, and before the exploratory factorial validation, the instrument has had 17 leadership competencies oriented by work-family balance. These competencies were evaluated in terms of their domain considering the report by leaders about how much they impacted their performance. After digitizing the questionnaire, the data collection was made by survey and took place intentionally, for accessibility, at a distance mode. The procedure used to disseminate the instrument was the snowball. Only managers, of any management level, who led a team, could respond to the survey. All ethical procedures were followed. Exploratory factor analysis was used for the analysis and interpretation of results. The sample obtained consisted of 220 Brazilian managers, with a mean age of 40.69 years (SD = 8.84), men (62.90%), married (66%), with at least 1 child (59.2%) and leading teams made up of three or more people (47.5%). The results showed a factorable empirical structure (KMO = 0.898), with three factors: 'Technical Competencies for Managing and Planning the Work of the People Led' (7 items, explained variance = 37.96; eigenvalue = 6.45, alpha = 0.815, factor loadings between 0.776 and 0.398), 'Competences to Promote Organizational Culture Practices Oriented to Balance Work and Family' (7 items, explained variance = 13.28; eigenvalue = 2.26, alpha = 0.880, factor loadings between 0.831 and 0.462) and 'Authentic Leadership and Socio-Emotional Competencies for Work and Family Integration' (3 items, explained variance = 7.01; eigenvalue = 1.19, alpha = 0.755, factor loadings between 0.465 and 0.383). The psychometric indicators obtained in this first version were very satisfactory. As a limitation, we highlight the little sampling variability, even if leaders from other regions of Brazil were invited to participate in this research. The scale is unprecedented and original, allowing identified leadership styles used in the compulsory home office during the

pandemic. Training actions can be better directed to develop the needs of leaders, working to promote the well-being and quality of life of their subordinates, reducing injustices in their actions and promoting the work-life balance.

*Keywords: leadership competencies, authentic leadership, statistical methods*

## Oral presentation OP479

### Values and innovation at work: the relationship between Person-Organization value (In)congruence, eudaimonia and innovation.

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science

#### Research goals and why the work was worth doing

Innovation is a crucial asset for an organization's success. Thus, it is of interest to investigate the role of individual and organizational factors contributing to innovative behaviors at work (IWB) and the mechanisms that explain these relationships. Personal values, such as stimulation and self-direction, are considered to promote IWB. However, individuals are also influenced by organizational values and culture, which not always are aligned with individual personal values. Thus, the fit between personal and organizational (P-O) values might play an additional role in the promotion of IWB. Although most part of the research considers P-O congruence to be positively related to individual outcomes (e.g. well-being), the relationship with innovative behaviors and the pathways to their development remains highly unexplored. Some evidence has been found for the relationship between value congruence and creativity. It is important to consider other key factors embodied by IWB such as idea promotion and implementation. Thus, the aim of this research is to analyze the relationship between P-O value congruence (stimulation and self-direction) and IWB and the mediating role of eudaimonic well-being in this relationship. In addition, we investigate whether gender moderates the relationship between P-O value congruence and eudaimonic well-being, and thus has a differential indirect effect on IWB.

#### Theoretical background

The theoretical background of the research is based on Schwartz's basic values theory (1992, 2012), and P-O fit congruence and social exchange theory (Blau, 1968). Schwartz's theory suggests that certain values, namely stimulation, and self-direction, are of particular interest to IWB. P-O congruence and social exchange theory suggest that the congruence in values could contribute to IWB by its effects on individuals' well-being. We also build on the happy-productive-worker model (e.g. Wright & Cropanzano, 2007)

#### Design/Methodology

Data came from 306 employees from six organizations in Spain who responded to an online questionnaire implemented in Limesurvey. The questionnaire was accessible via a link sent to participants' work email addresses. Traditionally, value congruence has been measured with difference scores. However, this approach is flawed as it discards information and is conceptually ambiguous. To overcome these problems, the moderated effects of value congruence on well-being were analyzed by means of hierarchical polynomial regression and response surface methodologies (Edwards, 2007). The relationship between well-being and IWB was tested by means of regression. In all cases, we controlled for the organization. We tested the hypothesized (conditional) indirect effects by means of bootstrapping

#### Results

Results showed a constant increase in IWB for congruence in stimulation. Congruence in low stimulation exceeded any incongruence. Regarding self-direction, we found O-P congruence to be related to increasing eudaimonia, however, incongruence with high personal self-direction was

pivotal. Eudaimonia mediated the relationship between congruence in self-direction and IWB. Gender did not play a moderating role in the proposed model.

#### Limitations

A methodological limitation is the cross-sectional nature of the study precluding causality and reciprocal causality between eudaimonia and IWB. Further experimental studies or cross-lagged panel correlation designs are recommended.

#### Conclusions -research and or practical implications

The contributions of P-O value congruence and eudaimonia can be decisive factor in predicting innovation and, subsequently, determine the competitiveness and success of organizations. Our research acts as an initial advance in disentangling relationships between value congruence, eudaimonia, and IWB. Collectively, the results regarding innovation and eudaimonia contribute to the rising discussion of the joint optimization of performance and well-being in organizational studies. Relevance to the Congress Theme 9

In the changing world of work, research focusing on innovative behaviors and personal growth and development contributes to the development of sustainable societies and workplaces. Our results state that adjustment between organizations and individuals can be a relevant drive to individuals' well-being and innovation. However, organizations pursuing innovation might also benefit from those individual values that challenge organizational values to some extent.

#### Relevant UNSDGs

SDG 8. Decent work and economic growth. Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.

Our results offer guidance for the promotion of innovative behavior at work and eudaimonic well-being. Thus, they can contribute to more sustainable workplaces and higher quality work.

*Keywords: Innovative work behavior, Value congruence, Eudaimonic well-being*

## Oral presentation OP580

### Videoconference fatigue: validation of the Italian translated Zoom Exhaustion and Fatigue Scale

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science

Research goals and why the work was worth doing

The present study aims to investigate the psychometric properties of the Italian translation of the Zoom Exhaustion and Fatigue Scale (ZEFS). Additionally, it seeks to evaluate this construct's relationship with technostress creators, sleep problems, work engagement, and job satisfaction.

Theoretical background

In the last few years, using video conferencing has become a necessity worldwide due to the Covid-19 pandemic. Indeed, many employees started to attend meetings virtually using technologies such as Zoom or Microsoft Teams, instead of meeting face-to-face. The Zoom platform's widespread use in video conferences has become generic, with many individuals substituting "Zoom" for "video conferencing." Recent research has found that using videoconferencing programs might leave you feeling exhausted, stressed, or depleted. Therefore, a new term -"Zoom Fatigue"- emerged because of overusing video conferencing technologies. Zoom fatigue is the state of being worn out after using a video conferencing platform for a meeting. Recently, a diagnostic tool (i.e., ZEFS) was implemented to identify zoom fatigue arising from excessive screen time (Fauville et al., 2021). However, as far as we know, a validation of the ZEF scale is unavailable in the Italian language; moreover, little is known about the psychological consequences of the recently increased utilization of videoconferencing.

Design/Methodology/Approach/Intervention

An online survey was administered to a sample of 360 Italian workers (56% male, M age =38.6±11.96). Besides the Italian translation of the ZEFS (15 items) used to assess Zoom Fatigue, the survey was composed of questionnaires (including validated measures) focused on sociodemographic and job-related information, technostress creators, work engagement, job satisfaction and sleep problems. The psychometric properties of the ZEFS were evaluated through exploratory and confirmatory factor analyses, as well as Cronbach's alpha and corrected-item correlation. Correlation and regression analyses were conducted to examine the associations between Zoom Fatigue and all the other variables.

Results obtained or expected (if not available, it must be made clear when they will be)

Preliminary analyses showed adequate reliability and validity of the ZEFS as well as favourable goodness-of-fit indexes and fit indices (CFI=0.961; TLI=0.95; RMSEA=0.076). ZEF scores were significantly and positively associated with technostress creators (techno-overload, techno-invasion, and techno-complexity) and sleep problems. In contrast, they were negatively associated with job satisfaction and work engagement, supporting the scale's concurrent validity.

Limitations

This study used a cross-sectional design that merely relied on self-report measures. Therefore, the current research did not allow for testing relationships among these variables across time nor to

assess all types of validity or reliability, such as test-retest reliability. Moreover, future work could also explore how contextual and individual differences may impact the experience of Zoom fatigue.

Conclusions – research and or practical implications/Originality/Value

The results indicated that ZEFS is a valid and reliable tool for assessing the psychological effects of videoconferencing in the Italian context. Moreover, by showing the relationships of Zoom exhaustion and fatigue with technostress creators, sleep problems, job satisfaction, and work engagement, the present study identified prospective directions that could be taken to protect the well-being of workers who use videoconferencing on a regular basis.

Relevance to the Congress Theme

The nature of work has changed considerably over the last few years, involving a progressive use of videoconferencing programs as a consequence of remote working. This raised attention to a specific form of fatigue, namely Zoom Fatigue. This complex situation needs to be addressed at different levels, and scholars need valid and reliable tools to understand this phenomenon.

*Keywords: zoom fatigue; italian validation; well-being*

## Oral presentation OP174

### Virtual, Hybrid, and Co-located Team Members' Well-being. A Systematic Comparison of Antecedents

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science&practice

Research goals and why the work was worth doing

The pandemic has brought significant changes in many professions, forcing employees to work remotely. After restrictions were withdrawn in many countries, some workers opted to work from home permanently, causing a rise in the number of hybrid teams. This has prompted the need to provide evidence-based guidance on managing this type of teams and maintaining their members' well-being. While there are studies on employee well-being antecedents, no systematic comparison of what specifically contributes to the well-being of employees from virtual, hybrid, and co-located teams has yet been provided. The goal of this exploratory study was to address this issue.

Theoretical background

Employees' well-being was defined in accordance with the hedonic perspectives (i.e., the presence of positive job-specific evaluations and the experience of positive job-related emotions). Working in each of the three types of teams results in specific demands experienced by team members. Therefore, I drew from the JD-R model and existing evidence on well-being antecedents to select factors that could be relevant to each team member's well-being. On this basis, factors from the following areas were selected: personal resources, such as emotional intelligence and home environment & individual factors; workplace resources, such as workstation environment, team communication, flexible work schedule, and leader-member exchange; and job demands, such as workload and team conflicts.

Methodology

A cross-sectional study was conducted with 1264 participants. They were recruited through direct invitations on social and professional networking sites. About half of the sample came from the US (n = 613) and about the same amount from Poland (n = 598). The proportion of participants from co-located, hybrid, and remote teams were more or less equal (n 1 = 384, n 2 = 425, n 3 = 371). Participants completed the survey with the Job Descriptive Index, Job-related Affective Well-being Scale, Schutte Emotional Intelligence Test, Demand Control Support Questionnaire, Work Group Characteristics Measure, Leader-Member Exchange 7 Questionnaire, and rating scales to measure lifestyle, household, workstation, and flexible schedule factors.

Results obtained

Multiple linear regression and Johnson's Relative Weights Analysis were employed to analyze the results. Predictors accounted for 45% of all participants' well-being variability ( $F(27, 1236) = 37.46; p < 0.001$ ). Coefficients of determination were slightly dispersed between different team types (56% for co-located, 49% for hybrid, and 45% for virtual). The analysis showed substantial differences in how the variables contributed to predicting the well-being of team members. For example, EI impacted only co-located team members' well-being. Having children driven hybrid team members' well-being while living alone in the household was significant only for virtual team members. Workstation quality seemed to be significant only for workers in stationary teams. Working in the same room with other people lowered only virtual team members' well-being, while affective conflict

was significant only for the hybrid teams. A flexible work schedule was particularly important for hybrid teams as well. There were factors impacting all team members' well-being, e.g., distraction at work or LMX. Also, such factors as physical exercise, having dedicated working space, workload, and informal chat opportunities do not contribute to the employees' well-being.

#### Limitations

The study's limitations are due to its cross-sectional design. The results should be confirmed in a longitudinal study to have more confidence in the robustness of the conclusions. In addition, a follow-up study with a random and larger sample would allow inferences about differences in well-being magnitude between members of each team type.

#### Research and practical implications

The study's results showed considerable differences in the strength and significance of the antecedents of well-being between groups of people working in different team types. This suggests that theoretical models describing well-being at work should consider the team factor and the specific demands of working in each team type. From a practical perspective, the study's findings will allow the development of evidence-based policies to enhance and maintain the employees' well-being in a way that fits their work mode and team composition.

#### Relevance to the Congress Theme

The presentation is related to the Urgency facet of the Congress Theme, as it addresses a recent and widespread change in the work organization practice.

#### Relevant UN SDGs

The study is relevant to the "Good health and well-being" goal, as it addresses the antecedents of these constructs, allowing to develop an evidence-based policy to enhance it.

*Keywords: well-being, hybrid teams, remote work*

## Oral presentation OP444

### Visionary leadership and team performance: The role of team potency and resource sufficiency

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science

#### THEORETICAL BACKGROUND AND HYPOTHESES

Articulating an aspiring vision is at the heart of effective leadership (Venus et al., 2019). According to Stam and al. (2014), visionary leadership mobilizes team members toward achieving a common future by triggering the emergence of collective possible selves. When leaders craft a strong vision for their team (e.g., to become the leading team regarding patient's satisfaction), they express confidence in the team's ability to become a new and improved version of itself, which may influence how the team evaluates its own ability to change (van Knippenberg et al., 2004). Drawing on social cognitive theory (Bandura, 1986), we first argue that visionary leadership positively and indirectly affects team performance via increased team potency, that is the team's general belief that it can be effective across tasks and contexts (Schaubroeck et al., 2011).

Yet, a leader's vision can also be threatening (Dent & Goldberg, 1999). It may raise the team's awareness of surrounding constraints and challenges (Rafferty & Griffin, 2004), thereby sowing doubt in team members' mind as to their collective ability to achieve the vision (Shamir et al., 1998). When the leader's vision is deemed unrealistic, team members may even start questioning the leader's judgement, which can further compromise the realization of team's future perspectives (Ashford et al., 2018). In this study, we challenge the unconditional positive perspective on visionary leadership and argue that resource sufficiency (e.g., time, information, and equipment) is a key boundary condition. Especially, we suggest that visionary leadership stimulates team performance via increased team potency when resource sufficiency is high, but not when it is low.

#### METHOD

In this time-lagged multisource study, we used a sample of 69 functional teams and their immediate supervisor working in a Canadian hospital (T1 = 422 members; T2 = 336 members). The response scale ranged from 1 (strongly disagree) to 7 (strongly agree). We adapted the three highest loading items from House (1998) to assess visionary leadership (T1;  $\alpha = .97$ ) by replacing the words organization and unit with the word team. We slightly modified Amabile's (1995) six-items scale to assess resource sufficiency (T1;  $\alpha = .82$ ). We measured team potency (T2;  $\alpha = .90$ ) with Guzzo's (1993) eight-items scale. Immediate supervisors assessed team performance (T3;  $\alpha = .81$ ) with the three positively worded items (out of four) developed by Edmondson (1999). We controlled for team size, team interdependence, and team leader's level of education.

#### RESULTS AND DISCUSSION

We aggregated individual scores at the team level for all variables: visionary leadership ( $r_{wg} = .70$ ;  $F = 4.10$ ,  $p < .001$ ;  $ICC(1) = .34$ ;  $ICC(2) = .76$ ), resources sufficiency ( $r_{wg} = .81$ ;  $F = 1.92$ ,  $p < .001$ ;  $ICC(1) = .13$ ;  $ICC(2) = .48$ ), and team potency ( $r_{wg} = .95$ ;  $F = 1.39$ ,  $p = .035$ ;  $ICC(1) = .08$ ;  $ICC(2) = .28$ ).

We used parcels to assess the distinctiveness between our measures (Little et al., 2002). Results of the four-factor model that included all the latent variables showed a satisfactory structure ( $\chi^2 = 99.665$ ,  $df = 59$ ,  $p = .001$ ;  $CFI = .942$ ;  $TLI = .923$ ;  $SRMR = .0796$ ), which is superior to best alternative model ( $\Delta\chi^2 = 72.626$ ,  $p < .001$ ).

We tested our hypotheses with PROCESS (Hayes, 2019) on 5,000 bootstrap samples at a 95% confidence interval. Our first hypothesis stated that visionary leadership increases team performance via team potency. Results show that visionary leadership is positively related with team potency ( $b = .10$ ,  $SE = .05$ ,  $p = .03$ ), which is in turn positively related with team performance ( $b = .48$ ,  $SE = .19$ ,  $p = .02$ ). Results from bootstrapping analyses support this hypothesis (indirect effect =  $.05$ ,  $BootSE = .03$ ,  $CI = [.004, .11]$ ).

Our second hypothesis stated that resource sufficiency moderates the indirect relationship between visionary leadership and team performance via increased team potency, which is also supported (index of moderated mediation =  $.06$ ,  $BootSE = .03$ ,  $CI = [.001, .12]$ ). We plotted the simple slopes of this indirect relationship at 1 SD above and 1 SD below the mean of resource sufficiency. Results show that this indirect effect is significant when resource sufficiency is high (indirect effect =  $.08$ ,  $BootSE = .04$ ,  $CI = [.01, .16]$ ), but not when it is moderate (indirect effect =  $.04$ ,  $BootSE = .03$ ,  $CI = [-.007, .10]$ ) and low (indirect effect =  $.003$ ,  $BootSE = .03$ ,  $CI = [-.06, .06]$ ).

We advance research on visionary leadership in the team domain in very important ways. Pushing SCT to the team-level, we suggest that to create the conditions for team performance, visionary leaders should make resources salient to team members. In future research, we encourage scholars to use a longitudinal design to clarify the temporal sequence linking visionary leadership to team performance, and to examine whether certain team attributes (e.g., team power distance) modulate the influence of visionary leadership.

*Keywords: visionary leadership, team potency, resources sufficiency*

## Oral presentation OP699

### Well-being and heart rate variability in everyday life of managers in care facilities

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science&practice

**Research Goals:** The nursing sector has been of great public interest not only since the start of the Covid-19 pandemic. A growing need for nursing care coupled with an increasing shortage of personnel characterizes the critical situation in Germany, which was further exacerbated by the pandemic. As a result, nursing facilities are facing major challenges that place a considerable burden on their employees. While health-related working conditions of nursing staff have already been investigated in numerous studies, there is a lack of research on their leader's health. Leaders, however, bear the great responsibility of having to meet these challenges under high pressure and constantly changing working conditions. The planned study is intended to close this research gap.

**Theoretical Background:** According to the job demands-resources (JD-R) model, strain reactions are based on the level of health-impairing job demands and stress-buffering resources. The present study aims to contribute to work and organizational research by integrating subjective and objective health-related outcomes into the JD-R framework while studying a rarely researched population.

**Methodology:** Using a sample of nursing managers and directors, we conducted an ambulatory assessment study to investigate measures of well-being and heart rate variability (HRV) in association with current situational aspects. Participants wore an electrocardiogram device on two working days and rated their level of job demands (e.g., overload and rumination), job resources (e.g., self-efficacy and role identification), and well-being (e.g., positive affect) five times a day. Data collection is currently still ongoing and is expected to be completed by the end of 2023. Based on the preliminary data, multilevel models were calculated for a total of 27 managers and 347 situations predicting affective valence and 5-minute state HRV.

**Results:** A preliminary result is that, in line with the health-impairment process, situations with high overload and rumination were associated with temporarily decreased positive affect, but not with HRV. Furthermore, consistent with the stress-buffering hypothesis, momentary self-efficacy and role identification significantly buffered the negative effects of work overload on positive affect and marginally on HRV. That is, overloading situations in which managers were self-efficacious and identified with their current role were associated with fewer impairments in affect and HRV than overloading situations in which these resources were unavailable. Further analyses are planned once the data collection is completed.

**Conclusion:** Contributing to psychophysiological ambulatory research in occupational health psychology, the present study provides insights into the detrimental concomitants of overload among nursing managing staff, while emphasizing the importance of increasing self-efficacy and role aspects as protective and stress-buffering resources.

**Strengths and Limitations:** Identified limitations of the study are the small sample size, the cross-sectional design, and the focus on only a few selected demands and resources, while many other variables of the work environment remained unconsidered. On the other hand, the multi-methodological approach provides insights into new, psychophysiological relationships within and between managers and offers a holistic view of real-life occupational health.

Relevance to the Congress Theme: The study focuses on an occupational group that has been confronted with a constantly changing working environment over the last few years. Not only the pandemic brought great dynamics into this professional field, but also new reforms and laws, advancing digitalizations and the increasing demand for care due to demographic developments. With innovative measurement methods in the form of smartphone- and sensor-based technologies, we wanted to capture these new challenges in an equally contemporary way.

Relevant UN SDGs: The present study contributes to the UN SDG “Good health and well-being” by offering insights into psychophysiological aspects of strain and by providing practical recommendations for promoting health and well-being at the workplace.

*Keywords: Ambulatory assessment, heart rate variability, health*

## Oral presentation OP199

### Well-being and job search during unemployment

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science

#### Research goals

We aim to understand the role of well-being in job seeking behaviour and how potentially well-being can mediate the effect of key factors that can promote job seeking behaviour including, job search efficacy, social support, and social capital. This is important as it will provide a deeper understanding of the underlying mechanisms that govern job seeking behaviours.

#### Theoretical background

Job seeking behaviour and potentially reemployment depends on a number of individual and situational factors including job seeker's personality traits, human and social capital, and support mechanisms available to individuals (Kanfer et al., 2001; Wanberg et al., 2002). However, unemployment can have detrimental effects on well-being with the potential to diminish individual's engagement with job seeking (McKee-Ryan, et al, 2005).

To understand this process, we examine how psychological well-being can mediate the relationship between job search self-efficacy, social support and social capital with job search activities and hypothesised two moderators of the mediation paths. First, we suggest that selective optimization with compensation (SOC) can strengthen the positive effects of our predictors on well-being. SOC is a self-regulation strategy that has been developed in life-span developmental psychology (Baltes and Dickson, 2001) and emphasizes the maximization of gains and minimization of losses associated with situational contexts such as the loss of employment. Second, we hypothesise that the positive association between well-being and job search activities is moderated by job search self-efficacy. Self-efficacy, which captures individual's belief in their capacity and ability to carry out tasks is instrumental in motivation and goal commitment. Thus, we expect that those with high job search self- efficacy are more likely to persist and commit to their job search even when they experience diminished psychological well-being.

#### Design and Methodology

We evaluated our hypotheses using Bayesian analysis and data from 292 unemployed participants. Participants resided in 14 locations in the UK and France and therefore a multilevel model was used to account for potential contextual differences between them.

#### Results

Preliminary results revealed that job search self-efficacy, social capital and social support have positive associations with psychological well-being. Moreover, the moderating effect of SOC was significant only for social capital indicating a stronger positive effect when individuals utilise SOC strategies. For job search activities, we found direct positive effects for job search self-efficacy, SOC and social capital but not for social support. Unexpectedly, there was no main effect for psychological well-being on job search, but the effect was conditional on job search self-efficacy. Specifically, well-being was positively associated with job search activities when job search self-efficacy is high and negatively when low. This was propagated to the indirect effects of SOC, social

support, and social capital so that the indirect effects were positive when job search self-efficacy is high and negative when low.

A key limitation of the study is that the data are cross-sectional and therefore the relationships identified cannot be interpreted as causal.

#### Conclusions

Our results make several contributions. First, we embellish our understanding of the mechanisms behind job search and the role of well-being in future job search and reemployment. Second, we show the instrumental role of SOC and job search self-efficacy in enabling individuals to engage with job search activities. Finally, our results have implications for practitioners and policy makers as they can inform the design of interventions for job seekers.

#### Relevance to the congress theme

Changing the world of work, should encompass a clearer understanding of job seeking behaviours. This study makes is relevant in this regard as it provides insights on how individuals can escape the vicious cycle of unemployment, poor well-being and disengagement from job search.

#### Relevant UN SDGs

Good health and well-being; decent work and economic growth

*Keywords: well-being, job search, unemployment*

## Oral presentation OP476

### Wellbeing at work of the intellectually gifted

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science

#### Purpose & theoretical background

Neurodiversity can be both a blessing and a curse in the workplace. Recent research shows that people with for example ADHD and ASS can increase their wellbeing at work by benefitting from certain workplace adaptations. As a result they feel better, have less intent to leave and are able to positively contribute to their organizations.(Khalifa et al., 2020; Patton, 2022)

There is relatively little known about the factors that impact the wellbeing at work of another group of neurodiverse workers: the intellectually gifted. Such knowledge is necessary to design solid interventions and improve counselling for this group. This current research project aims to expand this body of knowledge and thus contribute to the wellbeing at work of the intellectually gifted.

This study is a quantitative follow up to an earlier qualitative study, that showed that the gifted have specific hurdles to tackle at work e.g. an intolerance for perceived injustice, a need to be intellectually challenged and difficulties connecting with co-workers (van Casteren et al., 2021) . In this study we aim to learn more about the factors that are associated with experienced wellbeing at work by exploring the aspects of work that people really value and to what extent they are enabled and able to achieve said values. We also included concepts like autonomy, authenticity, leadership styles and intellectual humility to our questionnaire, in order to learn more about factors that are associated with wellbeing at work of gifted workers. By looking at factors connected to the gifted workers themselves as well as to the role of the occupational context, we aim to paint as complete a picture as possible.

#### Methods

The current study consists of a cross-sectional questionnaire study among members of Mensa in the Netherlands with an income from paid employment or from entrepreneurship. Mensa is an international society for gifted people from all walks of life which requires proof of an IQ score in the 98 th percentile of an approved intelligence test to become a member. We strive for N>00.

The work related values of gifted workers are identified by presenting them the capability set for work, a validated questionnaire in line with the value based approach of sustainable employability and wellbeing at work (Abma et al., 2016) (Gürbüz et al., 2022). Our questionnaire further encompasses themes questions about autonomy, person-job fit, preferred leadership styles, intellectual humility, and proactive personality. These topics were derived from earlier research into wellbeing at work in general and specifically for the intellectually gifted.

#### Results:

We expect to be able to report the first results and analyses from our study in the first quarter of 2023.

#### Limitations

The sample is not representative for all intellectually gifted workers due to the sampling method used.

#### Conclusion

More knowledge about the factors influencing wellbeing at work of gifted adults is needed to better identify threats and opportunities for the enhancement of the work experiences of this group. The results of this study will provide input for the development of interventions and improve counseling, especially around topics like career counseling and burn out prevention.

#### Relevance for congress

This research is relevant to the congress theme as it focusses on the UN Sustainable Development Goal 'Good health and Wellbeing'. The findings of the current study can help to inform future research and interventions which can create a more inclusive work environment. In a more inclusive work environment, fitting accommodations will be available and intellectual giftedness will no longer be an obstacle for experiencing wellbeing at work.

*Keywords: Giftedness, neurodiversity, wellbeing*

## Oral presentation OP761

### Wellbeing, sleep and health assessments in remote due to Covid pandemic workers depending on social support and hours worked

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science

The aim of this study was to examine the impact of remote due to pandemic working arrangements on wellbeing, sleep problems, and physical health perception in a representative sample of remote workers in Poland. The outbreak of Covid -19 pandemic resulting in implementation of remote work on a larger scale than earlier has a potential of creating new work stressors as well as stress outcomes. The systematic reviews and meta analyses show negative impact of remote working during pandemic on wellbeing, sleep and health (Patel, Robertson, Kwong, Griffith, Willan, Green, et al. 20220). There is some evidence on a positive role of social support in alleviating these negative effects (Grey, Arora, Thomas, Saneh, Tohme, Abi-Habib, 2020). The participants (n=635; women=438; men=197) aged 19 to 70 years (M=37,24; SD=11,02 years) filled in an online survey. They were divided into 6 groups on the basis of hours worked per week (below 40h, 40h, more than 40h) and social support (low (LSS), high (HSS)). The groups were as follows: (1) LSS >40h per week (N=77, M=38,60 years; SD=13,24 years), (2) LSS and 40h (N=144, M=36,21 years, SD=8,94 years, 67%), (3) LSS and <40h (N=123, M=36,23 years; SD=8,96 years), (4) HSS and >40hours per week (N=73, M=39,48 years, SD=14,29 years), (5) HSS and 40h (N=118, M=36,31 years, SD=10,98 years), (6) HSS and <40h (N= 100, M=38,39 ears, SD=11,30 years,). Social support was measured by Multidimensional Scale of Perceived Social Support (Zimet, Zimet, Farley, 2017), well-being was assessed by WHO-5 Well-being Index (WHO, 1998), sleep problems were evaluated by usage of Athens Insomnia Scale (Soldatos, Dikeos, Paparrigopoulos, 2000), and subjective health was assessed by questions derived from Short form Health Survey SF-36 (Ware, Sherbourne, 1992). Two factorial analysis of variance was performed on the data (the factors: a number of hours worked per week and social support). Interactive effect of hours worked per week and social support was found on wellbeing ( $F(5,629)=12.23, p=.000$ ). Employees with HSS working less than 40 hours per week ( $x=18.20, SD=.03$ ) and those working full time ( $x=18.41, SD=.43$ ) assessed their wellbeing higher than those with lower social support regardless of hours worked per week ( $x=16.29, SD=.53; x=15.26, SD=.29; x=14.49, SD=.42$ , respectively). Significant effect of interaction of hours worked per week and social support was found for assessment of sleep problems ( $F(5,629)=8,072; p<0,001$ ). Employees with HSS working less than 40h per week ( $x=18.45, SD=.76$ ) and those working full time ( $x=19,03, SD=.59$ ) reported less sleep problems than those working more than 40h per week irrespective of social support (LSS:  $x=23.03, SD=.58$ ; HSS:  $x=22,46, SD=.65$ ). Significant interaction of hours worked per week and social support on physical health assessment was found ( $F(5,629)=2,787, p=.017$ ). Physical health assessment was higher in workers with higher social support in all groups of working hours ( $x=3.47, SD=.09; x=3.47, SD=.08; x=3.32, SD=.08$ , respectively) when compared to those with low social support ( $x=3.22, SD=.09; x=3.22, SD=.07; x=3.15, SD=.07$ , respectively) with the lowest assessment in the group of low social support working overtime. The limitation of this study is too small amount of men when compared to women in the studied group. There is a high relevance to the subject of Congress theme because working remotely full time may create new work stressors, which may create a risk for health and wellbeing of the workers. Practical implications of the research is showing that social support seems to be a crucial factor for wellbeing, sleep quality and health perception in pandemic situation. Moreover, health, sleep and well-being problems were experienced more often by employees working overtime, therefore no more than 40 hours of

remote work should be recommended. This research stressed the importance of social support as well as working remotely no more than full time to maintain wellbeing, sleep, and subjective health. By indicating these this presentation contributes to SDGs (Good health and wellbeing).

*Keywords: well-being, social support, remote work*

## Oral presentation OP122

### **What difference does it make? An experimental study on the effectiveness of health-oriented leadership on-site compared to the digital working context**

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science

**Research goal:** Leadership represents an important workplace resource for employees. However, as opportunities to work from home increased in the past years, the question may be raised on whether leadership is more or less effective in digital working contexts compared to working on-site with regular face-to-face contact. The current research therefore investigates, whether the effectiveness of health-oriented leadership in terms of staff care (i.e., the extent to which leaders value, are aware of and promote employees' health at work) differs for employees in an experimental study.

**Theoretical background:** Due to containment measures during the pandemic, many employees immediately needed to shift to working from home. Since then, working from home opportunities have become established in many organizations. Working from home may pose a chance, but also a risk for employees' health and their work-related attitudes. In order to reduce risks and to promote employee health in the working context, there is a growing interest in health-oriented leadership, which specifically accounts for leader and employee health. While health-oriented leadership plays a crucial role for employees when working on-site, the role of health-oriented leadership in digital working environments yet remains unknown. It is an open question, whether health-oriented leadership in terms of staff care is more or less effective for employees when leaders and followers solely communicate via digital media compared to direct face-to-face contact.

**Method:** In a laboratory experiment with N = 60 participants, a moderating effect of the working context on the relationship between staff care and employee health as well as work-related attitudes was tested. We utilized a between-subjects design with a systematic variation of the the working context (on-site vs. digital working context). A professional actor, who was intensively trained before the experiment, portrayed a health-oriented leader, who either worked and communicated about 30 minutes with his employees (i.e., the participants) on-site with direct face-to-face contact or digitally via video call. As dependant variables, employees' physical and mental health, job satisfaction and engagement were measured by objective health measures (i.e., heart rate and heart rate variability) and self-ratings (exhaustion, engagement and job satisfaction). The experiment took about 45 minutes per participant.

**Results:** Data were analyzed by conducting mixed RM-ANOVAs. Results uncovered positive effects of staff care on employees' health and work-related attitudes. Moreover, results revealed that the effects of staff care on employees' engagement and job satisfaction were stronger, when the leader and employees were working on-site with direct face-to-face contact compared to the digital working condition.

**Limitations:** This study initially shows positive effects of staff care on employee health and work-related attitudes in a laboratory experiment. However, we cannot rule out deficits in the stability of the experimental conditions, as conversations between the leader and employees may have slightly differed from each other. Moreover, the limited time period might have been too short to uncover leadership effects which usually develop over weeks or months.

**Conclusion:** In line with previous research, the findings confirm that staff care has positive effects on employees' health and their work-related attitudes. Moreover, effects of staff care on employees

may be stronger on-site with face-to-face contact than in the digital working context. Organizations should make leaders aware of their responsibilities for their own and their followers' health, and should invest in leadership trainings specifically for staff care in digital working environments. Moreover, it seems to be important for leaders to also maintain regular face-to-face contact, so that staff care can unfold its full effectiveness.

Relevance to the congress theme: This study is the first to compare the effectiveness of health-oriented leadership in the digital working context to more 'traditional' working contexts with regular face-to-face contact. Regarding the congress theme ' Changing the world of work ', the study thus contributes to a deeper understanding of situational contingencies of health-oriented leadership in digital working environments which are likely to remain in the future. The study has important implications for leadership effects on employee health and wellbeing during the proceeding digitization.

Relevant UN SDGs: Good health and wellbeing

*Keywords: health-oriented leadership, working from home, well-being*

## Oral presentation OP620

### What do we know about entrepreneurial potential?

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science

#### Research goals

The current economic crisis and ageing population raise questions of how the entrepreneurial development in Europe can be strengthened, for example through generational change and continued entrepreneurial development.

By coining the term entrepreneurial potential (Krueger & Brazeal, 1994), a new scientific field has recently manifested itself. The knowledge developed within this field, may further our understanding of the concept and processes of entrepreneurial potential and its potential for solving imminent societal challenges. With this purpose, we review the literature on entrepreneurial potential and develop a wider theoretical model of entrepreneurial potential.

#### Theoretical background

Focusing the review on literature on developmental-competence actualization of human potential, we apply the Aristotelian distinction between potentiality and actuality (Aristotle, 2017) as a guiding, theoretical framework for the review.

#### Methodology

As the purpose of the review was to identify and understand all the relevant research traditions and approaches to entrepreneurial potential and to synthesize this into an overall theoretical model, we applied a semi-systematic review methodology (Wong et al, 2013). The literature search was performed in Scopus and Web of Science, resulting in 356 (Scopus) and 303 hits (Web of Science) using the phrase search “entrepreneurial potential”, supported by backward snowballing (Jalali & Wohlin, 2012)

#### Results

The literature review reveals that this nascent field studying entrepreneurial potential is not yet clearly outlined and delimited, neither in terms of theorization, construct definition, nor operationalization.

Theorization/ The main theoretical lenses applied in the emerging field are socialisation and/or personality theories. Using social learning theory (Bandura, 1977), social cognitive theory (Bandura, 1986), and theory of planned behavior (Ajzen, 1991), entrepreneurial potential is theorized to develop through role modelling, implicit learning, or other intangibles, often studied through a family business background (Chen et al, 1998; Wang et al, 2018; Hahn et al, 2021).

Construct/ Most publications do not define the phenomenon of entrepreneurial potential but frequently use proxy phenomena as indicators of entrepreneurial potential (Chen et al., 1998, Wang et al, 2018). Entrepreneurial potential is most commonly defined as a precursor for and preparedness to engage in entrepreneurial activities (Krueger & Brazeal, 1994; Santos et al, 2013; Veljkovic et al, 2019).

Operationalization/ Our review finds a great variety of operationalisations and approaches in the few available empirical studies (Chen et al, 1998; Hahn et al, 2021). Also the operationalisations

apply proxy-measurements, such as entrepreneurial intentions, risk-taking propensities, locus of control, personality traits, etc. Some studies seek to operationalize entrepreneurial potential as a fixed set of specific competencies (Raab et al, 2005; Santos et al, 2013), while others as more general characteristics (Krueger & Brazeal, 1994; Veljkovic et al, 2019)

Gender/ The review reveals important gender differences in the development, state, and actualization of entrepreneurial potential. Some empirical studies suggest that women need higher degrees of self-efficacy than men to engage in entrepreneurial acts (Wilson et al, 2007, 2009). Knowledge in gendered entrepreneurial potential is underrepresented.

With the purpose of synthesizing the available knowledge on entrepreneurial potential, we develop a theoretical model based on Aristoteles' broader conception of potentiality. The model will depict entrepreneurial potential as a teleological process, through which entrepreneurial potential develops (becoming/potentiality), is self-efficacious (state of being), and manifests itself (doing/actuality).

#### Limitations

The scope of the review is limited by the selection of search words and inclusion/exclusion criteria and is, as a semi-structured review, intended to explore and synthesize, rather than be exhaustive.

#### Conclusions

Mapping the literature review onto our theoretical model, we find that research is needed to offer a generally applicable definition of entrepreneurial potential, to develop and interrelate knowledge on both the potentiality and actuality, and to further the understanding of enabling and inhibiting conditions. Furthermore, specific knowledge on the development and application of female entrepreneurial potential is highly needed.

#### Relevance to Congress Theme

The paper is relevant to the congress theme, as it highlights important and emerging research on entrepreneurial potential. Entrepreneurial potential is not exclusively relevant for business start-up or take-over, but may also unfold and actualize in a wider world of work, which is defined by complexity and diversity.

#### Relevant UN SDGs

- Gender equality
- Decent work and economic growth
- Reduced inequalities

*Keywords: entrepreneurial potential, entrepreneurship, literature review*

## Oral presentation OP132

### What do Workers Want? Individual Differences in Reward Preference.

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science

Rewards have been considered vital elements of the relationship between organizations and collaborators, and they are central to the attraction, motivation, performance, and retention of key employees of the organization. However, extensive research has shown that this relationship between the reward system and the attitudes and behaviors of individuals in the work context is anything but linear and easy to predict. According to the theory of expectance, the rewards contain different instrumental values, and each individual can attribute the same reward to a different value. As such, the higher the value attributed to the given reward, the more significant effort the individual is willing to apply according to it. Therefore, the higher the value attributed by the individual to this reward, the more significant the impact of the same on their attitudes and behaviors in the work context. It is then essential to realize that characteristics lead individuals to value a specific type of reward more than others.

This investigation proposes that the preference for a given type of reward may vary depending on the psychological meaning that individuals attribute to work. For example, the work orientation construct conceptualizes different psychological meanings that individuals can attribute to professional activity. Simultaneously, it makes us know what each one seeks to draw from professional activity. The tripartite model of work orientation conceptualizes the existence of three orientations, job, career, and calling. Individuals with job orientation establish a transactional relationship with their work, only performing their tasks and waiting for their salary. Work is not an end but a means to achieve monetary rewards. Concerning career orientation, it is found that individuals work essentially motivated by career ascent but also by the ambition of recognition and status, both professional and social. Finally, individuals with a calling, almost as opposed to employment guidance, demonstrate an internal motivation for working exercise, which reflects a personal passion, and creates a predisposition to make sacrifices at various levels, including monetary and career. Given these differences, the present study proposes that work orientation may explain the different values attributed by individuals to rewards. As such, it can be crucial in explaining the inconsistencies in the relationship between reward systems and employee behavior. Thus, this study aims to verify whether people with different work orientations also value different rewards.

This study was based on the post-positivist paradigm and the hypothetical-deductive logic, using the quantitative methodology to assess the veracity of the hypotheses posed a priori. This study had 959 participants, 59.7% female, and 40.3% male, with a mean age of 40.65 years ( $SD=9.54$ ).

Regarding results, participants generally valued, in order of preference, opportunities for development and progression, intrinsic rewards, fixed financial rewards, variable financial rewards, and status symbols. Additionally, reward preferences vary depending on the work orientation, except for the fixed financial rewards that are valued by all equally regardless of their work orientation. Workers with career orientation significantly value development and progression opportunities and status symbols more than other workers. Moreover, they value fixed and variable financial rewards more than workers with calling orientation. In turn, workers with a calling orientation significantly

value intrinsic rewards more than career workers. Finally, workers with job orientation are the ones who value the most fixed financial rewards. However, contrary to what is expected, this difference is not significant, and in addition, the rewards that value the most are the intrinsic rewards.

In conclusion, work orientation contributes, even modestly, to understanding individual differences in the appreciation of rewards. This study contributes both to the literature on work orientation and rewards literature. Regarding, then, its contribution to the literature on work orientation seems to us that this study reinforces the idea that this is a relevant variable for understanding the attitudes and behaviors of individuals in the work context. Nevertheless, as we were able to determine and save better analysis, it was a pioneering study relating work orientation directly with the rewards. In addition, it also contributes to the literature with a piece of knowledge about individuals' preferences about rewards. About organizational practice, these results point to the importance of increasing the spectrums of the diversity of rewards they should make available to their employees. Additionally, reinforce the relevance of organizations investing in total reward systems and preparing them for the worker's measure. For example, within a certain fixed amount of budget and rules, employees select their rewards.

*Keywords: Rewards; Work Orientation; Calling;*

## Oral presentation OP459

### What Does it Mean to be Entrepreneurial? Factor Structure of a Facet-level Framework for Entrepreneurial Personality

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science&practice

#### Theoretical background

Entrepreneurial individuals are imperative for economic growth. Grounded in the dispositional trait theory, Ahmetoglu and Chamorro-Premuzic (2017) postulated a succinct four-factor framework for conceptualizing and measuring individual differences in entrepreneurial personality traits. This theory asserts that people vary in their tendencies and abilities to engage in critical entrepreneurial activities such as opportunity identification and exploitation, innovation, and value creation (Ahmetoglu, 2015; Shane, 2000). Its operational measure (Measure of Entrepreneurial Tendencies and Abilities, META; Ahmetoglu et al., 2011) constitutes four enduring psychological and behavioural traits labelled as Opportunism, Proactivity, Vision, and Creativity. META has provided a new framework for conceptualizing entrepreneurial traits and measuring entrepreneurial personality that is not limited to entrepreneurs (Ahmetoglu & Chamorro-Premuzic, 2017). META has been empirically validated such that it has been demonstrated to predict a wide range of critical entrepreneurial output (e.g., patents registered) and various organizational performances including engagement and job performance (e.g., Ahmetoglu et al., 2019; Akhtar & Kang, 2016; Almeida et al., 2014; Leutner et al., 2014). Nevertheless, to better identify and support entrepreneurial individuals, this paper argues that it is imperative to examine the traits that subsume under (aka “facets”) the four factors of the META framework.

The four-factor META framework has several limitations. Personality traits occur in hierarchies (Eysenck, 1990); higher-order traits (aka “factors”) are located near the top of the hierarchy subsuming more specific traits called facets. We postulate that the existing four-factor META framework holds non-trivial deficiencies that calls for the need of facets. First, higher-order traits are broader, more general, and come with less fidelity (Cronbach & Gleser, 1957). In simple terms, broad traits are like the microscope lens that has low resolution but a broad field of view, whereas narrow traits have a smaller field of view but high-resolution. The narrow lens, in relation to entrepreneurial personality, would allow us to see specific behavioural, cognitive, or affective patterns of entrepreneurial individuals with more granular details. Second, relying solely on factors may gloss over potentially important variations within the same domain (e.g., Danner et al., 2020), which means loss of information that captures individual differences in entrepreneurial personality. Third, ample evidence supports that narrow traits such as facets have stronger theoretical and empirical relationships with the criteria (e.g., Anglim & Grant, 2014; Anglim & Grant, 2016). In organizational settings, for instance, META factors may not be able to pinpoint which specific trait is a more important factor regarding innovation performance, yet facets could do so while offering in-depth explanation regarding trait-performance relationships.

#### Research goals

The research aims to extend the four-factor META framework and address the above issues by providing a facet-level META framework. Derived from literature reviews, we propose a twelve-facet META framework. This paper empirically tests its dimensionality and factorial structure, as well as its nomological validity, criterion validity, and incremental validity over several commonly researched

personality traits in entrepreneurship (i.e., entrepreneurial alertness, grit, creativity, transformational leadership).

#### Method

We ran two survey studies (N = 1471) to validate the META-facet measure - a self-report inventory that uses a five-point Likert scale. Study 1 examined the factor structure using Exploratory and Confirmatory Factor Analysis; study 2 investigated the nomological, criterion, and incremental validity of META facets in relation to the four established personality traits. Responses were collected via Prolific ([www.Prolific.co](http://www.Prolific.co)).

#### Results

We expect to complete the analyses by March 2023.

#### Limitations

Future research should incorporate experimental designs to compensate for the limitations of self-report data in this research.

#### Conclusions

This research enriches the entrepreneurship literature by focusing on specific traits in entrepreneurial competences. Organizations could benefit from this research to identify and develop entrepreneurial employees that could facilitate collaboration and improve organizations' competitiveness (Rauch et al., 2009). Entrepreneurs may benefit from improved understanding of their own entrepreneurial tendencies and develop their behaviors when engaging in entrepreneurial processes.

#### Relevance

This work is relevant to the 'decent work and economic growth' UNSDG and the congress theme. We aim to introduce an in-depth comprehensive personality framework to deliver desired changes for productive employment and new entrepreneurial ventures to promote economic growth.

*Keywords: Entrepreneurial personality, narrow traits, psychometric assessment*

## Oral presentation OP273

### **What doesn't kill us makes us stronger? The use of active trust strategies by managers and employees during challenging times**

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science&practice

#### Research goals & worth:

The aim of the present research is to extend current knowledge regarding how individuals within a manager-employee dyad actively support the development and maintenance of trust. Such insights make several worthy contributions to theory and practice, including but not limited to; offering an empirical understanding and framework of active trust strategies that can be employed across trust development and maintenance processes, and developing new theory regarding the use of active trust strategies in manager-employee trusting relationships during both routine and non routine times.

#### Theoretical background:

Seminal models of trust development depict trust to evolve over time as trustors make a judgement of trustees trustworthiness during repeated interactions (Lewicki & Bunker, 1996). Research has since disputed this passive process of trust development and points to the more intentional and agentic role individuals adopt to build trust (Möllering, 2006; Nikolova et al., 2015), however only a small body of literature has examined this idea and our understanding is curtailed. Another factor that has stalled our understanding of the intentional role individuals play in trusting relationships is the assumption that trust is maintained simply in the absence of violations (Williams & Belkin, 2016).

Notwithstanding these barriers to knowledge, some research accurately portrays trusting as an active process, akin to the concept of active trust, conceptualising trust as an ongoing accomplishment that requires continuous work by actors, even once established (Möllering, 2006, 2013). Existing research highlights certain behaviours that support active trust development (Child & Mollering, 2003; Hughes & Saunders, 2021; Six et al., 2010; Williams, 2007) and active trust maintenance (Gustafsson et al., 2020; Williams & Belkin, 2016). That said, there is a lack of continuity within this stream of literature as a consequence of varied foci in terms of both trust processes and referents. Thus current theory does not offer a clear conceptualisation of the intentional role individuals can adopt in trust processes.

#### Design:

This study adopts a qualitative method of inquiry (Van Maanen, 1998). Data is elicited from both parties in the trusting relationship via semi-structured, open-ended, in-depth, conversational interviews with 27 manager-employee dyads (54 interviews). To guide analysis, thematic analysis is applied as a methodological lens (Braun & Clarke, 2006).

#### Results:

Preliminary results support the proposition that individuals engage in active trust strategies to support the development of trust within manager-employee dyads. With regard to trust development, trustworthiness signalling, creating vulnerability, intentional supportive behaviour and identification are the recurring strategies employed in dyads that reported trusting relationships.

An interesting finding is that individuals employ different strategies to maintain trust depending on whether they are operating in routine or non routine times. In routine times, a continuation of the same behaviours seems to be important to maintain trust. Whereas when dyads face some form of non-routine, relational threat that threatens to destabilise their trusting relationship a divergence in strategies appears to be necessary to maintain trust. In such times, creating a shared understanding, negotiation and future focused problem solving , are the recurring strategies employed in dyads that report sustained trusting relationships.

#### Limitations:

The main limitation is the cross sectional nature of the research giving way to potential recall bias of participants. To address this, participants in relationships of various tenure were purposefully recruited (Lincoln & Guba, 1985).

#### Conclusions:

This research extends our empirical understanding of the concept of active trust and supports the development of new theory regarding the use of active trust strategies. Such empirical insight will also offer tangible outputs and will address a call for trust research to provide “practical, actionable insights for managers and organisations” (Dirks & de Jong, 2022, p. 23).

#### Relevance to the Congress Theme & UN SDGs:

At a macro level, the world we currently live in is an uncertain and, for many, a scary place . When we narrow our lens to consider the world of work, the same applies. Today's organisations are operating in complex landscapes, placing organisational actors in highly vulnerable positions. In such times, trust is more important than ever, particularly in relationships as crucial to organisational success as manager and employee. Although this research will focus at the micro interpersonal level, it will uncover strategies that are also applicable to the wider organisational and societal level. The findings will consequently support the UN goals of wellbeing, to which peoples' wellness at work plays an undeniably important role, and peace, justice and strong institutions.

*Keywords: Trust, active trust strategies, manager-employee dyads*

## Oral presentation OP118

### What happens to Health-oriented Leadership from leaders' and employees' perspective when working from home?

Katharina Schuebbe, Jörg Felfe & Dorothee Tautz | Helmut-Schmidt-University

science

The Covid-19 crisis provoked changes in the world of working. Both leaders and employees were forced to switch from office work to work from home (WFH). WFH has brought benefits, but also presents challenges to employees' health such as isolation or the expectation of constant availability. Previous studies have shown that leadership is an important resource for enhancing employees' health in the traditional office setting.

A leadership style that specifically focuses on employees' health is Health-oriented Leadership (HoL) (Franke et al., 2014). HoL encompasses (1) StaffCare (SC) describing the importance of employees' health for leaders (value), the perception of employees' warning signals (awareness), and leaders' active promotion of employees' health (behavior), (2) leaders' SelfCare, and (3) employees' SelfCare. Previous literature showed positive effects of SC on employees' health. However, it is unclear whether SC can be transferred to the digital work context and whether health-oriented leaders still are able to unfold their effectiveness on employees' health when not working on site and rarely meet the team in presence. Due to digital communication and the lack of direct contact, positive effects of SC might be limited. We assume that leaders less prioritize employees' health (value), as they might feel distanced by less contact. WFH might also challenge awareness through limited nonverbal communication via digital media, making it harder for leaders to recognize signs of overload. Moreover, leaders may also see fewer possibilities in their specific health-oriented behavior to influence working conditions at home, potentially leading to less action to promote employees' health.

As highlighted by Rudolph et al. (2020), less is known about contextual conditions of HoL. Following their framework model for healthy leadership, we investigated the feasibility and conditions for the feasibility and effectiveness of HoL in terms of SC when WFH from both leaders' and employees' perspective considering value, awareness, and behavior. We used a) quantitative data from a standardized survey with  $n = 18$  employees and  $n = 23$  leaders. Participants worked at least one day per week from home. To assess SC, we used items from the HoL instrument by Pundt and Felfe (2017). Employees were asked to rate their leaders' SC and leaders rated their own SC from a self-perspective. Both groups rated SC for the traditional work setting (office) and when WFH on a five-point likert scale from 1 (not at all) to 5 (completely true). Mean scores of the sub facets of SC were calculated and values for office and WFH were compared. Furthermore, we assessed b) qualitative data with semi-structured interviews in these both groups. After the general assessment of SC for office and WFH, they were asked to explain their ratings and elaborate on potential differences of SC when working in the office and when WFH. Interviews were analyzed and interpreted using qualitative content analysis after Mayring (2022).

Results of the quantitative data showed that SC was rated lower when WFH than for the office, both from leaders' and employees' perspective. Only in SC behavior no substantial differences were found from employees' perspective. Qualitative data showed that leaders feel less responsible (value) for employees' health due to limited control over their work environment, and instead ask for more individual initiative. Both leaders and employees experienced reduced communication and interaction during WFH, leading to less SC awareness. In addition, leaders find that digital

conversations are lacking in trust and prefer face-to-face interactions to detect early warning signals. From both perspectives, leaders display less health-promoting behavior when WFH compared to the office. Leaders feel limited in their ability to positively impact employees' health during WFH.

Our study provides several strengths and limitations. A strength is the use of a mixed methods approach and collection of quantitative and qualitative data to gain a comprehensive understanding of HoL SC when WFH. The interviewed leaders and employees did not work together in dyads, we therefore could not match the data. It would be interesting to compare the perceptions of leaders with the perceptions of their direct employees.

Our study contributes to the congress theme “The Future is Now: the changing world of work” and to the UN SDG “Good health and well-being”, as our research was novel in exploring specific challenges for leaders regarding the feasibility of HoL SC during WFH and understanding the underlying mechanisms. WFH immensely increased due to the Covid-19 crisis and is going to remain a part of the future world of work. Therefore, challenges for HoL as well as potential recommendations and practical implications for leaders and HR practitioners need to be addressed.

*Keywords: Health-oriented Leadership (HoL), working from home (WFH), leaders' and employees' perspective*

## Oral presentation OP675

### **What I do not know does not exist. The challenge of digitalization for the inclusive employment of people with intellectual disability**

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science

In recent decades, a change in focus began in the area of disability. It goes on to put the person first, instead of the disability. Disability is associated with the person but within a specific environment. This change indicates that interventions must be directed at the environment. From this perspective, it is understood that if a supportive environment is generated, social inclusion improves, given that if there is support in the environment, it is easier to participate in it. Based on the self-determination theory, it is reasonable to expect that supportive environments promoting self-determination will improve autonomy and well-being.

Although this was crucial progress, it was not enough to achieve the inclusion of people with intellectual disabilities (people with limited intellectual and adaptive functioning originating before the age of 18, Shallock et al, 2010). If there are supports that make it easier to do things even if you have an intellectual disability, but you don't have the opportunity to do it in "natural" environments, the objective of social inclusion is not fully achieved. Digitalization is a new challenge that can limit or facilitate the social inclusion of people with intellectual disabilities in regular workplaces (an important natural environment).

This paper analyzed the challenges of digitalization for the employment of people with intellectual disabilities in ordinary organizations. The types of work carried out by people with disabilities in ordinary organizations may be affected by digitization, so that tasks they carried out may be performed by artificial systems, given that they carry out low-skilled manual activities. The challenge is to achieve a technological transition that respects the inclusion of people with intellectual disabilities into the world of work. It is necessary to prevent a setback from occurring in social inclusion, preventing the creation of a digitalization process that separates people with intellectual disabilities from regular workplaces.

This work was based on the semi-structured interview methodology with triangulation of informants, which allows us to analyze the information by combining the perspectives of different types of participants. Three technology experts linked to the intellectual disability sector, three people with intellectual disabilities who were working in ordinary organizations and three team supervisors were interviewed. It was based on a script of questions that addresses the fundamental questions of analysis: tasks performed by people with ID in ordinary organizations, use of technologies, skills that this people will be required in the future in a context of change technology, technology opportunities, and supports for the worker with ID.

With the information obtained from the interviews, a content analysis was carried out (Burnard et al., 2008; Tuthill et al., 2020). For this, the transcription of the interviews was carried out. Subsequently, it was coded identifying the different swallowed aspects. From that base, another different researcher carried out an independent analysis having to reach an agreement with the initial one, resulting in a list of codes that integrate to arrive at a reduced list of manageable sub-categories. Finally, the final categories were discussed, making the adjustments and illustrating them with significant phrases from each category.

The results provided with information that allows the design of professional profiles for people with ID in which non-routine tasks and high social interaction that are difficult to automate are considered. It is also considered that technology can act as a facilitator. Finally, it will be important throughout the redesign process not to forget the objective of the autonomy of the person with an intellectual disability as a priority objective.

One of the most effective ways of achieving social inclusion for people with ID is through employment in ordinary organizations, but the difficulties remain. Due to its own characteristics, the work carried out by people with ID in ordinary organizations can be particularly affected by digitalization. The future of work, as well as its effects, will depend on the choices that we humans make. An important challenge is to achieve a technological transition that avoids the exclusion of people with intellectual disabilities. The present work supposes an advance in this sense from a socio-technical approach (e.g., Walker et al, 2008), contributing to the knowledge of the satisfactory and viable relationship between technology linked to digitalization and inclusive employment.

The theme of the congress is included in the objectives of this work. Dealing with digitalization represents an opportunity for people with intellectual disabilities. If we seek a society where the full social inclusion of this group is a reality, our look must change, and with it the strategies linked to their incorporation in natural environments.

*Keywords: People with intellectual disabilities, Digitalization, inclusive employment*

## Oral presentation OP594

### **What inhibits successful job mobility? The hiring bias towards applicants with atypical work experience.**

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science&practice

The Covid-19 pandemic has strengthened the need for cross-occupational job mobility. Due to the digital automation accelerated by this pandemic, it is estimated that up to 25 percent of the people worldwide will need to switch occupations by 2030 (McKinsey, 2021). In addition, the pandemic triggered people to reflect on their career, resulting in many people desiring an occupational change since the pandemic (The Brussels Times, 2021). However, realizing this wanted and much-needed increase in job mobility is highly challenging, since organizations tend to avoid hiring “atypical” profiles - such as job seekers who lack industry or occupational experience (Wechtler et al., 2021), although many organizations face an increase in vacancies and are struggling to find personnel (McKinsey, 2022). This continued focus among hiring professionals on the ‘right’ occupational and industry expertise is surprising since research has shown that pre-hire experience is of little value in predicting subsequent job performance (e.g., Van Iddekinge et al., 2019). Despite the necessity for organizations to (at least occasionally) hire people with atypical work experience, current academic efforts so far have failed to uncover why such hiring bias towards atypical candidates still occurs and when it is more likely to happen.

#### Research Aim and Theory

This research aims to address these questions by examining which inertial forces (Verbruggen & De Vos, 2020) underlie the hiring decision process among HR selection professionals and by exploring factors that could strengthen or weaken these inertial forces. To this end, we build on the inaction theory (Verbruggen & De Vos, 2020).

#### Methodology

This research consists of two steps. Firstly, we conducted 11 inductive interviews in Fall 2022 with hiring professionals in China and Belgium to explore their hiring decision process towards job applicants with atypical work experience. During the interviews, interviewees shared their own recruiting experience with atypical candidates and evaluated four manipulated resumes. Next, we intend to conduct experimental vignette studies in Winter 2022/2023 to examine the effects of inertial forces and the moderating factors drawn from the exploratory interviews on the hiring likelihood of atypical candidates. Vignette studies are a powerful tool for causal investigations of respondent judgements (Aguinis & Bradley, 2014).

#### Results

Based on the inductive interviews, we have identified several inertial forces that may inhibit employers from hiring candidates with atypical work experience. For instance, recruiters were often reluctant to hire strong atypical candidates out of fear due to uncertainty and risk (e.g., ‘We will face enormous uncertainty on if she is capable of or adapted to taking such huge responsibility although I admit she is potential for this position. We will bear the loss and I have to take accountability if she makes mistakes or quits in the early stage...’). In addition, we also found some factors that could influence the strength of the inertial forces and, thereby, affect the likelihood of hiring atypical candidates – such as whether the new hire would work in a team or alone and how the relationship

was between hiring professionals and line managers (trustworthy partner/operational sourcer). Also the time perspective (i.e., focus on immediate fit versus focus on long-term potential) had an impact.

#### Limitation

One concern of experiments is the low external validity. We, therefore, plan to conduct a large-scale field study in Fall 2023.

#### Conclusions

By uncovering why hiring bias towards atypical candidates occurs and when it is more likely to happen, this research could extend our knowledge of personnel selection. Practically, understanding this bias better and designing interventions based on the factors that could lower the inertial forces among hiring professionals are of critical importance since more openness toward candidates with an atypical profile is considered as one of the key ways to address the increasing workforce shortage in organizations and the needed labor mobility in the society.

#### Relevance to the Congress Theme

Most organizations today focus on the short-term person-job fit with an overrated attention on applicants' skills and work experience, while the skills and experience that are useful for today's tasks may not be applicable for the jobs in the future. Thus, our research proposes a new perspective to understand the person-organization fit in the long-run, which could help employers establish a more sustainable personnel selection process to hire the potential ones for tomorrow – and help people achieve a smooth occupational transition.

#### Relevant UN SDGs

By helping increase the openness towards people with atypical work experience in the hiring practice, this project will benefit the problem of workforce shortage in organizations and the unemployment issue in the society, which could contribute to a sustainable economic growth.

*Keywords: hiring bias, occupational transition, labor mobility*

## Oral presentation OP263

### **What is the meaning of paid work for the wellbeing of autistic adults? A focus group study comparing views between people with and without paid work**

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science&practice

What is the meaning of paid employment for the wellbeing of autistic adults? A focus group study on differences and similarities in views between autistic adults with and without paid employment.

#### Research goals and theoretical background

Worldwide, employment rates of people with autism are poor, which is problematic. In the prevailing medical model, the condition was seen as the primary reason for work disability, and consequently, the role of the work environment, strengths, talents and values of the (potential) worker were overlooked. In the current study, the meaning of competitive employment for wellbeing of autistic adults with and without paid work was evaluated. Research questions were: (1) What is the meaning/value of paid employment for autistic adults' wellbeing?; (2) What are differences and similarities between autistic adults with and without paid employment, in what having paid employment means for their wellbeing?

#### Methods

A total of 8 focus groups were conducted, including a total of 64 participants: 4 groups with and 4 groups without paid employment. All meetings were transcribed verbatim and analyzed separately for the groups with and without employment, using ATLAS.ti 9.

#### Results

In both the groups with and without employment, participants viewed having paid employment as highly important for their wellbeing, and the results showed more similarities than differences between the groups. Regarding the meaning of paid employment for wellbeing, three main themes were found from the data. The first theme was: Paid employment provides a variety of major benefits for wellbeing, with subthemes: 'purpose', 'social contacts', 'growth and use of talents', 'structure and calmness' and 'income and freedom'. The second theme was: Not having paid employment was associated with lacking societal recognition, and low self-esteem. This major theme was addressed in both groups but especially emerged from the group without paid employment and was not just the opposite of the first theme. Here, participants often reported to feel guilty, ashamed, socially excluded by society, and this was associated with feelings of low self-esteem and low self-worth, even if they had voluntary work. Moreover, participants receiving disability benefits talked about the 'benefits trap' they found themselves in, referring to being glad their current financial stress had been solved, but fear of losing those benefits also stood in the way of their wishes for future re-employment. The third theme was: (3) Work can seriously damage health and wellbeing. Both groups emphasized that work can be very damaging to health, and in both groups many participants had experienced burnouts. In the groups without employment, the severe health damage resulting from previous negative employment experiences sometimes was reported as a reason why participants did not envision themselves ever working again, although even then they often could still talk about the positive sides of employment and elaborate on what their ideal job would look like.

## Limitations

The study is exploratory, for which reason no causal relationships can be established. Moreover, the study included participants in the two types of groups based on actual employment status, not taking into account factors like previous employment duration or employment success. Also, the study population was relatively highly educated.

## Conclusions

In conclusion, the findings from both groups strongly highlight the importance of paid employment for the wellbeing of autistic adults. Not only did paid employment show many benefits for wellbeing, the absence of paid work made participants feel socially excluded, looked down upon by society and ashamed. However, most participants agreed that competitive work can be harmful to health and wellbeing. Future research should focus on how to improve employment success for autistic adults, how to lower their life and occupational stress levels and to prevent autistic burnout, and on how healthy jobs can be created where autistic adults get positive energy and increased wellbeing.

Relevance for congress theme and UN SDGs With current shortages in workers, it is essential workplaces become more inclusive. Many autistic adults want to have paid employment and have their individual talents, but work should not be harmful to their health. This study aligns with the UN SDG's 'No poverty', 'Good health and well-being', and 'Reduced inequalities'.

*Keywords: autism, meaning of work, wellbeing*

## Oral presentation OP471

### What makes coaching work? A longitudinal process study into the active ingredients of coaching

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Research goals and why the work was worth doing

The aim of this study is to examine the psychological mechanisms underlying successful coaching. With growing attention to individual well-being and thriving in the past two decades, professional coaching has become a popular intervention at both the workplace and the private domain. While the benefits of professional coaching for both well-being and functioning have been demonstrated in various settings, little is known about how and under which circumstances these positive coaching outcomes are attained. Unraveling the factors that make coaching work will inform both theory and practice of coaching.

Theoretical background

Research on the effects of coaching supports its popularity: studies have repeatedly demonstrated the positive effects of coaching on both well-being and performance outcomes. Yet, little is known about the coaching process itself: 'what is actually happening in the session, what coach and client do in the coaching interaction', and the process factors that help or hinder successful coaching.

In this longitudinal study, we aim to investigate important process factors that facilitate positive coaching outcomes. Specifically, we are interested in the techniques and methods that coaches are using, that is specific coach behaviors, such as stimulating self-reflection, showing empathy, or promoting active coping behavior, that might facilitate positive client change (e.g., increased self-awareness, goal attainment, improved well-being). Additionally, we are taking into account 'classic' process factors of coaching, such as the working alliance, and trust between coach and client. In linking these process factors to coaching outcomes, this study can provide important input into the 'active ingredients' of coaching to both coaching researchers and practitioners.

Design/Methodology/Approach/Intervention

Participants in this study will be following a 10-month long coaching intervention that consists of 6 individual face-to-face coaching sessions with a professional coach. The coaching program is voluntary and offered to medical specialists and residents from several hospitals in the Netherlands. Based on the Job Demands – Resources Model, we assess job demands (e.g., workload), job resources (e.g., social support), and personal resources (i.e., psychological capital), as well as burnout and work engagement before the intervention (T1), shortly after the intervention (T3), and at 6-month follow-up (T4). Coaching behaviors will be assessed after coaching is finished (T3). Additionally, we measure process variables of coaching (e.g., working alliance) at both the client- and the coach-level halfway through coaching (i.e., T2; after the 3<sup>rd</sup> coaching session).

Results obtained or expected

Given the hierarchical structure of our data (i.e., observations nested in clients (1), and clients nested within coaches (2)), we will use a multilevel approach to analyze our data. We expect that positive coaching outcomes (at T3 and T4) will be impacted by specific coach behaviors (i.e., the

techniques/behaviors that the coach is showing during coaching). More so, we expect that positive coaching outcomes will be influenced by classic process factors, such as the quality of the working alliance between coach and client. The results of these analyses are expected in winter 2022.

#### Limitations

Our study will be limited by issues relating to missing data points and drop out. Another limitation is that we cannot capture the coaching process in all its complexity but that we need to resort to self-reports of clients and coaches to characterize the coaching process.

#### Conclusions - Research/Practical Implications

From a theoretical perspective, this study will provide insight into the 'active ingredients' of coaching, helping to provide a richer scientific foundation to the practice of coaching. Second, understanding the coaching process – how it unfolds over time in presence or absence of relevant process factors – can inform coaching practitioners about their own share in generating coaching success, and how to intervene in their coaching practice.

#### Relevance to the Congress Theme

This study can provide evidence about understudied coach- and client process factors that play a key role in successful coaching. It will also shed light on the relevance of process factors that have been argued to be decisive for coaching success (e.g., the working alliance), yet have rarely been empirically examined. With coaching being a popular change methodology at the workplace across professions, this study helps to uncover how successful coaching can be promoted, and as such, how people can best be supported in 'the changing world of work'.

#### Relevant UN SDGs

Coaching is used to promote employee well-being, personal growth, and development. As such, this research is clearly linked to the UN SDG of 'good health and wellbeing'.

*Keywords: coaching; professional development; self-development*

## Oral presentation OP528

### What makes nurses flourish at work? Intrinsic motivation in the Job Demands-Resource model

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Research goals and why the work was worth doing

This study was designed to deepen our understanding of the boundary conditions and underlying processes by which characteristics present in the clinical environment influence nurses' well-being.

Theoretical background

A large body of evidence supports the stress as well as motivational process as postulated in the JD-R model, however, the processes underlying the stressor-resource-strain relationship remain rather understudied. It has been argued that not all employees perceive job demands and resources in the same way and that this is mainly influenced by their personal resources (Sonnentag & Frese, 2012). In the present study we posit that intrinsic motivation functions as personal resource as it is believed to influence the way in which employees allocate and balance their resources (Kanfer et al., 2017). Drawing on the postulates of SDT (Ryan & Deci, 2000), the aim was to investigate the mediating role of intrinsic motivation in the JD-R model (Demerouti et al., 2001). To validate and extend existing research on the JD-R and earlier job stress models such as Karasek's JDC model (Karasek, 1979), we further examined if job resources moderate the relationship of job demands with a) intrinsic motivation (activation hypothesis) and b) burnout (strain hypothesis).

Methodology

This study used a cross-sectional data set of direct care nurses (n=1729) from general acute care hospitals (n = 14) in Belgium. The data collection took place by means of online questionnaires between October 2020 and July 2021. The level of data collection, theory and statistical analysis is at the individual level. In a first step, CFA was conducted. Second, mediation and moderation analyses by means of SEM were computed, using Mplus software. Job characteristics included a set of different job demands and job resources (Dallner et al., 2000; Van Veldhoven et al., 2002). Intrinsic motivation was measured with the Work Extrinsic and Intrinsic Motivation Scale (WEIMS, 3-items; Tremblay et al., 2009). Work engagement was assessed using the 3-item version of the Utrecht Work Engagement Scale (UWES, Schaufeli et al., 2019). To measure burnout, a short version (12-items) of the Burnout Assessment Tool (BAT), a novel self-report questionnaire, was used (Schaufeli et al., 2020).

Preliminary Results

Job resources appeared to be a crucial factor for nurses' health as they influence their work motivation ( $\beta = .513$ ), engagement ( $\beta = .462$ ) but also their feelings of burnout ( $\beta = -.216$ ). Job demands remained an essential factor that harms psychological health, increasing burnout ( $\beta = .489$ ). Our results confirmed that job resources – via intrinsic motivation – led to increased work engagement ( $\beta = .170$ ) and decreased burnout ( $\beta = -.135$ ). In addition, job resources moderated the relationship of job demands with burnout ( $\beta = -.039$ ). In line with the strain hypothesis, low job

resources exacerbated the adverse impact of high demands on burnout. Against our expectations, we found no associations between job demands and intrinsic motivation nor a moderation effect of job resources on the respective relationship (activation hypothesis).

#### Limitations

First, due to its cross-sectional nature of our research, we are unable to determine any causal connections between the measures included in the study. Second, by focusing on registered nurses working in general acute care hospitals in Belgium, we put a narrow focus on culture and professional field in our study. This represents a limitation on the generalization of our findings. Third, concepts measured in this study were obtained through self-reports. As such, the strength of the effects reported here may have been biased due to common-method variance.

#### Implications

The clinical environment can be a source of significant stress which may put nurses' health at severe risk. On the other hand, it can also be a place where they experience joy, pleasure and fulfilment, promoting their motivation and engagement. Specifically, our findings indicate that nurses who perceive sufficient job resources such as feedback, autonomy and opportunities for growth and development, are likely to feel intrinsically motivated at work which seem to be beneficial in two ways: first, it will foster their work engagement and second, it will prevent them from burning out.

#### Originality/Value

The study contributes to research on nurses' well-being by uncovering the processes of how work motivation acts on employee functioning and the role it plays in both the motivational and energetic processes of the JD-R. Another originality of this study lies in its focus on both, the strain and activation hypothesis (as postulated by earlier stress models) in relation to burnout and work motivation.

#### Relevance to the Congress Theme

In order to sustain a healthy workforce and to meet challenging demands also in the future, hospitals need to create work conditions that promote workers' work motivation and well-being while preventing burnout.

*Keywords: Health Professionals, Wellbeing, Mental Health*

## Oral presentation OP523

### What matters more for daily well- and ill-being? The dual pathways of daily need satisfaction and frustration

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Research goals, value add, and theoretical background

The self-determination theory denotes that employees' basic psychological needs should be fulfilled for employees to experience optimal growth and functioning. However, these needs may also be thwarted, often resulting in less favourable outcomes such as ill-being. Positive effects result from the 'bright pathway' initiated by need satisfaction, whereas adverse outcomes result from the 'dark pathway' initiated by need frustration. The former pathway includes need satisfaction being associated with more optimal forms of motivation (and consequently optimal functioning), whereas the latter pathway includes need frustration being associated with less optimal forms of motivation. The needs are also context-responsive; therefore, it can be argued that they (and their mechanisms and outcomes) vary daily. Although need satisfaction has been widely researched, need frustration has been less explored.

Furthermore, these pathways (or mechanisms) are more often investigated on the between-person level rather than on the within-person level. These shortcomings are unfortunate as it leaves several questions unanswered. Does need satisfaction lead to positive outcomes but not to adverse outcomes? Is the opposite then true for need frustration? Or are both need satisfaction and frustration related to positive and negative outcomes but differ in strength? To answer these questions, this study aimed to understand the dual pathways (to well- and ill-being) of daily need satisfaction and frustration through the different motivational regulations. We also aimed to compare the strength of the indirect effects; that is if daily need satisfaction relates more strongly to positive outcomes than need frustration and if need frustration is more strongly associated with adverse outcomes.

Design/Methodology

An intensive longitudinal quantitative research design with a multilevel approach was used. Employees in small and medium enterprises were asked to complete daily surveys for ten working days ( $N = 68 / n = 557$ ). Data were analysed using multilevel structural equation modelling.

Results

The results revealed that both daily need satisfaction and frustration had an indirect influence on work engagement and exhaustion via intrinsic motivation. At the same time, the other motivational regulations did not play a mediating role. However, daily need satisfaction's indirect effect on work engagement was more substantial than need frustration. Similarly, daily need frustration's path to exhaustion via intrinsic motivation was more substantial than need satisfaction.

Limitations

First, the study's design did not allow for causal inferences to be drawn, as there was no temporal separation of the variables. Second, the study relied on self-report measures, which may raise

questions about measurement bias. Last, daily basic psychological need satisfaction and frustration were aggregated to reduce the number of items participants had to respond to.

#### Conclusion

These findings suggest that daily need satisfaction and frustration relate differently to the same outcomes, but that need satisfaction plays a more significant role in enhancing positive outcomes, whereas need frustration plays a more substantial role in improving adverse outcomes. The implications of this are that management can benefit from actively making efforts to support employees' daily needs and reduce their daily need frustration. Theoretically, it is important that researchers include both need satisfaction and frustration to account for the dual pathways to employee outcomes. It is also important to investigate the relationships on a within-person level as results differ from those on the between-person.

#### Relevance for the congress

Employee motivation and well-being, especially in under-resourced small business, remains a relevant topic in the changing world of work and in recovering economies.

*Keywords: motivation, diary study, self-determination theory*

## Oral presentation OP447

### What psychological mechanisms can explain the link between episodic interpersonal conflict at work and diurnal cortisol patterns? A diary study

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science&practice

**Research goals.** Research has disregarded how episodes of conflict at work alter daily temporal fluctuations of physiological strain states. Shedding light into how employees physiologically react to daily social stressors is nonetheless vital to formulate measures that prevent employees' psychophysical malaise in response to common daily stressors. This study examines how within-person episodic changes in response to interpersonal conflicts can affect daily patterns of negative affect and then daily diurnal cortisol patterns, namely biological indicators of strain states. Precisely, this study investigates how interpersonal conflict at work may impact three indices of cortisol: cortisol awakening responses (CAR; the rise in cortisol shortly after awakening, which is optimal when moderate), overall cortisol output (AUC; total cortisol produced across the day, which is optimal when low or moderate) and diurnal cortisol slopes (DCS; the decline in cortisol across the day, which is optimal when low and steep).

**Theoretical background.** Cortisol follows a diurnal rhythm, with a healthy diurnal rhythm that peaks within an hour of awakening and slowly decreases across the day. Literature shows that acute social stressors impact the diurnal cortisol rhythm, and lead to flattened cortisol slopes (Shrout et al., 2022), greater AUC (Zeiders et al., 2018), and altered CAR (Armstrong-Carter et al., 2021). By altering the cortisol cycle, conflict-related stress may compromise immune function, ultimately raising morbidity risks (Adam et al., 2017). Most studies linking cortisol parameters to conflict occurrence have been conducted in romantic couples, clinical or adolescent samples, and laboratory settings. Instead, the few studies on strain reactions using real-life stressor events have focused on work-family conflict, showing that workers have greater dysregulation in their DCS on days when they experience high work-family conflict (Almeida et al., 2016), or react differently to conflict, especially in terms of affective response (French & Allen, 2019). However, these studies did not consider naturally occurring conflicts, such as daily conflict at work. This suggests the importance of using "in vivo" methodologies for investigating the psychobiological correlates of real work conflicts. In this regard, prior diary studies on negative emotions suggest a link between the experience of a conflict at work and a subsequent rise in workers' negative emotions. Thus, one may wonder if it is the mere conflict occurrence to compromise the workers' cortisol cycle, or if the subsequent lasting and momentary alterations in resulting negative emotions play any relevant roles.

**Design.** Intensive longitudinal data were collected on 162 workers during two consecutive workdays. Research participants provided momentary reports on interpersonal conflict at work and negative affect, ten times a day for two days, and saliva samples five times a day.

**Results .** The results of latent growth curve piecewise multilevel models revealed associations between episodic interpersonal conflict at work, negative affect, and diurnal cortisol patterns. The simple occurrence of a conflict at work introduced significant variations in cortisol indices except for CAR. Indices of negative emotion dynamics predicted DCS and AUCg, controlling for conflict occurrence and other relevant covariates.

**Limitations.** Unmeasured moderating variables might intervene in the analysed link.

Conclusions. By integrating a daily diary design with multiple objective measures of strain, this study answers the call for investigating more short-term effects of social stressors and overcomes methodological issues related to self-report. In doing so, this study moves a step forward in the stress and conflict literature, as it is the first to identify day-to-day within-person fluctuations in negative affect as dynamic psychological mechanisms connecting episodic interpersonal conflict at work and daily cortisol patterns. Thus, this research clarifies “what happens” as conflict episodes unfold in real-time and real-life work settings. Thus, our findings suggest that companies could provide their staff with training on effective conflict management skills, and emotion regulation strategies. Companies could also consider introducing conflict resolution measures and psychological support services to support staff.

Relevance to the Congress Theme. This study extends the well-being topic by establishing a firm link between episodic interpersonal conflict at work and daily patterns of AUC and disclosing the psychological mechanisms through which this occurs.

Relevant UN SDGs . Good health and well-being.

Audience. Both practitioners and academics

*Keywords: interpersonal conflict, negative emotions, cortisol*

## Oral presentation OP411

### What the press reveals about the unemployed : a lexicometric analysis of 12 996 articles from the French written newspapers from 2005 to 2022

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science

Why the work was worth doing : Unemployed people are perceived in a very negative way (Norlander et al., 2020; Seghouat et al., 2021). This harmful stereotype and the associated stigma has four main consequences for the unemployed, who:

Are discriminated against in access to employment (Kroft et al., 2013), depending on the length of time spent unemployed (Ghayad, 2013) ;

Exhibit poorer social inclusion, self-esteem and psychological well-being (Bourguignon et al., 2022; Brand, 2015; Wanberg, 2012) ;

Experience a deterioration of their physical and mental health, in part due to the effects of stigmatization (Andler et al., 2020; McKee-Ryan et al., 2005; Paul & Moser, 2009) ;

Do not take-up their unemployment insurance for 1 in every 3 eligible people in France (Hentzgen et al., 2022);

Research goals : Considering these effects, it is therefore crucial to better understand the origin and the nature of the stereotypes about the unemployed . We investigate their coverage in the French press by analyzing 12 929 articles published from 2005 to 2022.

Theoretical background : Three major ways of analysing media production are agenda-setting and news framing (Scheufele & Tewksbury, 2007).

Agenda-setting refers to the capacity of newspapers, newsrooms, political parties or public figures to determine which topic is newsworthy;

Framing, or the way a piece of information is presented, has consequences for the understanding of that information and then for the behaviours that result from it;

Priming states that it is easier for a person to process a target-word if it is presented after a related prime. For this study, the used words in a news article can be thought of as cognitive associations between targets and primers;

Methodology : We use the "Reinert" unsupervised exploratory lexicometric method, which enables themes or frames to emerge from the data by statistically studying the co-occurrences of full words in a text (Ratinaud, 2014, 2018; Reinert, 1990). The analysis is based on a series of bi-partitions using a top-down hierarchical classification and uncovers classes that are the most specific in terms of their vocabulary, yet the most distinct from each other. Each class groups together associated text segments, reflecting the framings that structure our corpus (see Masciantonio et al., 2021; Ratinaud, 2018; and Schonhardt-Bailey, 2005, for an in-depth description of the method).

Results : The first of our findings concerns the lack of visibility of the unemployed in the media treatment, representing 0.027% of the published articles over the studied period (compared to 1.78% for football ).

Then, our work classifies 97.36% of our data into 6 frames :

The administrative and economic accounting of unemployment and the unemployed (18.8%) ;

Political visions and treatments of unemployment and the unemployed, debates on ideas and policies to be pursued (17.6 %) ;

The implementation of these political visions through legislation and decrees (17.9 %) ;

Territorial and associative support for the unemployed, territorial application of policies (23.6%) ;

Being unemployed: living, talking about and suffering from the experience of unemployment (15.5%) ;

Collective actions, associations and demonstrations by the unemployed (6.7%) ;

The newspapers coverage of the unemployed reflects their very low visibility, from which they are largely absent. The unemployed are hardly ever put on the agenda, if not mostly as a statistical and political issue rather than as people and experiences. This low visibility of their feelings, stories and visions could reflect a lack of empathy that is typical of people whose stigma is considered controllable (Decety et al., 2010; Weiner et al., 1988).

This invisibility can "be coupled, for the individual and collective actors who are victims of it, with a feeling of social inexistence, of contempt and negation of their very existence (Voirol, 2005, p. 117).

Limitations : The first limitation is our method, as other methods could nuance and complete our work. The second limitation is that we had to start our analysis on the 26th of October 2005, which left out several previous years of the newspapers coverage of the unemployed.

Conclusions and implications : To conclude, the unemployed carry a highly toxic social identity, with numerous consequences for their social and professional integration, psychological well-being and physical and mental health. A better understanding of the stereotype of the unemployed and its spread in the media allows for a better understanding of the channels through which the unemployed are exposed to this stereotype.

Relevance to the Congress Theme : The view of the unemployed, and its toxic and deleterious consequences, leads to a set of highly negative consequences for them and for society at large. This stigma needs to change in order to build a more inclusive future for the 13 million unemployed in the European Union (EuroStat, 2022).

*Keywords: Stereotypes, Stigma, Political communication*

## Oral presentation OP255

### What Works When You Work From Home: The Preferences of Employees On Working from Home

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science&practice

#### Research goals

The research examines to what extent the conditions of the work-from-home set up of the employee affect her preferences around working from home (WFH). Additionally the self-reported quality of work when working from home was examined. The factors taken into account include having a dedicated desk, work chair, high speed internet, private space for work, as well as demographic factors including gender and presence of children under the age of 18 in the household. The research provides an increased understanding on ways to optimise hybrid working schedules to cater to both the employee preference as well as maximise the quality of work produced. The results point at ways that organisations can reassess their approach to supporting employees in hybrid work.

#### Theoretical background

The restrictions associated with the Covid-19 pandemic have contributed to the creation of the idea of a “new normal” way of working (Bonacini et al., 2021). As restrictions lifted, companies began to consider the impact on WFH on their businesses (Fayard et al., 2021). Organisations are now increasing their plans for remote hiring going forward (Ozimek, 2020).

Several studies point to the relationship between office-like workstations at home and productivity (Karakolis & Callaghan, 2014; David et al., 2020). An important aspect of working from home is internet connection, as for many working remotely involves being in regular communication with their team and using internet as part of the job (Anandarajan et al., 2000).

The presence of children at home is a significant factor that influences the life-work balance of the employee (European Foundation for the Improvement of Living and Working Conditions, 2012). The findings by Powell and Craig (2015) indicate that women are more likely to work from home on a given day than men, and that the time fragmentation and scheduling also differ significantly by gender.

#### Data

The data which lies at the foundation of the analysis has been collected by the Malta Business Bureau. It relates to the period of time when the first round of coronavirus restrictions in Malta has been lifted. The survey asked employees to reflect on working from home during this time across a range of topics. The raw dataset has the survey results for 347 respondents who include employees and business owners in Malta.

#### Research Methodology:

Linear and ordinal logistic regressions are run, with the number of WFH hours the employee would like to have relative to their current number of WFH hours and self-reported quality of work as dependent variables respectively.

#### Results

The results were surprising in that the majority of WFH set up factors including high-speed internet, dedicated desk and chair were not significant in the regressions. However, demographic variables such as gender and the presence of children under the age of 18 in the household were highly significant (to 1%) in both the linear and ordinal logistic regressions. The interaction variable created for employees of different genders and different number of children at home also showed informative coefficient values: the direction of the coefficient changes based on whether the employee identified as male or female, and the size of the coefficient changes to reflect the different number of children present in the household.

The study contributes to the Future of Work literature and can provide new avenues of thinking to organisations looking to implement hybrid working models on aspects of working from home that are of particular importance to employees.

#### Limitations

The main limitation of the study is the Malta-based dataset which might have limited external validity depending on other geographies in question. The size of the dataset also does not allow to capture convincingly large subsets for each of the interaction variable values.

#### Conclusions

The results of the analysis are novel and informative both within academia and industry. The impact of factors on employees' preferences around WFH are to date underresearched making the insights from the research highly valuable. It is highly advisable that practitioners take into account the findings of this study as they make decisions around hybrid working arrangements. In particular, the limited role of factors such as providing workstation hardware can lead to cost savings for organisations. The difference in preferences between men and women in the organisations should be emphasised, with additional childcare facilities provision one of the suggestions the authors would like to put forward.

#### Relevance to the Congress Theme

The world of work is changing, and we believe that our research brings insights to the new emerging ways of working, hybrid working and WFH in particular.

#### Relevant UN SDGs

The two main sustainable developments goals addressed by this research are Good Health and Wellbeing, and Gender Equality.

*Keywords: hybrid working, work from home, gender*

## Oral presentation OP742

### When and why employees who experience family-to-work conflict are ostracized at work?

Paulina Idziak & Małgorzata Gamian-Wilk | SWPS University of Social Sciences and Humanity; Cong Liu, Department of Psychology, Hofstra University; Amanda Staniszevska-Celer, SWPS University of Social Sciences and Humanity

science

**Research goals:** The present series of studies examines the relationship between family-supportive supervision and family-to-work conflict as potential sources of workplace ostracism. The purpose of the present research was to identify reasons of ostracising co-workers who experienced family-to-work conflicts.

**Theoretical background:** Workplace ostracism, that is a failure to engage another when it is socially appropriate to do so (Robinson et al., 2013), is a damaging process connected with severe individual and organizational costs (Gamian-Wilk & Madeja-Bien, 2019; Howard et al., 2020; Liu & Ma, 2021 for review). One of the streams of research on workplace ostracism concentrates on workplace ostracism antecedents (environmental factors, e.g., Ferris et al., 2016; Howard et al., 2020). The present research focuses on lack of family-supportive supervision (FSS, the perception of the degree to which employees consider their supervisors as supportive of their family role demands, Kossek et al., 2007; 2011) and experiencing family-to-work conflict as potential ostracism antecedents. Our previous findings indicated that the lack of family-supportive supervision occurred not to be linked with being excluded or rejected six or twelve weeks later. Additionally, the family-to-work conflict mediated the relationship between the lack of family-supportive supervision and workplace ostracism (Gamian-Wilk et al., 2022). In the present research we examined possible reasons why employees who experience family-to-work conflict are ostracised at work. We considered negative perceptions as mediators in the relationship between the lack of family supportive supervision, experiencing family-to-work conflict and being ostracised. Co-workers may attribute procrastination and laziness to employees suffering from family duties overload and strains.

**Methodology:** A series of three experimental studies (N1=295, N2=232, N3=420) in a 2 (a scenario of a target having vs not having FSS at work) × 2 (a target experiencing vs not experiencing family-to-work conflict) between subject design, with the tendency to ostracise a target as a dependent variable was conducted among employees in an on-line survey. In the second and third studies target's perceived conscientiousness and tendency to procrastinate as mediators were also measured. In the third study we also manipulated the target's gender in the scenario.

**Results:** The results indicate a strong main effect of target's experiencing family-to-work conflict on excluding the target. Surprisingly, the tendency to ostracise the target was stronger when the FSS was high. Moreover, perceived target's procrastination and low conscientiousness mediated the relation between target presented as experiencing family-to-work conflict and ostracizing them.

**Limitations:** The manipulation used in the studies are based on hypothetical scenarios. Future studies should include employees responses to co-workers experiencing family-to-work conflicts in the workplace setting. The lack of multi-source data (coming from both ostracised and ostracising employees) call for caution in interpreting the results.

**Conclusions:** The findings of the present studies propose an explanation why employees who perceive their co-workers as experiencing family-to-work conflicts ostracise them. Our research extend literature on the integrative model of the work-family interface and on workplace ostracism.

Identifying negative perceptions as mechanism leading to excluding certain groups of employees suffering from family strains invites for preparing specified interventions focused on increasing family supportive supervision.

Relevance to the Congress Theme: Our topic is relevant to theme No4: Diversity and Inclusion and theme No14: Stress and Disfunctions

Relevant UN SDGs: Our research concentrates on such UN Sustainable Development Goals as Good health and wellbeing at workplace and Reduced inequalities at workplace.

*Keywords: workplace ostracism, family-to-work conflict, family supportive supervision*

## Oral presentation OP742

### When and why employees who experience family-to-work conflict are ostracized at work?

Paulina Idziak, SWPS University of Social Sciences and Humanities; Cong Liu, Hofstra University; Amanda Staniszevska, Konrad Smolak, Małgorzata Gamian-Wilk | SWPS University of Social Sciences and Humanities

science

1. Research goals and why the work was worth doing: The present series of studies examines the relationship between family-supportive supervision and family-to-work conflict as potential sources of workplace ostracism. The purpose of the present research was to identify reasons of ostracising co-workers who experienced family-to-work conflicts.

2. Theoretical background: Workplace ostracism, that is a failure to engage another when it is socially appropriate to do so (Robinson et al., 2013), is a damaging process connected with severe individual and organizational costs (Gamian-Wilk & Madeja-Bien, 2019; Howard et al., 2020; Liu & Ma, 2021 for review). One of the streams of research on workplace ostracism concentrates on workplace ostracism antecedents (environmental factors, e.g., Ferris et al., 2016; Howard et al., 2020). The present research focuses on lack of family-supportive supervision (FSS, the perception of the degree to which employees consider their supervisors as supportive of their family role demands, Kossek et al., 2007; 2011) and experiencing family-to-work conflict as potential ostracism antecedents. Our previous findings indicated that the lack of family-supportive supervision occurred not to be linked with being excluded or rejected six or twelve weeks later. Additionally, the family-to-work conflict mediated the relationship between the lack of family-supportive supervision and workplace ostracism (Gamian-Wilk et al., 2022). In the present research we examined possible reasons why employees who experience family-to-work conflict are ostracised at work. We considered negative perceptions as mediators in the relationship between the lack of family supportive supervision, experiencing family-to-work conflict and being ostracised. Co-workers may attribute procrastination and laziness to employees suffering from family duties overload and strains.

3. Design/Methodology/Approach/Intervention: A series of three experimental studies (N1=295, N2=232, N3=420) in a 2 (a scenario of a target having vs not having FSS at work) × 2 (a target experiencing vs not experiencing family-to-work conflict) between subject design, with the tendency to ostracise a target as a dependent variable was conducted among employees in an on-line survey. In the second and third studies target's perceived conscientiousness and tendency to procrastinate as mediators were also measured. In the third study we also manipulated the target's gender in the scenario.

4. Results: The results indicate a strong main effect of target's experiencing family-to-work conflict on excluding the target. Surprisingly, the tendency to ostracise the target was stronger when the FSS was high. Moreover, perceived target's procrastination and low conscientiousness mediated the relation between target presented as experiencing family-to-work conflict and ostracizing them.

5. Limitations: The manipulation used in the studies are based on hypothetical scenarios. Future studies should include employees responses to co-workers experiencing family-to-work conflicts in the workplace setting. The lack of multi-source data (coming from both ostracised and ostracising employees) call for caution in interpreting the results.

6. Conclusions – research and or practical implications/Originality/Value: The findings of the present studies propose an explanation why employees who perceive their co-workers as experiencing

family-to-work conflicts ostracise them. Our research extends literature on the integrative model of the work-family interface and on workplace ostracism. Identifying negative perceptions as mechanism leading to excluding certain groups of employees suffering from family strains invites for preparing specified interventions focused on increasing family supportive supervision.

7. Relevance to the Congress Theme: Our topic is relevant to theme No4: Diversity and Inclusion and theme No14: Stress and Disfunctions

8. Relevant UN SDGs : Our research concentrates on such UN Sustainable Development Goals as Good health and wellbeing at workplace and Reduced inequalities at workplace.

*Keywords: workplace ostracism, family to work conflict, work-life balance*

## Oral presentation OP460

### **When do challenging demands unfold their performance-enhancing potential? A daily diary study using objectively-measured information processing speed**

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science

**Research Goals:** According to the Challenge-Hindrance Framework, challenging job demands can have resource-depleting as well as stimulating and motivating effects on job performance. As former research was either relying on self-reported outcomes or conducted in the laboratory, little is known about the performance-enhancing potential of challenging job stressors on job performance in occupational realities. Therefore, in this study, we shed light on the stimulating effect of the challenging job demand workload on objectively measured performance (i.e., information processing speed) across the workday. In particular, we investigated under which circumstances the performance-enhancing potential of challenging job demands becomes evident. **Theoretical Background:** According to the Challenge-Hindrance Framework, workload is a typical challenge stressor that has resource-depleting and stimulating features. Based on this assumption, we hypothesised that high workload in the morning would have positive stimulating effects on information processing speed before the lunch break. As job demands are interrupted during the break, the length of the break is important for post break information processing. We assumed that only on days with a break duration shorter than usual, morning workload would still have a stimulating effect on the information processing speed after the lunch break. Longer lunch breaks, however, provide greater opportunities to restore resources as supposed by the Effort Recovery Model. As increased effort can only be shown if a sufficient amount of resources is available, we hypothesised that information processing speed at the end of the workday would only be stimulated by afternoon workload on days with an above-average lunch break duration. **Methodology:** To test these hypotheses, service providers (N = 64) answered smartphone questionnaires repeatedly over two weeks. The questionnaires were presented three times a day at the workplace: before and after the lunch break as well as at the end of the workday, providing a total of 1244 valid measurements. Information processing speed was measured with a smartphone-based 90-second digit symbol modalities test that was included in the questionnaire. **Results:** Multilevel models revealed that workload in the morning correlated positively with information processing speed before the lunch break. There was no significant main effect of morning workload on information processing speed after the lunch break which was also not significantly moderated by the break duration. In line with our hypotheses, post break workload was only positively associated with information processing speed at the end of the workday on days with an expanded lunch break duration. **Conclusion:** One possible conclusion is that high workload can have a positive stimulating effect on cognitive performance if sufficient resources are available. Thus, lunch breaks seem to play a crucial role: Even though they may temporarily interrupt the stimulating effect of challenging demands as supposed by the Challenge-Hindrance Framework, they still may ensure the resources necessary to invest in more efficient information processing in the long term as assumed by the Effort Recovery Model. For this reason, lunch breaks can be seen as a key resource to sustainably ensure afternoon performance - especially on days with a high workload. **Strengths and Limitations:** A particular strength of the study is the repeated assessment of objective performance in a real-life occupational setting outside the laboratory. However, it was not examined to what extent increased information processing speed manifests itself in job-specific performance. Furthermore, individual challenge and hindrance appraisals have not been taken into consideration. Nevertheless, these results provide new insights into the stimulating effects of momentary workload and lunch break recovery on cognitive

performance in the occupational context that should be further investigated. Relevance to the Congress Theme: The use of smartphone-based objective measurements in the workplace shows that psychological research is moving with the times, deriving benefits from new technologies and not being left behind by other disciplines. Furthermore, information processing can be seen as a key feature in the changing world of work, especially with regard to modern knowledge work, as it is a fundamental premise for the performance of employees in many occupational fields. Relevant UN SDGs: The present study provides insights into the role of lunch breaks for the effect of challenging demands on individual strain. Such occupational research findings are the first step towards lunch breaks organized in a way that enables employees to make efficient and sustainable use of their individual capacities during work, without overburdening their available resources, to ensure employee health and well-being.

*Keywords: information processing speed, work breaks, workload*

## Oral presentation OP220

### **When do employees seek social resources? The role of identity leadership for job crafting behaviors**

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science&practice

Research goals and why the work was worth doing

The aim of this project is to investigate the conditions which facilitate job crafting among employees. Namely, we will investigate how Identity Leadership (IL) determines job crafting (JC) behaviors, with specific focus on increasing social resources. We will also investigate a mediating role of team identification in this relationship.

Theoretical background

JC describes job's modifications that employees make to achieve a better fit between their personal needs or abilities and their job (Wrześniewski & Dutton, 2001; Tims & Bakker, 2010). According to Tims & Bakker (2010) there are four types of JC: increasing structural resources, increasing social resources, increasing challenging demands and decreasing hindering demands. Researchers emphasize that JC is beneficial for employees and organizations (see Rudolph et al., 2017). Thus, it is important to investigate the predictors which facilitate JC among employees. One such relevant predictor is leadership, since leaders are the ones shaping the work environment and affecting employee motivation. For instance, Wang and colleagues (2017) showed that one Transformational Leadership can facilitate JC. However, this relationship was weaker when employees had a high level of organizational identification. This means that organizational/team identification—which is an important part of IL—could be a crucial factor for JC. The IL also is a positive leadership style. And—what is worth to emphasize—IL is based on shared social identity ("sense of we and us"). Research suggests that a shared social identity is an important factor related to the employees' well-being (Steffens et al., 2014; van Dick et al., 2018). For instance, van Dick and colleagues (2018) showed that IL is positively related to team identification, trust, job satisfaction and innovation. Although past research has shown that a range of positive leadership styles facilitate employee proactivity (Tummers & Bakker, 2021; Wang, 2017), according to our best knowledge, the relationship between IL and JC has not been investigated. We argue that investigating relationships and mechanisms between IL and JC is important for at least several reasons. First, increasing social resources is a less frequently used type of JC (compared to increasing structural resources and increasing challenges; Rudolph et al., 2017). Thus, it would be important to find conditions that strengthen this type of JC behavior. At the same time, we assume that IL will be a key factor predicting increasing social resources. It is because a fundamental component of IL—"sense of we and us"—seems to be crucial for employees' proactive changes that are based on relations with colleagues.

Design/Methodology/Approach/Intervention

The study will test the relationship between three aspects of IL (identity advancement, identity entrepreneurship and identity impresarioship), team identification as a mediator and increasing social resources using time-lagged correlational design (expected sample N = 850). We will also control for transformational leadership. There will be two measurement points separated by 6-8 weeks. At each measurement point we will use the following scales: Identity Leadership Scale (van

Dick et al. 2018), Job Crafting Behavior Scale (Petrou et al., 2012), Team Identification Scale (Doosje et al., 1995), and A short measure of Transformational Leadership (Carless et al., 2000). To test our hypotheses, we will perform structural equation modeling.

Results obtained or expected (if not available, it must be made clear when they will be)

We hypothesize that (a) identity advancement, (b) identity entrepreneurship, and (c) identity impresarioship are positively related to increasing social resources and these relationships are mediated by increased team identification. Moreover, we assume that these relationships remain significant when transformational leadership is controlled.

The first data collection of this study will be performed in January 2023, and the second measurement point will be conducted after 6-8 weeks. The results will be available by March/April 2023.

Limitations

We will apply a time-lagged cross-sectional research design and use self-reports to measure focal variables. Thus, our data may be subject to common method bias.

Con clusions - Research/Practical Implications/ Originality/Value

If our hypotheses are supported, we will identify which leadership behaviors motivate employees to introduce proactive changes in their work. Namely, these findings will enable us to explain what conditions lead to increasing social resources and can help leaders and organizations shape a positive work environment that facilitates employee proactivity.

*Keywords: job crafting, identity leadership, team identification*

## Oral presentation OP410

### When Does Creativity Lead to Innovation? The Moderating Role of Work Standardisation and Rewarding Innovation

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science

#### 1. Research goals

Creativity and innovation are obviously connected – all innovation starts with a novel and useful idea – but they are also clearly separate. In fact, it has been firmly established that creative ideas often fail to be realized and live up to their potential (Sarooghi et al., 2015). In this paper, we examine the surprising effects of work standardisation as a facilitator of the creativity – innovation relationship, as well as how the social context (i.e., rewards for innovation) further conditions this relationship.

#### 2. Theoretical background

Moving from a creative idea to an implemented innovation requires the deployment of a wide array of resources (Baer, 2012; Garud, et al., 2013). In this paper, we examine the role of task standardisation and rewards for innovation in bolstering the creativity – innovation link for small work groups, through resource conservation and allocation. We try to expand our understanding of the effect of work standardisation (standardisation of habitual work processes, not directly focused at creative or innovative activities), a relatively understudied form of standardisation, especially in relation to creativity and innovation, given its prevalence (Vogus & Welbourne, 2003).

The effect of standardisation on creativity and innovation is the subject of some debate, with both positive and negative effects found in various contexts, types of DVs, and types of standardisation in scope (Damadzic et al., 2021; Acar et al., 2019). On the one hand, innovative behaviour implies deviating from standard working routines, suggesting a negative relationship between standardisation and innovation. On the other hand, because standardisation and routinization save time, energy, or other, more tangible resources, especially in workgroups it could be argued that standardisation will stimulate innovative outcomes. We adopt this resource conservation logic to predict that work standardisation will positively moderate the relationship between creativity and innovation (hypothesis 1), given the particular need for resource deployment at this stage of the creative/innovation process (e.g., Garud et al, 2013).

Furthermore, we propose that standardisation of routine task may free up cognitive and time resources (Ohly et al. 2006), but that these resources are not necessarily allocated to innovation processes. Drawing from a resource allocation perspective (Kanfer & Ackerman, 1989) and from expectancy theory (Vroom, 1964), we suggest that the benefits of standardisation for the innovation process will depend on the motivation to allocate the freed resources to innovation. Thus, we propose a resource conservation and allocation model, suggesting that the degree to which innovation is explicitly valued and rewarded acts as a boundary condition for the positive moderation effect of standardisation on the creativity – innovation relationship (hypothesis 2, two-way interaction, and 3, three-way interaction).

#### 3. Methodology

We examine our model using a multisource and multilevel data set, containing input from team leaders, team members, and senior managers from 24 SMEs in the Netherlands. The final sample contains 109 teams. Mixed effects regression analyses are used to test the hypotheses.

#### 4. Results

Regarding our study hypotheses, we did not find a significant moderation effect of work standardisation and team creativity on team innovation (H1), but we did find a positive moderation effect for rewards for innovation (H2). Consistent with our resource conservation and allocation logic, we find support for a three-way interaction of team creativity, standardisation, and rewards for creativity (H3). This result suggests that team creativity is most strongly (positively) related to team innovation when both work standardisation and rewards for innovation are high.

#### 5. Limitations

Our empirical approach is limited in the degree it allows to make causal claims, particularly with regards to the mechanism. Although our results certainly are consistent with resource allocation being part of the answer, we can only infer this through theory and are not able to show the nuance ways in which this process may unfold. Further investigations could employ an experimental approach to overcome such limitations.

#### 6. Conclusions

The results support a model that emphasizes that the separate and interactive effects of creativity, resource conservation and allocation should be considered when making predictions about the effects of work standardisation.

#### 7. Relevance to the congress theme

The changing world of work implies a focus on both creativity and innovation and on work design. This study contributes to a nuanced way of making decisions about an important work design parameter (standardisation) and its relationship with creativity and innovation.

*Keywords: Creativity, Innovation, standardisation*

### Oral presentation OP3

#### **WHEN EMPLOYEE GENDER DIVERSITY BENEFITS FIRM PERFORMANCE: THE IMPORTANCE OF FEMALE REPRESENTATION IN THE TMT**

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science

Organizations have slowly become more gender-diverse. The vast majority of countries in the United Nations have enacted sex discrimination legislation related to employment and promoted gender equity as a sustainable development goal (United Nations, 2015). The increasing trends in women's employment are encouraging in terms of achieving egalitarian societal values, but contemporary organizations face challenges to harness the potential of gender-diverse employees. Indeed, having a gender-diverse workforce involves challenges such as interpersonal conflict, the formation of subgroups, and gender-based stereotypes, thereby potentially damaging social integration and organizational productivity.

Inconsistent results from extant research studying the relationship between gender diversity in the workforce and organizational outcomes reflect such difficulties. For example, existing studies found null, positive, negative, or curvilinear effects of employee gender diversity on organizational performance. Thus, scholars have investigated various boundary conditions such as human resource management investment, work-family programs, organizational life-cycle stage, and institutional and industrial contexts. Taken together, the current body of research suggests that addressing challenges in a gender-diverse workforce is critical for maximizing its value.

The purpose of our study is to provide new insights into how firms can successfully integrate gender-diverse members and harness potential benefits of employee gender diversity for firm performance. We identify female representation in top management teams (TMTs) as a powerful contingency factor that shapes the successful coordination and effectiveness of gender diversity in organizations. Specifically, we suggest that gender-diverse employees can successfully work together to contribute to firm performance when there is greater female representation in the TMT. Indeed, gender composition at the top of the organization is highly visible to employees. Drawing from signaling theory and a symbolic perspective of TMTs (Broome & Krawiec, 2008; Hambrick & Pettigrew, 2001; Spence, 1974), we suggest that female representation in TMTs signals to employees that their firms emphasize gender equity, thereby enabling gender-diverse employees to cooperate with one another at their highest capability. Thus, female representation in a TMT can be a powerful asset that integrates gender-diverse members, which ultimately enhances the overall success of the firm.

We contribute to the literatures on gender diversity, strategic human resource management (HRM), and firm performance by highlighting the importance of the co-existence of employee gender diversity and female representation in the TMT. Our research highlights an integrative view on gender diversity at various levels of the organization. Prior works have largely been divided into employee-focused and TMT-focused research, with each stream of research focusing on examining gender composition either at the employee level or the TMT level. We provide theoretical reasoning and empirical evidence on how and why the potential synergistic interactions across the different levels of gender composition in the organization may occur. Specifically, we capture relational coordination as a measure of social and task-related integration among gender-diverse employees and suggest that female representation in the TMT will help successfully integrate gender-diverse employees, which leads to higher firm performance. Our identification of female representation in

the TMT as a critical boundary condition is noteworthy because it speaks to the importance of improving the gender inequality that still remains at the upper levels of contemporary organizations. Due to significant underrepresentation of women at the top level, female representation in the TMT can send a powerful signal to employees regarding a firm's commitment to gender equity.

In sum, our research identifies a way to maximize the benefits of gender diversity in the workplace: promoting female representation in the TMT to create a context where gender-diverse employees contribute to firm performance. We test our theory using panel data from South Korea (Study 1: 1,017 observations from 306 Korean firms across eight years) and an online experiment in the United States (Study 2: 483 working adults) and find general support for our predictions. In doing so, we believe that our research is well aligned with the Congress Theme and UN SDGs as our research seeks to contribute to gender equality.

*Keywords: TMT GENDER DIVERSITY, EMPLOYEE GENDER DIVERSITY, FIRM PERFORMANCE*

## Oral presentation OP794

### **When follower performance violates leader performance expectations: Evidence for a causal mechanism of destructive leadership**

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science

Research goals and why the work was worth doing: We examine how follower performance that substantially exceeds or falls below the leader's performance expectations can trigger abusive supervision, a specific form of destructive leadership. Destructive leadership has extensive negative consequences for employees and organizations (e.g., Mackey et al., 2017). The examination of its antecedents is essential for the development of future interventions.

Theoretical background: Previous evidence suggests that both high and low follower performance can trigger destructive leadership (e.g., Tepper et al., 2011; Tariq et al. 2019). However, an integrative explanation for why leaders show destructive behavior towards low- or high-performing followers is still lacking. To address this issue, we developed a theoretical framework building on expectation states theory (Correll & Ridgeway, 2003) and leadership identity construction theory (DeRue & Ashford, 2010). We hypothesize that when followers diverge substantially from leaders' performance expectations both positively or negatively, this can threaten the leaders' leader identity, as they may perceive the followers' performance behavior as a denial to their claim of leadership. We further assume that this leader identity threat can result in destructive leader behavior as a means to remove the threat (cf. Epitropaki et al., 2017). Drawing on the folk-conceptual theory of action explanation (Malle, 1999, 2911), we hypothesize that leaders differ in the degree of identity threat based on the perceived intention behind the follower performance behavior: the threat should be particularly high when the leader suspects an egoistic intention of the follower.

Design/Methodology/Approach/Intervention: To test our hypotheses, we conducted an online confederate study in a 2x5 between-subject design, implementing a face-to-face interaction between a follower (confederate) and a leader (participant). The follower's intention (prosocial vs. egoistic) was manipulated using a video message shown to participants (N = 226) before the face-to-face interaction. Participants then took part in a video conference where they were tasked to discuss the execution of a personnel selection task with the follower. Here, the follower's (confederate's) task performance was manipulated (performance well below expectations vs. performance below expectations vs. performance fulfilling expectations vs. performance above expectations vs. performance well above expectations). Participants were then asked to rate their leader identity threat and their intention to show abusive supervision (Tepper, 2000). As a further measure of destructive leadership, independent raters assessed the leader's behavior during the video conference.

Results obtained: We found significant main effects of follower performance and follower intention on abusive supervision intentions, all in the expected directions. We did not find a significant interaction term. A multi-categorical moderated mediation model (Hayes, 2018) showed that most indirect effects linking follower performance to abusive supervision intentions via leader identity threat were significant. We did not find significant moderation effects of follower intention on the follower performance – identity threat paths. We found similar results for the independent ratings destructive leader behavior. Our results generally support our theoretical assumptions that leader identity threat mediates the relationship between follower performance and abusive supervision.

Limitations: Only a small part of the participants held an actual leadership position (22.6 %), limiting our results' ecological validity.

Conclusions – research and/or practical Implications: We developed and tested an integrative framework explaining why leaders engage in destructive behavior when working with low- or high-performing followers, contributing to the growing body of research on destructive leadership. Future research should investigate the described model in the field with participants in actual leader and follower positions. Organizations could apply the findings in leadership development for leader self-reflection and awareness methods to prevent destructive leadership.

Relevance to the Congress Theme: Our contribution is relevant to the congress theme insofar as destructive leader behavior is likely to remain a commonplace occurrence in work environments, despite growing efforts to curb it. Creating awareness among HR professionals, leaders, and followers alike that unexpectedly high and low follower performance can cause destructive leadership is crucial for reducing its negative impact.

Relevant UN SDGs: Focusing on how destructive leadership is triggered, our research fits the goal of "decent work & economic growth." Our research is helpful for the development of interventions to avoid destructive leadership in the future, which helps to create decent work environments.

*Keywords: follower performance, leader identity threat, abusive supervision*

## Oral presentation OP231

### **When team mindfulness creates value from diversity in values – A two-stage moderated mediation model linking cognitive diversity to team performance**

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science

Organizations largely integrate team-based structures to fuel the value of their workforce. As these teams become more heterogeneous due to demographic changes in the workforce composition, growing employee mobility, and higher task specializations, organizations have to increasingly deal with a multitude of values, beliefs, attitudes, and opinions among their teams. While research on the adverse effects of cognitive diversity (e.g., differences in beliefs and values among team members) has proliferated in the past, much less is known about how challenges associated with cognitive diversity in teams can be attenuated to positively influence team performance.

Our research addresses this gap. In the present research, we develop and test a two-stage moderated meditation model in a longitudinal study with 104 teams from three countries to argue that team mindfulness attenuates the adverse effects of cognitive diversity on relationship conflicts. Team mindfulness is particularly beneficial to teams with high task interdependence where the task requires members to work closely together; team mindfulness leads these teams to experience less relational conflict, which in turn predicts higher team performance.

Our study makes several contributions to theory and practice. We add to the ongoing scholarly debate on the diversity-performance link by generating novel insights on when and how cognitive diversity influences team performance. This endeavor benefits the theoretical and practical conversation on the pitfalls of team diversity and offers empirical evidence on how to overcome these. Second, our research responds to the call for more empirical research on mindfulness as a team-level construct. More specifically, we provide an attempt to investigate the role of team mindfulness for team performance in a longitudinal, international field study.

We focus on cognitive diversity, which has been shown to partly relate to negative effects in teams because people are drawn to and seek collaboration with those they perceive as similar. They tend to stick to their own perspectives and reject the opinions of those they perceive as dissimilar, which frequently results in disagreements. More than that, teams characterized by high cognitive diversity in terms of beliefs, opinions, and values are more likely to experience lower cohesion and higher levels of conflicts. If cognitive diversity leads to more relationship conflicts among team members, an essential question for organizational scholars and practitioners alike is how to attenuate these effects to avoid adverse effects on team performance. We suggest that team mindfulness - a form of shared beliefs among group members that interactions are characterized by awareness and non-judgment - constitutes a promising psychological construct to influence the relationship between cognitive diversity and relationship conflicts.

We used a longitudinal design and assessed individual and collective-level variables at four different time points with 104 teams from three different countries. Teams worked together for a certain period (average= 2.6 weeks, max=10 weeks) on graded group assignments necessary to finalize the course successfully. The graded group work consisted of team presentations. Team performance was measured using third-party judgments of the course instructors who were blind to the study hypotheses.

We find evidence for an attenuation effect of team mindfulness in the relationship between cognitive diversity and relationship conflict, suggesting that teams high in mindfulness are less prone to personal conflicts resulting from cognitive diversity. This is particularly beneficial to teams whose task requires members to work closely together, as relational conflict predicts lower team performance, especially among them.

Despite the strength of the present research, our work has some limitations that warrant further directions for research. First, we integrated a previously validated measure of cognitive diversity that is relatively concise and was shortened for economic reasons. The used scale for cognitive diversity is not able to capture more complex dynamics of emergent states in team diversity. Second, we applied a correlational design to investigate our theoretical model. The concern of reverse causality in our study is unwarranted, as cognitive diversity was measured as the group work started and relationship conflicts with three measurement points over several weeks. However, we acknowledge that further research should integrate experimental methods to allow for even more robust causal inferences.

This paper adds to our understanding of the diversity-performance relationship and suggests that mindfulness as a collective-level construct can positively influence team performance by reducing relationship conflicts in diverse teams. We hope to stimulate further research on mitigating and attenuating factors of the adverse effects of cognitive diversity on team performance.

*Keywords: diversity, team mindfulness, team performance*

## Oral presentation OP360

### **When work aligns with values: an intervention study to strengthen the wellbeing, health, and employability in healthcare professionals**

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science&practice

Research goals :

With the healthcare sector facing high sickness absence levels, turnover and growing shortages of health-care workers, it becomes important to pay attention to retention of healthcare professionals. The scarcity of qualified healthcare professionals is even more problematic since the Covid-19 pandemic, where the multitude of work-related stressors that these professionals face put their wellbeing, health and employability at serious risk. In light of these stressors, there is often little attention for positive aspects in the daily work, such as personal values that drive them in work (e.g., helping others, making a meaningful contribution). For protecting healthcare professionals and promoting wellbeing and health, value-based approaches hold an enormous potential. For this reason, the 'Work Values' intervention was developed which aims to provide health-care professionals with opportunities to realize their work values.

This study aims to investigate (1) the barriers and facilitators for implementing the Work Values intervention in a hospital care setting, and (2) the effect of the Work Values intervention on wellbeing, health and team cohesion of a team of healthcare professionals of a hospital unit.

Background :

The emerging scientific field of positive psychology has stressed the hidden potential of focusing on positive aspects in life such as values, strengths, and positive experiences. Applications of positive psychology to work have, however, mainly focused on interventions at the individual level that are detached from the immediate work environment. Less is known about positive approaches that enable the achievement of personally meaningful work values in which both the individual level and organizational level are involved.

A promising model to foster meaningful work values is the idea of value-based work, is the capability approach. Applied to the work context, the capability approach recognizes that employees value work for different reasons, such as opportunities for personal growth or for contributing to something meaningful. To date, however, employee values are rarely discussed explicitly at work. Especially, when the pressure is high or when problems arise, there usually is a strong emphasis on coping with pressure (e.g., through better time management) and fixing the problem (e.g., working on one's deficits). However, especially in challenging times, it may be crucial to focus on the value and meaning that people derive from their work to help them cope.

Based on the capability approach, the 'Work Values' intervention was developed in which teams were provided with opportunities to realize work values that are most important to them. The intervention aims to help team leaders and -members identify (a) the aspects that employees/teams value in their work; (b) work context factors that play to these values; and (c) individual/team actions that contribute to realizing these values.

Design and methods :

In this field experiment and pilot study, the 'Work Values' intervention, was tested and evaluated in nursing units of a Dutch non-university hospital. Pre-, post-, and follow-up questionnaires were distributed among team leaders and team members (i.e. nurses). Besides demographic data, Health (SF-1), wellbeing (UBOS), work engagement (UBES), Team climate (Team Climate inventory), supervisory support (POS) and employability self-efficacy were measured. Also face-to-face interviews with team leaders and team members were conducted to investigate barriers and facilitators for implementation and to study the perceived impact on work-related well-being, team cohesion and employability.

#### Results :

Results will be available end of 2022. The first preliminary findings show that the intervention is feasible for the hospital care setting and teamleaders and teammembers are highly satisfied with the intervention.

#### Conclusion:

This study will contribute to the understanding of what is needed for health-care professionals to stay motivated, engaged, and healthy at work and how sustainable employability can be promoted within the healthcare sector. Especially in challenging times (such the ongoing transformation in healthcare) strengthening the wellbeing, health and employability of healthcare professionals is essential for society. Value-based approaches to work hold an enormous potential for protecting healthcare professionals but are scarcely used in practice or researched. The 'Work Values' intervention is one of the few positive psychology interventions to enable personally meaningful work values. Since this is a pilot study, no control condition was included. Therefore the effects of the intervention can not be compared with care as usual.

*Keywords: Healthcare, valuable work, workers' wellbeing*

## **Oral presentation OP20**

### **When work hurts – Mental health challenges upon returning to work post-COVID-19 pandemic restrictions within the South African public service**

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science

The COVID-19 pandemic has affected the world of work immensely. Pre-existing socio-economic challenges compound this impact in South Africa before the pandemic. In managing the challenges posed by the COVID-19 pandemic, the South African government introduced measures to minimize the spread of the pandemic. These measures affected not just individuals but also covered the organizations in which they operated. Calls exist to understand challenges faced as part of the new normal and post the COVID-19 pandemic restrictions. This research narrows the focus on understanding the experiences of a sample of 12 employees over a year in narrating their experience of work post-COVID-19 pandemic restrictions. Multiple interviews were used, including a web-based diary entry, to collect participant experiences given the research aim. A qualitative approach relying on narrative inquiry was utilized to understand the participant's experiences. Three main findings existed. First, the participant narrated challenges upon returning to work post-COVID-19. These challenges were compounded by a level of anxiety and uncertainty related to the employees' job security. Subsequently, this led to mental strain. Second, concerning organizational functioning, the participants also expressed the challenge of operating within organizational structures unable to support the post-COVID-19 setting. This also included questioning why it was still necessary to come to the physical office space. Third, as a result of the two findings, participants expressed a desire to leave the workplace for "greener pastures" or more conducive workspaces that support mental health ideals. Based on the findings, strategies can be put in place that inform the promotion of mental health in the South African public service. These include the need for support services to promote mental health to address individual and organizational issues that impede the pathway of such interventions. The findings proffer useful precursors to interventions that address the challenge of mental health.

*Keywords: mental health, work, employees, public service, well-being, narratives*

## Oral presentation OP452

### **Which factor most affects unethical behavior at work? The influence of ethical culture, ethical culture strength and collective moral identity**

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science&practice

Ethics in the workplace is an important phenomenon that has a critical impact on organizations and societies. Ethical scandals, such as those in business and politics, have called attention to the need to create policies and other mechanisms that can undermine unethical acts. Hence, contextual factors such as ethical culture stand out as crucial because they can play a pivotal role in enhancing or diminishing unethical acts. Ethical culture is a subset of the concept of organizational culture and corresponds to the interplay between formal and informal systems that boost ethical behavior or prevent unethical conduct. Regarding individuals, moral identity has been one of the most studied constructs related to moral behavior. Moral identity is defined as a self-concept around a set of moral traits. Past research suggests that ethical culture and moral identity positively impact ethical behavior in organizations. However, research has yet to consider if collective moral identity interacts with ethical culture to predict ethical behavior and how ethical culture strength has a role in this relationship.

The purpose of this study was to investigate the effect of ethical culture, ethical culture strength, and collective moral identity on unit-level observed unethical behavior and unethical pro-organizational behavior while examining their moderating effects.

We tested our model with 1942 employees from 96 units of ten organizations in Brazil. Of the ten organizations, three were public institutions, and seven were private. We applied the Corporate Ethical Virtues Scale (CEV), the moral identity scale, the Observed Unethical Behavior in Organizations Scale, and the Unethical Pro-Organizational Behavior Scale. The within-unit agreement was estimated for all variables and provided evidence of agreement within units for all the variables, except for the ethical culture's sanctionability dimension. To model the relations between the variables, we employed an SEM.

The results showed no statistically significant associations between the collective moral identity and both unethical behavior measures. We found negative, statistically significant correlations between both measures of unethical behavior and the dimensions of ethical culture, except for the feasibility dimension. The results also showed that ethical culture strength among members of the work units was significantly related to a lower shared perception of observed unethical behavior and a lower shared perception of unethical pro-organizational behavior. Since collective moral identity was not a significant predictor of the dependent variables, the interaction models of moral identity and ethical culture were also non-significant.

Our findings point out that ethical culture and ethical culture strength have a strong effect on unethical behavior, but that collective moral identity has no impact. The research on moral hypocrisy can explain this, which means appearing moral to others while avoiding the cost of actually being moral. Additionally, we must consider the cultural context in which this data was collected. Brazil has a phenomenon known as the Brazilian *jeitinho*, which refers to a social mechanism used by Brazilian citizens to deal with difficult situations that arise in daily life and for troubleshooting.

There are some limitations in our study. The first limitation is that the data is cross-sectional, which unviable causal inferences about the model. Second, all the measures used in this study were self-reported surveys, which have issues related to common method bias. Third, we measured only moral identity using the classic self-report scale from Aquino and Reed (2002).

Regardless of these limitations, this study provides a clear contribution to our understanding of ethical culture on unethical behavior. First, we contribute to the ethical culture literature by introducing the concept of ethical culture strength and showing that it has a significant negative effect on unethical behavior. Second, we demonstrate that ethical culture has a significant association with unethical pro-organizational behavior, even though it has a weaker effect.

We also contribute to the literature by demonstrating that moral identity may not always be a good predictor for ethical behavior - this effect may vary depending on the context. Regarding practical implications, our research highlights the potential effect of ethical culture on unethical behavior. Hence, our research points out that organizations that invest in ethical norms and values can positively affect the company.

This study is relevant to the Congress Theme “The Future is Now: the changing world of work” because it investigates how can we enhance a desirable competence in the future world – specifically ethical behavior – by making changes in the work context related to ethical culture and by promoting group dynamics that could help increase ethical behavior and diminish unethical acts.

*Keywords: ethical culture, collective moral identity, unethical behavior*

## Oral presentation OP170

### Who is first? The effect of trustworthiness on the decision to hire first employees in new businesses

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science

**Research goals:** The goal of this study is to examine a first step to business growth from a psychological perspective: Who is hired as the first employee? Given that the first employment involves taking considerable risk, we suggest early-stage entrepreneurs' intention to hire should be influenced by the trustworthiness of potential future employees. Therefore, this study explores whether an adapted version of a well-established model of trust can be used to understand early-stage entrepreneurs' hiring decisions.

**Theoretical background:** Although many studies have examined entrepreneurial growth, it remains unclear how entrepreneurs acquire human capital, and what characteristics of new employees explain successful business growth. Hiring a first employee could be a strategy to obtain human capital, but such a hiring decision is risky for entrepreneurs, which makes trust research highly relevant for this topic. According to a standard trust model (Mayer et al. 1995), risk-taking in relationships depends on trust, which evolves from the interplay of the trustors' propensity to trust and the trustworthiness of the trustee. Furthermore, Mayer et al. differentiate between three different trustworthiness facets: benevolence, integrity, and ability. We therefore, suggest that early-stage entrepreneurs hire candidates if they are high in benevolence and high in integrity. In addition, we propose to adapt the ability component to the start-up context: In entrepreneurship situations, it might be less candidates' amount of ability, but rather the breadth of their ability that matters (i.e., broad but smaller expertise in diverse fields vs. specific expertise in one field). The broader the scope of abilities (given the same overall ability), the higher should be the likelihood that someone is hired as a first employee.

**Design/Methodology:** 195 Pakistani entrepreneurs were randomly assigned to four groups. All were asked to imagine a critical situation of a start-up with numerous, overwhelming tasks to be accomplished. They read that the entrepreneur in this scenario decided to hire an employee. Subsequently, two potential candidates were described with different ability characteristics (i.e., one participant with average expertise in diverse fields and one participant with high specific expertise in one field but low expertise in others) and then rated by the participants. In each of the four groups, both candidates were either high (or low) in benevolence (or in integrity). Therefore, benevolence and integrity were between-subject experimental factors and breadth of ability a within-subject factor.

**Results obtained:** An ANOVA revealed that the within-participants effect was significant (i.e., participants intended to hire the candidate with a broad scope of abilities and not the expert), but between-participants effects were not. Thus, our data suggests that entrepreneurs care mostly about the breath of expertise when hiring, whereas the trustworthiness factors benevolence and integrity of first employees seem less relevant for entrepreneurs' hiring intentions.

**Limitations:** The study was conducted in Pakistan and needs replication in other countries to claim generalizability.

**Conclusions:** Our study broadened the scope of trust research, differentiating the trustworthiness factor ability. In addition, we bridge research about HRM and entrepreneurial growth, applying a

well-supported theoretical model to the situation of early-stage entrepreneurs who face the decision to hire first employees.

Relevance to the Congress Theme: Entrepreneurship has been considered by many governments as a crucial strategy to move countries forward and to foster innovations. However, this strategy can only be beneficial if new businesses survive and grow.

Relevant UN SDGs: SDG 8, decent work and economic growth.

*Keywords: Entrepreneurship, business growth*

## Oral presentation OP137

### **Who is in control? Understanding different patterns of leadership entrainment processes with a video-based observational study**

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science

#### Research Goals

Meetings are a ubiquitous characteristic of work life. Managers and their employees spend a great deal of their time in meetings with each other, and while ideally both parties align and learn through such conversations, this is often not the case. This increasingly becomes a problem as – in contrast to the traditional view of leadership as something that a single person owns through their position of authority – leadership is more and more seen as something that should be brought about by all participants taking part in leadership activities, which entails that leadership is not a one-way street, but that ideally, a manager and their employee provide each other with new perspectives. Yet, how exactly does this look like? Surprisingly, we do not know much about different conversational patterns that characterize how managers and employees try to influence each other in the form of claiming and granting leadership in meetings. However, it is intuitively appealing that there is considerable variability in how a manager and an employee jointly shape the flow of the conversation, and that how such a conversation unfolds has downstream consequences for how a meeting is perceived. The goal of our research was thus to identify different types of manager-employee interaction patterns and explore how these different types relate to perceived mutual learning (i.e., the employees' perception of reciprocal learning between themselves and the manager).

#### Theory

The key argument regarding leadership claiming (i.e., verbal behaviors that signal the willingness to offer a direction and to exhibit social influence) and granting (i.e., verbal behaviors that accept another person's influence attempts) is that leadership control can be exhibited not only by managers but also by employees (DeRue & Ashford, 2010; Cashman et al., 1976). This constitutes a dynamic process which can be more or less aligned. Accordingly, we expect that a manager and an employee can show different patterns of alignment of their claiming and granting behavior over the course of a meeting. Drawing from entrainment theory (Ancona & Chong, 1999), we describe a high alignment of the behaviors of the manager and the employee (e.g., manager claims leadership, employee grants leadership) as high entrainment, and divergent behaviors (e.g., manager claims leadership, employee shows neutral behavior) as low entrainment.

#### Design & Methodology

We collected video-recorded one-on-one meetings from 103 manager-employee dyads. Using these videos, we coded the verbal behaviors (claiming, granting, neutral) of both interaction partners and developed a temporal index that visualizes claiming and granting behaviors from leaders (and followers) over time. We graphed these indices for each dyad and qualitatively analyzed these graphs to identify clusters that illustrate similar interaction patterns. Employees also self-reported their mutual learning after the meeting.

## Results

We identified five entrainment types that we labelled “Traditional Dancing”, “Modern Dancing”, “Irish Dancing”, “Late Bloomers” and “Single Dancing”. We chose the analogy with dancing because when people are dancing together, they also align their movements by synchronizing their steps, creating an entrainment pattern.

Three of these types (i.e., “Traditional Dancing”,  $k = 23$ ; “Modern Dancing”  $k = 25$ ; “Irish Dancing”,  $k = 24$ ;) represent high entrainment, that is, both parties show an aligned pattern of behaviors (i.e., they act in sync). The other two types (“Late Bloomers”,  $k = 13$ ; “Single Dancing”,  $k = 18$ ) represent low entrainment (i.e., both parties do not show synchronized behaviors).

Meetings characterized by high entrainment were positively associated with employees perceived mutual learning, whereas the “Late Bloomers” type was negatively associated with mutual learning.

## Limitations

Two limitations concern (1) the lack of knowledge about the meeting content and (2) the sole focus on verbal behaviors. Future research could utilize a thematic coding scheme and also capture nonverbal behaviors (e.g., gestures) to explore whether entrainment patterns also generalize to different meeting foci and communication channels.

## Conclusion

In our mixed-method study, we investigated the actual behaviors shown in dyadic manager-employee meetings and developed a typology of entrainment patterns. In doing so, we shed light into the “black box” of meeting interactions and unravel the dynamics between managers and employees. We also provide first insights into the implications of different dynamics for mutual learning, which is a crucial outcome in the knowledge economy.

## Relevance to the Congress Theme

The paper is relevant to the theme as it develops theory for a future that is already there, namely that leadership and followership are increasingly merging, and that alignment between both parties in meetings is crucial in a globalized world with hybrid and virtual work arrangements.

*Keywords: dynamics, leadership, relational control*

## Oral presentation OP76

### Who is Successful in Career Development? A Person-Centered Approach to the Study of Career Orientation Profiles

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science

This research examined the presence of career orientation profiles by investigating how young workers combined protean career orientation attitudes, motivation to learn to develop one's career, and an optimistic future perspective on their career. Further, it explored how workers differentiated endorsement of these attitudes and motivation (i.e., career orientation profiles) were associated with the adoption of multiple career enhancing behaviors, namely proactive career behaviors (i.e., career planning, networking, and skill development) and learning behaviors with technologies. Latent profile analysis was conducted among individuals in early career (N=767) and found four distinct profiles. A first profile revealed that 28.4% of workers in early career were displaying high levels of protean career orientation, motivation to learn, and optimistic future time perspective (profile 4). Two differentiated profiles showed either high levels of protean career attitudes and low levels of motivation to learn (profile 3) or low levels of protean career attitudes and high levels of motivation to learn (profile 2). These profiles presented average level of future time perspective and represented 13.8% and 40.6% of the sample. Finally, 17.2% of the sample showed low levels on all these variables (profile 1). Only workers who showed high levels on all these indicators also presented high levels of proactive behaviors and learning with technologies. The other three profiles were associated with suboptimal levels on these outcomes. Taken together, these results offer new insights on the psychological state of mind most adapted to success in a modern career.

*Keywords: career orientation profiles; career development; protean career orientation*

## Oral presentation OP202

### Why can't I get out? Development of a career inaction scale.

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#### Context & aim

Although many western governments strive to stimulate job transitions as a way of addressing the mismatch in the labour market and of improving career sustainability (De Vos et al., 2020; Joint Employment Report, 2021), job mobility rates remain low in many countries. Similarly, many people who feel unsatisfied with or stuck in their careers, do not change jobs (e.g., Watson et al., 2021). The phenomenon of “career inaction” offers one potential explanation for these apparent contradictions. Career inaction refers to the phenomenon that people desire or need a change in their career but fail to take sufficient action to realize that change (Verbruggen & De Vos, 2020). Verbruggen and De Vos (2020) theorize that career inaction holds considerable risks for both employees and organizations, such as poorer health, lower well-being, increased stress, and lowered productivity. Yet, to date, little is known about the actual outcomes or correlates of career inaction, partly due to the lack of a measurement instrument to assess this phenomenon. We aim to address this gap by developing and testing a scale that captures the psychological concept of feeling stuck in your career.

#### Approach

We started by reading the Theory of Career Inaction (Verbruggen & De Vos, 2020) and related research (e.g., Rogiers et al., 2022). Based on this reading, we formulated an initial set of items. We collected input on these items from 7 expert scholars and 10 laymen on the clarity, and content and face validity of these items. In a next step, we tested the scale in a data set with 264 Belgian employees. We ran an explorative factor analysis on our scale and assessed its reliability. Third, we evaluated the scale in a longitudinal survey with Belgian employees who applied for career counseling vouchers. We already ran reliability and correlation analyses on data from wave 1 (N=794) and wave 2 (N=477). We also plan to perform a confirmatory factor analysis using this dataset.

#### Results

Results from study 1 indicate that our 9 items reliably measure one underlying factor ( $\alpha = .94$ ); namely, not being able to undertake sufficient action despite the desire for change. Results from the second study indicate a significant ( $p < .00$ ), moderately to highly positive correlation of all 9 items for both waves 1 and 2. Preliminary results showed again that our scale reliably ( $\alpha = .88$  for wave 1 and  $.92$  for wave 2) reflects career inaction as one factor.

#### Limitations

First, since research on career inaction is still in a nascent stage, the item generation was mainly based on the conceptualization by Verbruggen and De Vos (2020). Yet, a recent qualitative study on the lived experience of 43 Belgian employees in career inaction (Rogiers et al., 2022) provided further inspiration for our initial items. Second, our scale was formulated and tested in Dutch given our Belgian research context. However, in collaboration with 6 expert career scholars and 3 laymen, we now generated an English version of our scale to increase its usefulness in future, international studies.

#### Conclusion and contribution

This scale development is of value to both scholars and practitioners in the career field. So far, career inaction could only be measured indirectly, i.e., by targeting people who fail to realize the desired or needed change in their careers. Our scale allows scholars to directly pinpoint the specific situation of not succeeding to take sufficient action on a desired or needed career change. In doing so, it can facilitate more empirical insights into the prevalence, antecedents, and potential effects of career inaction. Additionally, it can support career coaches in clearly identifying whether or not clients find themselves in career inaction and selecting appropriate counseling actions accordingly.

Relevance to the Congress Theme and relevant UN SDGs

In the changing world of work, career decisions and transitions become more and more complex for many employees. (measuring) Career inaction – and its potential risks – therefore seamlessly connects to the topic of “the future of work”. This topical phenomenon reflects how thinking about future jobs or other career desires can put people in a psychological state of career inaction with unwanted negative consequences (e.g., regret in the long run or a higher risk of burnout). Raising awareness of career inaction can help to reduce those negative consequences and, perhaps, even guide people out of their ‘stuckness’. As such, we also hope to contribute to the UN SDG of stimulating and guarding employees’ good health and well-being.

*Keywords: Career inaction, Career transition difficulties, Scale development*

## Oral presentation OP261

### **Why do some autistic adults have paid work whereas others do not? An exploratory focus group study comparing autistic adults with and without work**

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science&practice

#### Research goals and theoretical background

Globally, sustainable employment rates of people with autism are very low, indicating difficulties in both finding and keeping competitive employment. Due to the biomedical model, much previous research assumed this is due to the 'condition'. Recently however, awareness is growing that other factors hamper work participation, such as an unwelcoming work environment. In this exploratory focus group study, we evaluated what autistic people with and without paid employment reported as barriers and facilitators to sustainable, paid employment. Research questions were: (1) What barriers and facilitators do autistic adults report in finding and keeping competitive employment?; and (2) What are differences and similarities between autistic adults with and without paid employment regarding the barriers and facilitators they report for sustainable employment?

#### Methods

A total of 8 focus groups were conducted, including a total of 64 participants: 4 groups with and 4 groups without paid employment. All meetings were transcribed verbatim and analyzed separately for the groups with and without employment (inductive thematic content analysis), using ATLAS.ti 9.

#### Results

In both groups, major themes were: 'workplace atmosphere', 'supervisor skills and attitudes', 'work tasks and work environment', 'work that is enjoyable and aligns with talents', 'getting adequate support', 'self-insight', 'self-esteem', and 'communication'. A theme only found in those with employment was 'proactivity'. A theme only found in groups without work was 'disability pension takes away stress'.

Important barriers in both groups were supervisors' and coworkers' lack of knowledge about autism and their unwillingness to adapt themselves or the workplace to the autistic worker. Over- and underestimation of skills and not being able to do work that is enjoyable or fitting talents was common in both groups. Both groups reported needing support (e.g. job coaching) but not receiving it, and those without work even often reported inadequate support. In both groups participants showed difficulties with self-insight/self knowledge regarding personal boundaries, talents and career preferences, especially prior to the diagnosis. The group without work seemed to have had more damaging experiences as a result, e.g. by working too hard and not respecting their boundaries, often resulting in burnout. They also showed lower self-esteem and more distrust. Receiving disability benefits relieved stress in this group.

Important facilitators were a positive and inclusive work environment and supervisor, who creates calmness, has an eye for wellbeing and talent, and who communicates well. The groups without work emphasized the importance of having a place to retract oneself socially if needed and to be able to work without pressure. In the groups with employment, higher self-esteem was found, and these participants seemed less affected by prior negative experiences in work or school (e.g. bullying, rejection). Finally, in the groups with paid work, assertiveness in general, as well as assertive

communication about workplace needs were found. Finally, only in the group with work, proactivity was found as theme, e.g. regarding personal career goals, finding creative solutions and through thorough preparation of job applications.

#### Limitations

The study is exploratory, for which reason no causal relationships can be established. Moreover, the study included participants in the two types of groups based on actual employment status, not taking into account factors like previous employment duration or employment success. Also, the study population was relatively highly educated.

**Conclusions** A large variety of factors are involved in successful occupational outcomes for autistic adults. Findings suggest that interventions should focus both on the side of the work environment, and the worker. Employers need to become more inclusive in attitude and behavior and eradicate hiring discrimination. Moreover, they need to become more flexible willing to make tailored workplace adjustments favoring individual workers' needs and talents. Interventions targeting autistic adults should enhance self-insight/self-knowledge (e.g. concerning healthy boundaries, talents or preferences), improve assertive communication skills regarding needs and boundaries, and improve self-esteem and empowerment.

**Relevance for congress theme and UN SDGs** With current shortages in workers, it is essential workplaces become more inclusive. Many autistic adults want to have paid employment and have their own talents, but work should not be harmful to their health. This study aligns with the UN SDG's 'No poverty', 'Good health and well-being', and 'Reduced inequalities'.

*Keywords: autism, barriers and facilitators, focus group*

## Oral presentation OP159

### **Why do they leave? Factors associated with young managers' propensity to leave or not to leave their position**

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science

Research goals and why the work was worth doing

The aim of this research is to find out more about why young managers' leave or intend to leave their managerial position. Given the high dropout rate, and problems of recruiting young people to managerial positions, this work will identify factors that are associated with young managers wanting to leave or remain in their position. Thus, the work contributes to giving recommendations and guidance for future intervention studies looking to support young managers.

Theoretical background

A lifespan perspective on managerial development suggests that young managers may be confronted with extra challenges, and thus in need of special attention and support in their transition into the role and identity as a manager (Liu et al., 2021). Furthermore, entering a new role, for which a young age can be seen as nonprototypical, may be considered an extra demanding challenge. Thus, from a stress theory perspective (e.g. Conservation of Resources; Hobfoll, 1989), building up and making available (the right kind of) resources may facilitate a more healthy transition into the identity as a manager.

Design/Methodology/Approach/Intervention

We will analyze survey data from approximately 600 young managers (i.e., 19-29 years of age), from different sectors who have worked or are working in a managerial role. We will conduct comparative analyses between those who have left their position and those remaining in their managerial role. We will also study and compare the strength of relations between a variety of contextual factors (e.g., role clarity, support, span of control) and turnover intentions among those still working as managers.

Results obtained or expected (if not available, it must be made clear when they will be)

The data analysis will be conducted at the end of 2022. We expect to find a range of work and demographic factors that contribute to young managers' propensity to leave their managerial role, but also factors that may contribute to lower turnover rates.

Limitations

The data used in this research is cross-sectional. Although this may pose less of a problem for the analysis based on register data, we cannot be certain about the direction of the relations between studied work environment factors, nor that common-method bias inflates strength of relations. However, given the lack of studies on young managers' propensity to leave the results can be used as a starting point for future explorations.

Conclusions – research and or practical implications/Originality/Value

This study will be among the first to focus on young managers' propensity to leave the managerial role at an early stage. The results will clarify what factors contribute to them leaving or intending to leave as managers. Thus, the research will shed light on potential risk factors and supportive factors

to consider if organizations want to create beneficial conditions for their young managers to thrive and develop in their managerial role.

#### Relevance to the Congress Theme

Managers' play an important role for employee wellbeing and performance. Making sure that the upcoming generations of managers have sufficient resources to develop their managerial skills and be fit to lead the way is an important part of creating a sustainable future working life.

#### Relevant UN SDGs

Supportive managerial behaviors are vital for achieving good workers' health and wellbeing, as well as decent work and economic growth in organizations. To increase chances of reaching these goals, managers' prerequisites and possibilities to thrive and develop into their managerial role is an important precondition.

*Keywords: Managers, Work environment, Age*

## Oral presentation OP464

### **Will you lend me your strength? Development and evaluation of an interpersonal strengths-use intervention.**

Piet van Gool & Ishani Sewnarain Sukul | Eindhoven University of Technology

science

#### Research goal

Using your own strengths at work has been shown to positively affect well-being and performance. But can you also proactively make use of other people's strengths, and how does that affect either partner involved? As our jobs become increasingly interdependent, these questions become more salient. In this study, we (1) introduce the concept of interpersonal strengths-use as a proactive strategy in which employees try to use other people's strengths for their own benefit and (2) develop and test an interpersonal strengths-use intervention to examine its effects on both interaction partners.

#### Theoretical background

We hypothesized that employees who proactively try to use their coworker's strengths, positively affect the dyadic relational energy they experience when interacting with that coworker, as well as their own individual performance. The rationale is that the coworker's strengths function as a job resource for the employee who tries to use the coworker's strengths. Moreover, we hypothesized that the coworker that is the target of interpersonal strengths-use would also benefit from this behavior in terms of dyadic relational energy and individual performance because it would allow this target to capitalize on their own strengths.

#### Design

We developed an interpersonal strengths-use intervention and tested its effects using a waiting list-control group design. We built the intervention around identifying, developing, and using strengths as is a best-practice in individual-level strength-use interventions (Meyers & Van Woerkom, 2017) but changed the focus to the strengths of the other participants. Using a round-robin survey, we collected dyadic data before and after the intervention among direct colleagues in 9 teams from an IT consultancy company in the Netherlands. This yielded a total of 508 dyadic measurements, including pre- and post-measurements of both the experimental and control group. We adapted the individual strengths-use measure to reflect interpersonal strengths-use. Participants rated their (own) strengths use, their interpersonal strengths use, and their relational energy in the interactions with all their team colleagues. All measures were adapted for dyadic use. Additionally, the team leaders rated everybody's performance. We extended used the Multilevel Social Relations Model (Snijders & Kenny, 1999) to be able to split team, actor, partner, and dyadic effects. The multi-level structure allowed us to extend the social relations model to include measurements over time (i.e., the pre- and post-measures).

#### Results

Our results showed that our intervention stimulated interpersonal strengths-use. Moreover, interpersonal strengths-use energizes those who seek out strengths in others. We did, however, not find significant effects of interpersonal strengths-use on either the strengths-use or relational energy of the target of interpersonal strengths-use. We also found no significant impact on the performance of either side of the dyad.

### Limitations

Due to a relatively limited sample size, we were not able to properly examine the effects of interpersonal strengths-use on the individual or team level.

### Conclusions

Interpersonal strengths-use seems to be a promising new positive, proactive strategy that employees can use to benefit their well-being by creating more energizing interactions with colleagues. More research is needed to explore the boundary conditions under which interpersonal strengths-use may also help the target of this behavior. Both practitioners and researchers can use the intervention we developed to stimulate interpersonal strengths-use and increase employees' well-being.

### Relevance to the Congress Theme

Employees are increasingly dependent on others in their work. Interpersonal strengths-use can help employees make optimal use of their social environment in their job.

### Relevant UN SDGs

Good relationships at work are an essential factor in employees' well-being. Our intervention helps employees to proactively create more energizing interactions with their colleagues.

*Keywords: strengths use, intervention, dyads*

## **Oral presentation OP611**

### **Win or lose: Rivalry, risk-taking, and relative performance**

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Competition is an essential component of organizational life. While some competitive situations can be defined purely in structural terms, a subset are characterized by the relational significance of the competition to the competing parties, and these latter types of competition are encapsulated by the construct of relational rivalry (Kilduff et al., 2010; Kilduff, 2014, 2019). Rivalry, in this context, is defined as an intense competitive relationship with heightened psychological stakes associated with the competition. Thus, relational rivals are competitors who have an enduring, historically-embedded competitive relationship that lends them much greater subjective importance, compared to other competitors who pose equal threat.

Prior research shows that rivalry can have powerful motivational effects, which prompt both rational and irrational responses, including increased motivation to outperform competitors, greater risk-taking, eager decision-making, pronounced legacy concerns, and unethical behavior. These studies demonstrate that the motivation to win and defeat the competitor increases in a contest against a rival. However, while multiple inferences can be made from the existing literature about the motivation to succeed against a rival, not much can be said about the actual implications of success or failure against a rival. This paper thus examines the implications of relative performance for the relationship between rivalry and risk-taking.

Drawing on arguments from social comparison theory and the literature on social aspirations, this paper proposes that relative performance against a rival impacts the extent to which rivalry affects risk-taking and performance. Underperformance relative to a rival is likely to have a special psychological salience that magnifies its significance and may serve as an unambiguous indicator of performance below aspiration levels. Accordingly, this paper hypothesizes that risk-taking is higher when underperforming against a rival compared to overperforming against a rival, as well as when underperforming against a rival compared to underperforming against other competitors.

To test the proposed relationships, this paper uses archival play-by-play and game level data from the National Football League (NFL) in the USA, since clear rivalries can be identified in the NFL, along with clearly-identifiable performance objectives and empirically established measures for both performance and risk-taking. Linear and logistic regressions are used to test the hypotheses. Initial analyses suggest the presence of a significant interaction between relative performance and rivalry when it comes to predicting risk-taking. Fine-grained results will be available by early next year. We will further examine the role played by the magnitude and significance of the relative performance differential.

This paper will seek to build on rivalry, risk taking, and performance improvement literature. First, this paper will attempt to contribute to rivalry theory by investigating an important boundary condition for the known effects of rivalry. Investigating this is especially relevant because real-life competitions are hardly ever one-off interactions, and performance feedback is often available at various points in the prolonged competitive relationship. Second, this paper will contribute to the literature on performance feedback and social aspirations. Prior work has argued that social aspirations are less consequential for performance feedback due to their scarcity and interpretational ambiguity. In contrast, the present paper points toward one type of social

performance feedback that is likely to be interpreted as a relatively clear and unambiguous indicator of the failure to achieve social aspirations: relative performance with respect to one's rival.

The findings of this paper have important implications for how individuals and organizations cope with the changing world of work, since risk preferences and attitudes are an integral part of managerial and organizational decision-making. Calculated risk-taking will play a significant role in how individuals, teams, and organizations prepare for the future and respond to changing economic, social, and political pressures. Furthering our understanding of the drivers of risk-taking will contribute to the ability to make decisions that lead to greater benefits and fewer adverse outcomes for employees, organizations, and society at large.

*Keywords: rivalry, risk taking, relative performance*

## Oral presentation OP103

### Witnessing Workplace Ostracism: The Role of Organizational Dehumanization

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#### Research goals

To date, workplace ostracism (i.e., employees' perceptions of being ignored or excluded by others at work; Ferris et al.,2008) has exclusively been examined from the victims' perspective (i.e., experienced workplace ostracism). It was found to negatively influence victims' well-being, attitudes and behaviors (Howard et al.,2020). Recently, scholars suggested that workplace ostracism might also be detrimental to employees who witness ostracizing phenomena (Sharma & Dhar,2020), notably by damaging their employee-organization relationship (Wilkerson & Meyer,2019). Although investigating how witnessed workplace ostracism (WWO) affects observers' organizational perceptions might be necessary to build a full picture of the construct (Mao et al.,2017), no research examined the influence of WWO on observers' organizational dehumanization (OD) perceptions (i.e., employees' perceptions to be treated like tools by their organization; Bell & Khoury,2011). This research aims to explore the relationship between WWO and OD, its boundary conditions (i.e., employees' entitativity) and subsequent consequences (i.e., employees' life satisfaction, affective commitment, and strike intentions).

#### Theoretical background

On the one hand, WWO is argued to negatively affect observers as they feel the victims' pain as their own (Harvey et al.,2018). Additionally, witnessing workplace incivility entails negative consequences for observers beyond experienced mistreatment (Miner & Cortina,2007). For instance, it is negatively linked to observers' life satisfaction (Glomb et al.,1997), affective commitment (Dupré et al.,2014), and is thought to increase witnesses' strike intentions (Skarlicki & Kulik,2005).

On the other hand, OD impairs employees' psychological strains (Taskin et al.,2019), affective commitment (Stinglhamber et al.,2021) and is thought to promote strike intentions (Brison et al.,2022) as it thwarts employees' socioemotional needs.

Interestingly, scholars suggested that observers of workplace ostracism are likely to blame their organization for fostering a hostile work environment (Wilkerson & Meyer,2019) where their need to belong can be threatened (Dhanani & LaPalme,2019). Hence, we hypothesize that, when controlling for experienced workplace ostracism, WWO positively relates to OD (H1). Since both WWO and OD affect employees' well-being, attitudes and behaviors (Caesens et al.,2017; Sharma & Dhar,2020), we further hypothesize that, when controlling for experienced workplace ostracism, OD mediates the relationships between WWO and observers' decreased life satisfaction (H2a), decreased affective commitment (H2b), and increased strike intentions (H2c).

Additionally, observers are more likely to blame organizations for a member's wrongdoing (e.g., ostracism) when they perceive organizational members as highly entitative (i.e., as a single entity rather than multiple individuals) (Efron et al.,2021). Hence, we hypothesize that the relationship between WWO and OD is stronger when employees' entitativity is high (H3). We also hypothesize that the effect of WWO on observers' decreased life satisfaction (H4a), decreased affective commitment (H4b), and increased strike intentions (H4c) via OD will be stronger when entitativity is high.

## Methodology

The hypotheses were tested in two cross-sectional studies using online questionnaires distributed to employees from various organizations. In Study 1 ( N =204), H1 and H2a-c were tested. Study 2 ( N =345) replicates and extends Study 1 by testing all hypotheses. All variables were measured using original or adapted validated scales (e.g., WWO was measured using an adapted version of Ferris et al.'s (2008) experienced workplace ostracism scale).

## Results

In both studies, results of SEM and latent bootstrap analyses provided support for all hypotheses. Yet, the interactive effect between WWO and entitativity surprisingly showed at low levels of WWO.

## Limitations

This research relies on self-reported measures, which rises concerns about common method variance bias. Additionally, the cross-sectional design of both studies makes it difficult to draw conclusions regarding causality.

## Conclusions/Implications

On top of operationalizing WWO for the first time, this research contributes to the workplace ostracism literature by showing that it affects every employee, not solely victims. This research also adds to the OD literature by extending its nomological network.

## Relevance to the Congress Theme

Because OD relates to decreased life satisfaction and affective commitment, and increased strike intentions, it is of utmost importance to implement changes to reduce these perceptions. By showing that WWO is a predictor of OD, this research provides organizations with an avenue to achieve this goal.

## Relevant UN SDGs

By focusing on predictors of employees' life satisfaction, this research identifies leverages to improve employees' wellbeing, thereby being relevant to the Good health and wellbeing SDG.

*Keywords: witnessed workplace ostracism, organizational dehumanization, entitativity*

## Oral presentation OP688

### Women in aerospace: Perspectives from the lenses of HR specialists

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The aerospace sector represents a great economic contribution; however, it faces the challenge of attracting and retaining qualified workers, especially women. STEM (science, technology, engineering, and mathematics) fields experience, in general, gender occupational segregation, which contributes to shortages of workers and their skills, consequently undermining the future of work and workers. This is even more visible in aerospace, being, thus, important to understand why this sector pulls girls and women away.

Several theoretical approaches were proposed in the literature to answer this question. There is a so-called leaky pipeline going from early stages of socialization and education until the first career stages, progressively losing women for STEM jobs. Besides biological gender differences, psychosocial aspects play an important role in those leaks. For instance, gender stereotypes regarding both women (expected to be caring and choosing communal-oriented careers) and STEM jobs (perceived as being agency and problem-solving oriented, which are considered masculine attributes) inform a socialization that matches these stereotypes from parents and teachers, while also create among girls a mismatch in interests. Lack of self-efficacy in STEM courses (e.g. maths) has also been considered. The consequential low representation of women in STEM makes female role-models scarce, which reinforces stereotypes.

This is a complex phenomenon requiring perspectives from multiple stakeholders. An overlooked perspective is that of HR professionals in charge of recruiting, and training workers, and promoting jobs in aerospace among students. This research presents a case study of QSR, a HR consultancy firm in social sciences operating in the aerospace sector. It aims to understand the experiences of women in aerospace as well as the work developed by them on female representation. For this purpose, two qualitative resources were available in QSR: 1) perspectives from HR specialists and 2) documents. Thus, individual in-depth interview to all (N=9) HR specialists were conducted, as well as a document analysis of the five Research and Development (R&D) projects in which QSR was a team member. The analyses of the collected data were carried out with IRaMuTeQ software, which allowed the mining and visualization of the emerging main themes/classes.

In the individual interviews, after an iterative process of category creation and allocation of excerpts, the software showed six classes in textual analysis: 1) expertise in aerospace, 2) perspectives on gender equality (e.g., role of women in male-dominated fields), 3) interpersonal context in women experiences (e.g. discrimination experiences and support from others); 4) intrapersonal aspects (e.g. voicing and allowing discrimination); 5) QSR and HR professionals' mission, and 6) the influential role of school and teaching. Among these insights, we highlight that low work-life balance was the most mentioned barrier for women to enter and thrive in aerospace (e.g. a field hostile to motherhood), and assertiveness was the most referenced strategy they perceive women use to overcome barriers. Some gender-blindness was also pointed as a strategy used by HR professionals to avoid discrimination.

The documental analysis showed words associated with the inclusion of women in aerospace appearing only in one R&D project. Analysing this report in detail, the following classes were

suggested: historical context of women entering aerospace (e.g. war); organizational facilitators (e.g. mentors); workplace barriers (e.g. pay-gap); and academic barriers (e.g. interest).

In spite of limitations such as focusing in only one company with few workers, thus restricting generalization, these studies provide important messages. They provide insights from the lenses of HR specialists, which is novel (to our knowledge, the perspective of girls and women themselves, teachers and/or parents is more often taken). They highlight initiatives that, in the perspective of these professionals, are crucial to increase women representation in aerospace: networking actions, contact with role-models, and top-down organizational inclusion measures. However, these HR specialists might adopt gender-blind approaches in their practice, which are well-intended and can increase confidence in women, but disregard the effects of past experiences in access to opportunities. In the spirit of EAWOP 2023 conference, this case study highlights that the future of work in aerospace needs skilled profiles that are more out of reach for women due to sexism, and HR specialists need to be part of the dialogue with other stakeholders and disciplines for, together, developing competences and facilitating the attainment of UN sustainable development goals 5 (gender equality) and 8 (decent work and economic growth), given the importance of aerospace for economically prosperous careers and societies.

*Keywords: Gender occupational segregation, STEM, case study*

## Oral presentation OP747

### Women leaders in family firms: challenges and opportunities

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science

**Research goals:** The majority of businesses worldwide are family firms. Many organizations, and family firms face challenges in inclusiveness and equity when it comes to the role of women, especially in leadership positions. Although family firms are well positioned to enable women to access leadership positions, research on their leadership and the unique challenges they face is still underdeveloped (Maseda et al., 2021). The aim of this study is twofold. First, to understand the main challenges women leaders of family businesses face, and how they cope with and overcome these challenges. Especially regarding career development, specific leadership styles and how they manage intrapersonal, interpersonal and group conflict. Second, increasing our understanding of how women leaders deal with family and business demands would help to empower current and future women leaders in family businesses.

**Theoretical background:** Becoming influential leaders of their family firms imply women must overcome several challenges related to enhancing their self-confidence and self-efficacy, authenticity, and having legitimacy (McAdam et al., 2020). Being part of a business family might offer women potential easier access to leadership however, there is also the risk of experiencing the “impostor phenomenon” (Shanine et al., 2020), given gender stereotypes and the influence of family ties to be appointed as leaders. Literature reports the advantages of the presence of women in leadership (e.g., emotional strengths, constructive conflict behaviour), which could be extra salient in family firms given their positive impact both family and business (Kubiceck & Machek, 2019). Exploring specific leadership styles (e.g., servant leadership, authentic leadership, autocratic leadership) could advance our understanding of how family context shapes business leadership and how leadership could promote or hinder constructive conflict management (Alvarado-Alvarez et al., 2020; Obi et al., 2020).

**Research design:** This study adopted a qualitative approach. The participants (n=25) were recruited on purpose from a database of women leaders of Spanish SMEs family firms created for the researchers. Data was collected through in-depth interviews varying from 1,5 to 2 hours of length). A thematic analysis will be used to extract the salient themes related to imposter feelings, leadership development, and conflict management.

**Results expected:** We expect to obtain themes regarding career development, imposter feelings and cognitions, styles of leadership, and conflict management (e.g., types of conflict, family conflict). A comparative analysis will inform about the differences and similarities across these dimensions considering the age of the participants, the company’s size, and the industry or sector. We also expect to draw a rich and complex structure of relationships between the dimensions.

**Limitations:** The use of purposive sampling gives space to the researcher’s bias and the self-motivated willingness of the participants to take part in the study. The specific context (e.g., women leaders, Spain, and family SMEs) motivates further studies in other contexts (e.g., other countries) or comparing groups of women and men.

**Conclusions:** Understanding how women leaders in family firms develop their career as leaders facing unique challenges because of the intersection of family, management, and ownership roles

contribute to contextualizing leadership and conflict management theories. This study is also relevant for practice because brings empirical evidence for developing mentoring and coaching programs for career development and well-being under a gender perspective.

Relevance to the Congress Theme: This research responds to the call for urgent actions addressed to reduce the gender gap in organizations as family firms by bringing more visibility to the contributions of women leaders and the unique challenges they face.

*Keywords: women, leadership, family firms*

## Oral presentation OP107

### Women's Attraction to Top Level Positions: A field study among female government executives in the public sector

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Research goals. Women are underrepresented at top levels in organizations (European Commission, 2019), despite research showing that men and women are equally effective in these leadership positions (Eagly et al., 1995). Scholars tried to comprehend this glass ceiling by studying gender biases during selection (Bosak & Sczesny, 2011). However, female candidates can also be prone to biases when deciding (not) to take on a higher role, e.g., because of gender biases in job advertisements. Studies found that gendered language in job ads leads to lower application intention/behavior among women (Born & Taris, 2010; Deros & Wille, 2018). The present study expands this research line in an applied field setting: among government executives.

Background. Building on the theory of symbolic attraction (Highhouse et al., 2007), we investigated whether role, behavioral, and technical requirements (positively or negatively metastereotyped) in existing job ads and their wording (dispositional or situational) withheld female government executives from applying for top management positions. Female executives may believe that others perceive them as less qualified leaders due to their gender (metastereotypes; Vorauer et al., 1998). Hence, ads that require leadership competences might refrain instead of attract female executives to apply. We expected job attraction (H1) and application behavior (H2) to be lower for role (H1a/H1a), behavioral (H1b/H2b) and technical (H1c/2c) requirements that female candidates hold negative metastereotypes about. Building on the linguistic category model (Semin & Fiedler, 1991) we further expected effects on job attraction (H3) and application behavior (H4) to be stronger if role (H3a/H4a), behavioral (H3b/H4b) and technical (H3c/4c) requirements were worded in a dispositional rather than a situational way.

Design & Method. A field experiment with a 2x2 within subjects design investigated effects of metastereotyped requirements (negative versus positive) and their wording (dispositional or behavioral) on job attraction/application behavior of female government executives (N = 129). Negative and positive gender metastereotypes regarding the requirements were selected/tested based on a literature review and pilot studies.

Results. Manipulation checks were successful. Mixed Model Analysis showed that, even when controlling for qualifications on the requirements, a negatively metastereotyped requirement in an ad was perceived as less attractive than a positively metastereotyped requirement for the role and technical requirements but not for the behavioral requirements (H1a/H1c supported, H1b unsupported). There was no interaction between type of requirement and wording on attraction for role and technical requirements (H3a/H3c unsupported). For the behavioral requirements, there was a significant interaction between type of requirement and wording, such that type of requirement had no effect on attraction when the wording was behavioral, yet when a dispositional wording was used, a negatively metastereotyped requirement was significantly less attractive than a positive one (H3b supported). Generalized Estimating Equation analysis showed that, when controlling for qualifications on the requirements, application behavior was higher when the job ad contained positive compared to negative role and technical requirements (H2a/H2c supported), but not for behavioral requirements (H2b unsupported). No interactions were found between type of requirement and wording for role and technical requirements (H4a/H4c unsupported), but there was

an interaction between type of behavioral requirement and wording such that a negative metastereotype only led to lower application if worded in a dispositional way (H4b supported).

Limitations. Although participants were executives of a wide variety of departments in the government organization, this study only focused on one government organization. Future research could also include other (private) organizations.

Conclusions. Findings are in line with the theory of symbolic attraction (Highhouse et al., 2007) and findings from Wille and Derous (2018) and indicate that effects of metastereotypes in ads hold in a field setting. For behavioral requirements, results supported the linguistic category model and showed that a dispositional wording can have negative effects on attraction and application behavior. Organizations that wish to obtain more women on top level positions should carefully consider which words to use in job ads and avoid dispositional wording of person requirements.

Conference theme. This study aims to uncover early barriers in women's promotion to top level positions by studying metastereotypes in existing job ads from a large government organizations. This way, we can make tailored recommendations to this government organization on how to better formulate job ads to gain more women at top level positions.

*Keywords: gender – leadership – field study*

## Oral presentation OP568

### **Women's Careers in Policing: factors supporting and hindering career progression and what the police can do about it**

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The current research, conducted in partnership between academics and practitioners from a large UK Police Force, aims to understand the factors which support and hinder women's career progression in the Force, and explores the ways in which the research findings have informed practice. This research provides contextual information which can support the career progression of women by understanding; in their own words, the barriers that they face. In addition, our data explored rank, race, sexual orientation, gender identity and caring responsibilities in line with recommendations to explore intersectionality and factors other than oversimplifications made by gender alone (Sharheim, 2019).

Women's career progression has been made prominent by #metoo, pay gap reporting and the motherhood penalty (Morgan, 2015). In policing, research has observed gender differences in the promotion process in Australia (Drew & Saunders, 2020), gender and culture challenges in Canada (Murray, 2021), implications of police transformation for women officers in the UK (Brown & Silvestri, 2019), as well as understanding how women have successfully navigated their careers in policing in the USA (Morabito & Shelley, 2018). At a recent US summit, barriers to promotion for women in policing were discussed and ranged from lack of confidence to pervasive 'masculine' culture (Sharheim, 2019).

In the UK, policing is by consent (Home Office, 2018) with a key goal to ensure that the 'police are the public and the public are the police' ensuring appropriate representation within forces (Boag-Munro, 2017). The theory of representative bureaucracy explains the importance of diversity in public organisations (Bradbury & Kellough, 2010). In the UK in 2020, women were 31% police officers, 33% police constables, 22.5% Chief Superintendent and 29.4% Chief Officer. The Force involved in this study has diversity and inclusion and improving community representation as a strategic priority.

Women in policing face multiple career challenges, partly due to the pervasive view that promotions are positive discrimination, therefore even when women are promoted, believing this was because of gender and not ability (Archbold & Moses Shultz, 2008). Women also experience reduced confidence coupled with 'second shift' or family responsibilities and a lack of resources making promotion seem like an impossible feat (Archbold & Hassell, 2009; Benard, 2008; Gale, 2013; Dugan & Barnes-Farrell, 2020; Trappe et al, 2015). The 'ideal worker' and 'ideal parent' model help explain women's career progression, often epitomised by part-time work and gaps following parental leave, in contrast to the 'ideal police worker' who is full time with continuous and unbroken service (Silvester, 2017).

An online qualitative survey was distributed to women in the force in Spring 2020. Participants responded to free text questions about their expected and desired rank, their feelings about their career and availability of support. There were 166 completed questionnaires (125 with demographic data). Our sample was primarily white (82%), Police Constable (50%), with children under 16 (36%) or no caring responsibilities (28%), heterosexual (72%), with an undergraduate degree or similar (42%). Data was analysed using inductive content analysis.

Results were categorised into three broad themes of:

Culture : masculinity, face fitting, tokenism and individual responsibility for career development.

Family considerations : the gendered nature of work, role flexibility and the importance of good manager relationships.

Promotion process : challenges finding time to study, the recruitment process for promotion, mentoring and the desire not to move away from front line policing into management.

Further analysis of these headline themes is currently underway and will be presented at the conference. Additionally, we will share how this information was triangulated with exit interviews and coaching feedback to inform practice and policy in the force.

Our initial study aimed to look at the intersection between race and gender, yet representation of BAME individuals was low. This led the researchers to question how to reach BAME individuals and encourage participation in research. The sample here was predominantly white and therefore further research is needed to ensure we reach (and receive the trust of) a diverse audience.

The academic/practitioner partnership is unique and enabled an evidence-based approach to support the force to identify strategies to understand and enhance the career progression of women. Insights were offered into common challenges such as how to communicate regarding equality, diversity and inclusion, e.g., the difference between positive action and positive discrimination. In context findings add to the research literature which can be utilised by other forces around the world to understand the perceptions, barriers and facilitators to women's career progression.

*Keywords: Womens Careers, Barriers, Facilitators*

## Oral presentation OP307

### Work Adaptability Among Older Workers – A Review and Research Agenda

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science&practice

**Aim and objectives** Workers aged 55 to 64 are increasing and are set to equal one-quarter of the global workforce by 2030 (Harasty & Ostermeier, 2020). Accordingly, it is crucial to advance the understanding of what factors help older workers to adapt effectively to their working conditions. The current review aims to generate new knowledge through a critical and systematic review of the existing literature on career adaptability among older workers. By identifying findings and perspectives from a broad range of empirical studies, the review highlights commonalities, and differences by depicting the antecedents, processes, conceptualization, and outcomes of older workers' career adaptability.

**Theoretical background** Career adaptability is an important resource in coping with changing work conditions, such as managing career-related tasks, transitions, and work traumas (Savickas, 2005). Given its relevance for favorable work outcomes such as e.g., career performance (Rudolph et al., 2017), research lacks an understanding of how and why career adaptability plays a crucial role in the careers of older workers. While it is conceivable that age-related losses restrict, and age-related gains foster, older workers' ability to deal with the challenges in their careers (Fasbender et al., 2019), career adaptability may vary as a function of age. In addition, because individuals allocate their resources for the regulation of age-related losses (Baltes et al., 2006), there is a need for a clearer understanding of critical factors associated with how older workers regulate career adaptability resources to ensure proper functioning.

**Method** The systematic review included peer-reviewed articles, cross-sectional and longitudinal data, and intervention studies. The search terms were as follows: career adaptability, work adaptability, work adjustment, older workers, older employees, career construction, retirement, work behaviors, aging workforce, late-career planning.

**Results** The results reveal that career adaptability is an essential construct among older workers, which might facilitate their late career development and transition to retirement. We also outline several avenues for future research to advance the understanding of career adaptability in the late career.

**Limitations** The current review focused on empirical peer-reviewed papers, which are identified with the used keywords in the selected research fields. More general research on aging and life adjustment was not the focus of this work.

**Conclusion** The article concludes by demonstrating knowledge and understanding of the role of career adaptability among older workers and offering several suggestions for future research, highlighting the theoretical, practical, and empirical contributions that future work in this domain could make.

**Relevance to the Congress Theme** Contemporary workplaces require individuals to construct their careers and acquire career adaptability more actively, yet the convergence of changing global demography brings challenges for companies and individuals alike. The role of career adaptability may address the challenges associated with an aging workforce on an individual and broader contextual level.

Relevant UN SDGs Age-related losses across the lifespan are unavoidable and age discrimination are still common in the workplace today. By incorporating findings to specify the questions of the core theories, processes, antecedents, and outcomes of career adaptability among older workers, the current review addresses the inequalities of older workers in the workplace by providing a greater understanding of age and adaptation, i.e., how older workers better engage in work which allows for maximizing older workers' advantage. This contributes to the UN SDGs of "decent work and economic growth" and "reduced inequalities."

*Keywords: Career adaptability, Older workers, Aging workforce*

## Oral presentation OP642

### Work Design, availability of psychological resources during work, and health

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science&practice

**Research Goals.** In a fast changing work environment, it is vital to identify key factors of work affecting employees' well-being and their ability to focus. By that, creating a health promoting and skill enhancing work environment and tasks will be possible, even if circumstances change quickly (e.g. introducing home office during and after pandemic). The goal of this research was to see how work design on the one hand and regulation hindrances on the other hand affect well-being at work and how that affects employees' mental health.

**Theoretical background.** Three key factors of psychological work design are being researched: task demands, scope of action and regulation hindrances. Tasks that present different levels of cognitive challenge, as well as the opportunity to decide for oneself which tasks to do and how, are signs of complete work assignments (Hacker & Sachse, 2014). Regulation hindrances, however, can be seen as risk factors: they interrupt or hinder the flow of work, disrupt concentration and create uncertainty and frustration, e. g. in the form of unclear work assignments or lack of feedback, forcing employees to spend time and resources they actually need to perform their tasks on resolving these obstacles (Zapf & Semmer, 2004). While well-designed work situations enable employees to access and use more of the psychophysical resources required for task completion, monotonous, tightly predetermined and often interrupted unclear tasks take away positive mental and motivational states (e.g. attention, concentration) and reinforce negative emotional and physical states (e.g. nervousness, physical discomfort; Wieland, 2013). These momentary states reflecting resource availability during work in turn affect long-term health: the more effort required to reach a state where one is able to perform a task, the more exhausted one is (Bakker & Demerouti, 2007). However, psychophysical health problems are rarer when positive states predominate (Hammes, 2015). The ability to manage one's own health can make it easier to cope with poorly designed work conditions (Hammes & Wieland, 2012b). Based on the five-by-five effect model (Wieland & Hammes, 2014), the state of resource availability during work is expected to mediate the influence of task design (*hypothesis 1*) and regulation hindrances (*hypothesis 2*) on the frequency of psychophysical health problems. Individual health competence is expected to moderate the influence of task design (*hypothesis 3*) and regulation hindrances (*hypothesis 4*) on the state of resource availability during work.

**Methodology.** Data was collected in twelve different production and service companies as a cross-sectional study within the framework of workplace health promotion projects online and by means of paper questionnaires ( $N = 2\,488$ ). Data analysis was conducted using two moderated mediation analyses.

**Results.** The better the tasks were designed (predictor 1), the more psychophysical resources were available during work and the less frequently psychophysical health problems occurred. The direct correlation of task design with health impairments disappeared when the mediator resource availability was added. The correlation of task design and health problems was mediated by resource availability but not moderated by health competence (*hypothesis 3*). The more regulation hindrances were present (predictor 2), the fewer psychophysical resources were available during work, leading to more frequent psychophysical health problems. Although there was a direct correlation between

regulation hindrances and psychophysical health problems, this was mediated by resource availability. The relationship between regulation hindrances and resource availability was slightly moderated by individual health competence. High individual health competence could buffer the negative influence of regulation hindrances on resource availability during work, especially if many regulation hindrances are present (*hypothesis 4*).

**Limitations.** As this is a cross-sectional study, caution should be exercised when interpreting causal relationships. Only German companies participated in this study.

**Conclusions.** Both health-promoting and health-impairing effects of working conditions can essentially be attributed to the indication that they either strengthen or weaken the state of resource availability during work, which points to a predictive role of the quality of work design and supports important correlations within the five-by-five effect model. While varied task demands and scope of action are to be promoted to an appropriate extent, regulation hindrances are to be reduced as much as possible. An additional strengthening of individual health competence should make it easier to deal with “unavoidable” regulation hindrances that often accompany major changes in companies. This research links science to practise, as the used model is also applied in psychosocial risk assessment in companies.

*Keywords: task design, regulation hindrances, psychophysical resources*

## Oral presentation OP362

### Work engagement in healthcare workers during the COVID-19 pandemic in the Netherlands

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Research goals :

The COVID-19 pandemic has placed great pressure on healthcare systems and societies around the globe. Intense and extended stress responses during crises like these can have short and long-term effects. The ability of healthcare workers to effectively cope with stressors is vital for their patients, their families, and themselves. It is of importance to improve the mental health and resilience of healthcare professionals, to combat the aftermath of the COVID-19 crisis and possible future crises.

This study explores the impact of the COVID-19 pandemic on healthcare workers' wellbeing and engagement at work and to provide recommendations to healthcare workers and hospital managers to maintain or improve the health and wellbeing at work. Specific research aims are: 1) to examine the levels of work engagement experienced by hospital employees in the Netherlands at 2 time-points during the COVID-19 outbreak, 2) to explore differences in work engagement levels between medical and non-medical employees (and the different occupational groups within each) at both waves, and 3) to examine potential predictors of work engagement among all hospital employees during the COVID-19 outbreak.

Background :

The COVID-19 pandemic has been linked to a great deal of anxiety, exacerbation of mental illnesses, social isolation, and feelings of helplessness among individuals (Sahebi et al., 2021). For healthcare workers these outcomes are believed to be even more severe, due to the high vulnerability of healthcare workers working with COVID-19 patients and increased work stress and workload (Badahdah et al., 2020; Cao et al., 2020). Despite the emerging research on the impact of COVID-19 on the well-being of healthcare workers, two important issues remain understudied. First, little emphasis has been given to the potential impact of the Covid-19 pandemic on non-medical workers in healthcare settings (e.g. cleaning- and logistic staff, lab workers, managers). Second, insight into potential positive effects and positive outcomes (e.g. engagement and team support) is less profound. Yet, these positive effects are interesting to explore since they can play an important role in helping healthcare workers cope better when confronted with difficult situations (e.g. the COVID-19 pandemic).

Design and methods :

A cross-sectional study was conducted using data from two cohorts; at two time-points (COVID-wave 1 cohort in June 2020 and COVID-wave 2 cohort in November 2020), a survey was conducted among all-6000 hospital employees of a non-university hospital in the Netherlands.

Main outcome measurement was work engagement (UWES). Furthermore, potential prognostic variables were work pressure (Job Content Questionnaire), co-worker support (VBBA) and preparedness for traumatic events (Bank et al, 2018). To explain the key outcomes among the different occupational groups, employees were divided into medical employees (doctor, nurse

specialist/physician assistant, allied health professional and trainee) and non-medical employees (manager, staff, supporting staff with patient contact, and supporting staff without patient contact).

Analysis of variance (ANOVA) tests will be used to compare the outcomes for various job types while controlling for age and gender. To examine which employee outcomes are prognostic factors for work engagement, multivariable regression analysis will be conducted.

#### Results :

In total, N=1980 hospital employees were included in the COVID-wave 1 cohort and n=1261 hospital employees in the COVID-wave 2 cohort. Preliminary results show that the overall levels of work engagement were considered average for both cohorts (COVID-wave 1: M = 3.92, SD = 0.82; COVID-wave 2: M = 3.88, SD = .95) for both job types (medical vs. non-medical) compared to Dutch norms (Schaufeli & Bakker, 2004). Further results concerning potential significant differences between mean scores of engagement (subscales) across job types and prognostic employee factors for engagement will be available end of 2022.

#### Conclusion:

Although the cross-sectional nature of the study and inability to match respondents from time 1 and time 2 should be recognised as a limitation, this study provides relevant insight into what factors are paramount for ensuring that healthcare workers remain healthy at work and how resilience can be improved. Knowledge of this nature will assist healthcare managers and policy makers in taking care of their staff during the aftermath of COVID-19. These results can also inform managers in preparing healthcare workers for the ongoing transformation in healthcare where healthcare demands are rising and resources are becoming increasingly scarce.

*Keywords: Health care, Covid-19, workers' engagement*

## Oral presentation OP454

### **Work interrupted: The dual nature of daily work interruptions and the moderating role of daily perceived overqualification**

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science

**Research goals:** Currently, there is a consensus in the literature that interruptions are largely harmful (e.g., Puranik et al., 2020). This theoretical perspective considers interruptions during the workday as hindering task completion, thereby eliciting negative outcomes later in the day such as negative affective states, reduced well-being, and reduced performance (e.g., Puranik et al., 2020). Yet, a more recent perspective challenges the above ideas, putting forward the notion that work interruptions might at times also have beneficial aspects due to the fact that they may provide key information that can boost interrupted employees' goal progress, thus leading to positive outcomes for employees (Puranik et al., 2020; Sonnentag et al., 2018). Thus far, these perspectives have been considered rather separately in the literature, leaving open how interruptions can trigger employee reactions that are more ambivalent in nature. In the present study, we unite both pathways – thereby drawing on cognitive appraisal theory that provides a suitable theoretical basis to examine work stressors that might cause ambivalent reactions.

**Theoretical background:** Following cognitive appraisal theory, we posited that daily work interruptions are comprised of both threat (i.e., increased daily negative affect) and challenge (i.e., increased daily work goal progress) aspects, thus leading to opposing effects on outcomes (i.e., daily job satisfaction, daily creative process engagement, and daily work-private life conflict). We further proposed that if an employee perceives themselves to be overqualified for that day's work, this will constitute a resource surplus that buffers the threat aspects and amplifies the challenge aspects of daily work interruptions.

**Research Design:** We collected daily diary data over 10 workdays from 213 employees.

**Results:** Results showed that daily work interruptions were positively related to daily negative affect and positively related to daily work goal progress. Moreover, results showed significant indirect effects of daily work interruptions on daily job satisfaction and daily work-private life conflict via daily negative affect as well as significant indirect effects of daily work interruptions on daily job satisfaction and daily creative progress engagement via daily work goal progress. Further, higher levels of daily perceived overqualification than on average buffered the positive relationship between daily interruptions and daily negative affect.

**Limitations:** Although daily diary designs provide strengths, there are some limitations. For example, despite separating the measurements of study variables across two daily surveys to address common-method bias, we cannot claim causal effects. Furthermore, data from the two different daily diary surveys came from the same sources and therefore, common-source bias might have affected our study results.

**Conclusion - Research and Practical Implications :** Our study advances theory on the stressor-strain relationship by emphasizing the need to specify how different stressors can activate functionally different psychological pathways. Results further highlight that daily work interruptions are ambivalent in their nature. Moreover, we showed that perceptions of overqualification vary between days and that daily perceived overqualification acts as a resource when dealing with work

interruptions. By adding this micro perspective to research on perceived overqualification, our study provides evidence on potentially beneficial aspects of perceived overqualification. Lastly, companies should offer trainings for employees that detail positive and negative aspects of interruptions as well as related consequences. In doing so, employees may acquire the knowledge to decide on a case-by-case or day-by-day basis how to deal with interruptions. Moreover, companies should find ways to facilitate the informal exchange of information between colleagues and supervisors/employees that comes with interruptions and which can bolster work goal progress.

Relevance to the Congress Theme : Within a changing and evermore interconnected world of work, work interruptions are one of the most pertinent task-related stressors (e.g., Puranik et al., 2020; Sonnentag & Frese, 2013). Thus, it is crucial to understand how employees are affected by interruptions and how they can effectively cope with being interrupted to navigate the changing world of work.

Relevant UN SDGs: This work is relevant to the ' Good health and wellbeing ' UN SDG goal, as it addresses how employees can cope with interruptions at work as one of the most pertinent work stressors in modern day work. Moreover, this research is related to the ' Decent work and economic growth ' UN SDG goal as it relates to the question how demands of a growing and changing economy impact employees' working conditions.

*Keywords: stress, work interruptions, perceived overqualification*

## Oral presentation OP22

### Work well, sleep well? The complex relationships between person-job fit and sleep

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science&practice

Research goals and why the work was worth doing. In the present study, we examined the interplay between person-job fit and self-efficacy on job stress and indirectly on sleep quality. Theoretical perspectives and previous empirical findings suggest that a holistic approach is needed when examining the relation between key factors at work and sleep quality. Therefore, we focused on person-job fit, an approach that considers the fit between individual abilities and characteristics of the jobs' tasks that are performed at work. Building on previous research surrounding the negative relationship between job stress and sleep quality, we also took job stress into account and examined it as an underlying mechanism between person-job/self-efficacy interaction and sleep quality.

Theoretical background. Poor sleep quality has been shown to have negative consequences for individuals and organisations such as poor job performance, counterproductive work behaviour and accidents. Thus, in order to improve well-being of employees and the performance of organisations, there is a need to identify key factors at work that can lead to impaired sleep. Previous research provides mixed findings around relation between job characteristics and sleep quality, indicating a) a need for a holistic approach and b) existence of moderating variables. Person-job fit considers the match between the job tasks and individual abilities and/or preferences, providing thus a broader focus than just looking at job characteristics. Self-efficacy is individual's confidence about their own abilities to compete specific tasks and has previously been shown to influence the perception of job situations. In present study, we expect self efficacy to moderate the relation between person-job fit and job stress such that it will strengthen the negative relationship and in turn influence the sleep quality.

Design/Methodology. In a cross-sectional field study (N = 177) the complex relationships between person-job fit, self-efficacy, job stress and sleep were examined. Participants aged between 18 and 65 years filled in an online questionnaire, assessing their current work situation, self-efficacy, stress perception and the sleep quality.

Results. The results revealed that the interactive effects of person-job fit with self-efficacy on job stress and in turn on sleep quality were significant. As expected, good person job fit led to less job stress and better sleep quality only for employees with high self-efficacy.

Limitations. The study was conducted within a cross-sectional design; thus, the causality of the effects remains uncertain. Future research could examine whether the results can be replicated with a larger sample and in a more controlled setting, for example as a laboratory study, obtaining internally valid findings or within a time-lagged design.

Research/Practical Implications/ Originality/Value. The present research investigated how the interaction between person-job fit and self-efficacy impacts sleep quality via job stress. We obtained externally valid (field study) findings and demonstrated that a combination of a good person-job fit and a high self-efficacy can be a key to less job stress and good sleep quality. These findings supplement previous research by creating a new approach to the discourse surrounding how person job fit might impact sleep. The present study can also be the basis of further research that allows for practical implications in development and training of employees regarding their self-efficacy.

Relevance to the Congress Theme. In order to promote success of organisations, we need to focus more on employees' needs. Present research demonstrates that development of specific competencies such as self-efficacy, might increase the sleep quality of employees, which has previously been shown to be related to many positive work outcomes.

Relevance to UN SDGs: Present research is relevant to promotion of goals of wellbeing and health, as well as decent work and economic growth.

*Keywords: Person-job fit, self-efficacy, sleep quality*

## Oral presentation OP536

### Work Well-Being in Expatriates: Investigating Developmental Trajectories of Exhaustion and Vigor

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science&practice

The world of work is continuously changing, forcing organizations to recognize the importance of a global workforce. Discussions around managing this international mobility of highly skilled people and accessing the availability of human capital have generated debates of great magnitude across the world. Multinational organizations benefit from highly skilled expatriates, as they bring competitive advantages to the employers and the potential of international economic exchange and cross-cultural development. The work well-being of these global talents is an essential antecedent for their productivity and ability to perform well, and therefore novel knowledge about expatriates' work well-being is needed. Expatriates operate in a unique and challenging environment, where a great deal of demands and stress are imposed on them daily. Research has shown that job exhaustion (negative indicator) and vigor (positive indicator) are the most essential dimensions of job burnout and work engagement - elements of work wellbeing. Job exhaustion and vigor are often studied in domestic work well-being literature and have also been found to be relevant when studying expatriates. Expatriates are likely to experience both engagement and burnout simultaneously, because of the constant new challenges and requirements they face. Under these unique working conditions, it is possible to find expatriates who are highly engaged in their work, but at the same time experience exhaustion due to work demands. However, identifications of simultaneous profiles of work engagement and burnout are rare overall, and nonexistent in expatriate literature.

Experiences from expatriation work affect work well-being. Even though studies have highlighted that working abroad has transformative influence on individuals, providing a possibility to explore the meaning of their expatriation experiences and changing their perception of identity, little is known how these kinds of experiences link to their work well-being. In this study, we focus on the meaningfulness of expatriate work, in particular, the perceptions of meaning making (MM) that their work abroad provides for expatriates personally, and how it links to their work well-being in terms of exhaustion and vigor. MM is an appropriate job resource in the context of expatriation as it has been found to involve several positive elements, such as learning and development opportunities on a professional and personal level, interesting tasks involving wider responsibilities than occur in the home country, and some studies show evidence that these kinds of issues are related to positive outcomes such as career success.

Following Conservation of Resources (COR) theory, we perform latent profile analyses (LPA) on a three-wave longitudinal dataset from 416 Finnish expatriates to identify the configurations of exhaustion and vigor among an expatriate population, for example, subgroups of the sample experiencing high levels of vigor coupled with high levels of exhaustion, or subgroups experiencing low exhaustion along with high vigor, etc. This approach helps to provide a holistic understanding of work well-being among the studied group. We identified the existence of three exhaustion-vigor profiles; profile 1, labeled "Stable" (n = 240, 58%), indicated stable low levels of exhaustion and stable high levels of vigor; profile 2, labeled "Unenergized" (n = 43, 10%), presented stable medium levels of exhaustion and vigor and finally, profile 3, labeled "Risky" (n = 133, 32%), indicated a stable high level of exhaustion and decreasing high level of vigor. Further we demonstrated that meaning making (MM) through work predicts the developmental profile membership in exhaustion-vigor continuum. Expatriates with higher levels of MM were more likely to display characteristics from

either stable or risky profile of exhaustion-vigor continua rather than the unenergized profile. Results showed high proportion of expatriates belonged to a risky group, experiencing both high exhaustion and high vigor. This particular group of expatriates are simultaneously exhausted and vigorous all while experiencing meaning of life through their work. However, their levels of vigor have found to be dropping overtime thus indicating that such state of being exhausted and vigorous at the same time could be risky and unsustainable in the long run even though they have a meaningful job.

Our contribution is threefolds: first, we examine exhaustion and vigor utilizing a person-centered approach, examining the development of workplace well-being among individuals, particularly in the international work context. Second, the profiles of exhaustion and vigor are studied simultaneously, which provides naturally occurring longitudinal subgroup combinations of expatriate population. Third, we contribute to the knowledge of how perceptions of meaning making through expatriate work are associated with different longitudinal exhaustion-vigor profiles.

*Keywords: Expatriates, meaningful work, latent profile analysis*

## Oral presentation OP242

### Worker Safety and Health Training in Relation to the United Nations Sustainable Development Goals

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science&practice

The purpose of this presentation is to discuss how key research contributions and best practices regarding worker safety and health training can assist others in making progress toward the accomplishment of select United Nations Sustainable Development Goals. This presentation will be organized around the goals and targets associated with GOOD HEALTH AND WELL-BEING (Goal 3) and DECENT WORK AND ECONOMIC GROWTH (Goal 8), as research and practice on worker safety and health training relates directly to these goals and specific objectives. For each target, the presentation will emphasize exemplary research and practice efforts regarding safety and health training as indicated below.

Goal 3: GOOD HEALTH AND WELL-BEING: Ensure healthy lives and promote well-being for all at all ages.

3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

This discussion will highlight how training programs can be developing and implemented for both workers and supervisors to assist them in adapting well (i.e. preventing mental health problems) in the face of adversity, trauma, tragedy, or sources of stress. As an example, an application and evaluation of a disaster worker resiliency training program developed by the U.S.'s National Institute of Environmental Health Sciences and the Substance Abuse and Mental Health Services Administration will be provided.

3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

Given worldwide concerns associated with the opioid crisis, this discussion will focus on current research and ongoing worker awareness training programs that focus on primary prevention and empowerment of workers to take care of themselves and their co-workers in regard to opiate use. A safety training example from the construction industry, which has been hit particularly hard by the opioid crisis, will be provided.

3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents.

Globally, the number of road traffic deaths continues to rise steadily, with the problem being particularly severe in low and middle-income countries and with respect to incidents involving professional truck drivers. This discussion will highlight how safety training for truck drivers is being conducted to teach defensive driving strategies to avoid collisions. The discussion will also note how work psychologists are advancing practice through safety climate research to enhance the positive transfer of safety training for professional truck drivers.

3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

This discussion will focus on how work psychologists have defined the domain of safety performance for hazardous waste workers and emergency responders and how their research has identified best

practices for training these workers. In addition, this aspect of the presentation will point out that hazardous waste worker training is a critical element for preparing workers to deal with climate-related hazards and natural disasters. Thus, the discussion will also be tied to how work psychologists' contributions can be employed to assist others in achieving United Nations Sustainable Development Goal 13 on CLIMATE ACTION (i.e., Take urgent action to combat climate change and its impacts) and Target 13.1 "Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries."

Goal 8: DECENT WORK AND ECONOMIC GROWTH: Promote inclusive and sustainable economic growth, employment and decent work for all.

8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.

On a worldwide basis, researchers and practitioners have stressed that there are often considerable barriers to the acquisition and use of safety knowledge for minorities, immigrants, and indigenous peoples in safety-critical work. The discussion here, using an example of workforce preparation for cleaning up the Deepwater Horizon Oil Spill, will indicate how researchers and practitioners designed and delivered training to remove such barriers and promote the safety and health of all workers (i.e., Asian (Vietnamese), Blacks, Hispanics, Isleños, and Whites). Notably, this discussion will provide examples for how government policy makers can incorporate findings from behavioral research on safety and health training into guidance documents for worker safety training.

*Keywords: Safety and Health Training, Worker Well-Being, Diversity and Inclusion*

## Oral presentation OP684

### Workers' age and their contribution to innovation in organisations

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science&practice

Organisations are in constant need for innovations (Rosenbusch et al., 2011). However, the workforce is ageing and there are wide-spread beliefs that the ability to innovate and the openness to changes decline with increasing age (Appelbaum et al., 2016; Harris et al., 2017; Ng & Feldman, 2013). Norwegian time series studies show that between 55 and 65 % of the leaders prefer involving younger workers when new technologies and methods are to be introduced (Ljunggren et al., 2021). Thus, through this practice of age discrimination, older workers might become marginalised in innovation processes, impairing their motivation, competence development, and employability, and the organisations must rely on decreasing numbers of individuals for their needed innovations. Against this backdrop, this research aims at revealing the role of workers' age in organisational innovations. The study report on relationships between innovation and workers' age, taking into consideration the effect of organisational leadership, autonomy, predictability, innovation climate, age of teammates, age discrimination, engagement, openness, and satisfaction with own performance.

#### Theoretical background

Innovation is here defined as idea development, support for co-workers' ideas, and participation in idea implementations (Jansson, 2000), operationalised accordingly, and briefly named innovative behaviour. A worker's leeway for innovative contributions depends on organisational, team level, and individual factors (Amabile et al., 2016; Blomberg et al., 2017; Rietzschel et al., 2016). Research has found positive (Ng & Feldman, 2013), negative (e.g., Lehman, 1943; 1960) or no relationships (e.g., Fischer et al., 2019; Liu et al., 2016) between age and innovation. Methodological weaknesses exist (Frosch, 2011), most studies have been on workforce in one or a few companies, and few studies are conducted on representative samples of workforce populations. The present study expected workers' age to relate positively to innovative behaviour due to older workers' accumulated insight in their work processes and own organisation. Further, the study expected several factors perceived as being on organisational, team, and individual levels, as listed above, to predict innovative behaviour in organisations.

#### Design/Methodology

Data were collected in 2021 by questionnaires to a representative sample of Norwegian workers aged 20 – 74 years (N=1531). Innovation was measured by nine items (Janssens, 2000; Van der Vegt & Janssens, 2003). Three items measured idea development ( $\alpha=.84$ ), support for co-workers' ideas ( $\alpha=.89$ ), and participation in implementations of ideas ( $\alpha=.88$ ), respectively. Leadership was measured by an LMX-scale (Glasø et al., 2015). QPS-Nordic ADW (Pakin et al., 2008) was used to measure Autonomy ( $\alpha=.76$ ), Predictability ( $\alpha=.80$ ), Openness ( $\alpha=.81$ ), Satisfaction with own performance ( $\alpha=.73$ ), and Work ability ( $\alpha=.77$ ). Innovation climate was measured by The Organizational Climate Measure (OCM)" (Patterson et al., 2005), ( $\alpha=.89$ ). Age discrimination was measured by NADS (Furunes & Mykletun, 2010), ( $\alpha=.82$ ), Engagement by UWES-3 (Schaufeli et al., 2019), ( $\alpha=.81$ ). Data were analysed by correlations and multiple hierarchical regression, entering age in the final step.

#### Results

Idea development, support for co-workers' ideas, and implementations of ideas were strongly correlated ( $r=.68 - .81$ ). Workers' age was unrelated to these innovation behaviour variables but correlated to all predictor variables except LMX and Work ability. Idea development was predicted by Autonomy ( $\beta=.18$ ), Predictability ( $\beta=.07$ ), Innovation climate ( $\beta=.15$ ), Age discrimination ( $\beta=.08$ ), Engagement ( $\beta=.10$ ), Openness ( $\beta=.19$ ), Satisfaction with own performance ( $\beta=.13$ ), and weekly working hours ( $\beta=.07$ ). Support for co-workers' ideas was predicted by LMX ( $\beta=.07$ ), Autonomy ( $\beta=.19$ ), Innovation climate ( $\beta=.22$ ), Engagement ( $\beta=.12$ ), and Openness ( $\beta=.22$ ). Implementations of ideas was predicted by Autonomy ( $\beta=.21$ ), Predictability ( $\beta=.07$ ), Innovation climate ( $\beta=.21$ ), Age discrimination ( $\beta=.07$ ), Engagement ( $\beta=.09$ ), Openness ( $\beta=.16$ ), Satisfaction with own performance ( $\beta=.08$ ), and weekly working hours ( $\beta=.08$ ). The models accounted for 24 % of the Idea development variance, 34% of the Support for co-workers' ideas variance, and .31 % of the Implementations of ideas variance .

#### Limitations

The findings rely on self-reports and the same method of measurement.

#### Conclusions

Workers' age is unrelated to innovative behaviour in the Norwegian working population. Instead, innovative behaviour is predicted by autonomy, predictability, positive leader-member interaction, and innovation climate as perceived contextual factors, and openness, satisfaction with own performance and engagement as individual factors. Organisations might profit from including workers of all ages in innovation processes.

#### Relevance to the Congress Theme

The study addresses the core of the congress theme – change.

*Keywords: Ageing workers, innovation, age discrimination*

## Oral presentation OP82

### Work-family conciliation practices and supervisor support: a weekly study

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science

Given the prevalence and continued growth of work-life balance as a theoretical and empirical concept, strategies such as work-family practices, created to improve the relationship between work and family/personal life domains (e.g., flexibility policies, dependent care support, leave arrangements, etc.) had been implemented. However, despite some organizations offering the possibility to use these practices, the actual use by employees is dependent on different organizational context variables, namely the support and acceptance of supervisors to their utilization. Accordingly, and given the already-known importance of work-family culture support and, therefore, the positive impact of these factors on individual and organizational outcomes, this study has as its main objective the understanding of the supervisors' impact on the actual use of work-family policies, along with the impact on boundaries management and employees' well-being. To explore this interconnection more fully, this tests a weekly study for four weeks as a methodological approach to understand if having different levels of supervisor support along the weeks impacts the employees' use of work-family policies differently and, therefore, the boundaries management and consequent well-being. Specifically, with a sample of employees from a Portuguese bank institution (participant number to be defined), until the middle of 2023 and, through quantitative and statistical methods, we aim to determine: (i) whether there is an explanatory role of supervisor support in the employee's use of work-family practices; (ii) if there is an explanatory role of supervisor support in the employee's boundary management behaviours (i.e., work-family boundary control and work-family segmentation behaviours) and (iii) understand how this interconnection is related to well-being at work (i.e., burnout and engagement) and beyond work (i.e., satisfaction with life and satisfaction with family life). Despite the homogeneous sample as a possible limitation, this study contributes theoretically and empirically to the work-life framework. Firstly, it is important to point out the methodological and innovative contribution of a weekly study regarding work-family practices and supervisor support. Moreover, it extends the existing literature on the above-mentioned relationship, considering its effect and possible variations on boundary management and well-being over four weeks. Hence, taking these variables together, this study can bring important implications for future research and human resources departments, especially in what concerns the implementation and use of work-family conciliation practices at a time when organizations and employees are bringing the work-life balance concept to the table. Accordingly, this study gives an important contribution to the theme of the changing world of work, specifically regarding well-being and work-life balance. Likewise, it contributes to the UN Sustainable Development Goals, namely decent work, economic growth, good health, and well-being.

*Keywords: work-life balance, work-family conciliation practices, well-being*

## Oral presentation OP780

### Work-family relationship and social support among remote employees with regard to sex and hours worked per week - longitudinal approach

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science

The goal of this study was to examine the work-family relationship and social support among remote employees who have been working remotely for at least three months and then reexamine work-family relationship and social support in four months. This longitudinal approach gave an opportunity to compare work-family relationship and social support levels with regard to sex and hours worked per week.

Holmes et al. (2020) pointed out that psychological and social aspects of the COVID-19 pandemic need to be researched (among other aspects). When the coronavirus pandemic started a lot of enterprises implemented remote work where it was possible. Although remote work has been known for decades now, the sudden implementation of it in various work environments has been introduced without a proper preparation. This caused extra stress for the employees already worried about their health and their loved ones' wellbeing.

635 workers aged 19 to 70 years old ( $M=37,24$  years,  $SD=11,02$  years) took part in the online study. They had to have been working remotely for at least three months. 4 months later of those employees 477 (75,12% of the original sample) completed the follow-up study. There were 311 women (65%) and 166 men (35%). They were either working less than 40 hours per week ( $N=113$ , 23,7%), full time (40 hours per week,  $N=205$ , 43%) or more than 40 hours per week (overtime,  $N=159$ , 33,3%). Workers were split into six groups: (1) women working less than 40 hours per week ( $N=67$ , aged 21-68,  $M=36,63$  years;  $SD=11,11$  years), (2) women working full time (40 hours per week;  $N=133$ , aged:21-63,  $M=37,23$  years,  $SD=9,54$  years), (3) women working overtime (more than 40 hours per week;  $N=111$ ; aged: 22-69 years,  $M=39,86$  years;  $SD=10,48$  years), (4) men working less than 40 hours per week ( $N=46$ ; aged: 21-70 years,  $M=45,21$  years,  $SD=13,50$  years), (5) men working full time ( $N=72$ , aged: 23-71 years,  $M=40,32$  years,  $SD=10,42$  years), (6) men working overtime ( $N=48$ , aged: 24-63 years,  $M=39,54$  ears,  $SD=9,17$  years).

Work-family interface was measured by 12-item scale comprising of four subscales: work-family facilitation, work-family conflict, family-work facilitation, family-work conflict. Social Support was measured by Polish adaptation of Multidimensional Scale of Perceived Social Support developed by Zimet and coworkers (Buszman, Przybyła-Basista, 2017). Repeated measures ANOVA's with between-subjects factors (6 groups described above) were applied.

None statistically significant results were obtained with regard to work-family relationship. However, post-hoc analysis revealed that regardless of the time that passed between measurements women working overtime when compared to men working less than 40 hours per week had lower levels of work-family facilitation ( $p=0,015$ ).

Statistically significant differences in perceived social support results were revealed between the first time and the second time participants were researched ( $F(1,471)=4,396$ ;  $p=0,037$ ). Regardless of the sex or hours worked per week employees perceived a lower level of social support after four months since the first measurement was taken. To further investigate this matter repeated measures ANOVA's with between subjects factors were performed with regard to perceived social support

obtained from significant other, family, and from friends. The only significant differences were observed in perceived social support from friends. The participants reported less support from them in time ( $F(1,471)=8,327; p=0,004$ ).

The work-family relationship remained fairly stable in remote workers during the pandemic. This research showed that men working less than 40 hours per week when compared to women working overtime report higher levels of work-family facilitation. It could imply that men working remotely could observe more benefits from their work to their family domain than women who were working overtime. Also, this research can provide some insight into the role of social support as a potential stress buffer. Unfortunately, the study showed that in time remote workers perceive lower levels of social support, especially lower level of support from their friends. Pandemic as a chronic stressor might deplete workers' social support reservoirs.

It is important to note that perceived social support levels from significant other and family remained unchanged during those 4 months that passed between measurements. It is worth considering to investigate work-family relationship and social support over the time as the COVID-19 pandemic time being a huge stressor causing psychological distress is proven to be detrimental to mental health (Patel et al., 2022). Resources to provide social support to friends might deplete with time, perhaps providing it to the significant other and family might decrease too - a longer perspective is needed to investigate this effect in the future.

Relevant UN SDG of this research is 'good health and wellbeing'.

*Keywords: work-family relationship, social support, telework*

## Oral presentation OP793

### **Working on the “coronacoaster”: A netnographic study exploring the navigation to working from home in the Covid 19 pandemic**

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science&practice

Research goals/Theoretical Background: Few studies have examined the impact of working from home during the Covid 19 pandemic on employee wellbeing. Within the available research many factors identified as influencing homeworkers’ wellbeing, (e.g., isolation and difficulty detaching from work), are not unique to lockdown (Wood et al 2021), but the strength of their effects and way they shape wellbeing may have altered during this time. Whilst survey design can capture a ‘snapshot’ in time and identify relationships between variables, insight into the underlying mechanisms is limited. The inability to capture pre-pandemic data limits the application of survey findings for informing recommendations and shaping interventions.

Interview studies exploring the construction of work-life borders have identified employees’ desire for flexibility across four distinct areas: time, space, evaluation and compensation (Cowan and Hoffman, 2007). However, individual circumstances and preferences influence how individuals integrate/segregate their work and non-work lives (Kossek et al 2012). Interviews capture prevailing thoughts and meaning-making for participants relying on accuracy of recall when asking for reflections on past experiences. As such, their potential for identifying strategies to manage work-life borders and understand the ebb and flow of homeworking over time is limited.

The Job Demands-Resources model (Bakker and Demerouti 2007;2016) provides a framework to understand how people craft balance between their work/non-work demands and resources. With evidence that factors specific to the pandemic have had a more indirect than direct impact on wellbeing (Wood et al 2021), this period allowed us to capture the evolving social narrative around the navigation of work and non-work life, the experience of work/non-work demands, and resources people utilise to manage borders between different life domains.

Design/method: A netnographic approach was employed (Kozinets, 2015) which allowed us to draw on the strengths of other methods in a single data collection tool. A closed group was created on a popular social media platform in April 2020, following the BPS ethical guidelines for internet mediated research (BPS, 2017). Participants were initially invited to participate through our personal networks, followed by snowballing. Informed consent was gained through entry to the group via agreement to group rules and participation. 203 participants, mostly based within the UK, representing a range of occupational groups required to work from home took part. Participants were free to post comments, pictures, gifs, videos and weblinks both unprompted and in response to discussion points posted by the research team and other participants.

Data were analysed through an inductive approach to identify themes and patterns within participants’ experiences of the initial transition to homeworking and as the situation evolved over time.

Findings obtained: Much like a diary method, we were able to capture personal challenges and experiences from early on in the pandemic; the “Coronacoaster” as it became known within the group. The sharing of comments and posts enabled an understanding of individual perspectives and social narrative, much like a focus group, but occurring in a more naturalistic way. We were also able

to gather visual data as participants 'invited us into their homes' with pictures facilitating richer insight into participants' experiences and aiding a deeper level of interpretation. Broad themes include; Contradictions and transitions; implications for wellbeing and performance; the homeworking environment; and sharing space with others.

Limitations: The self-organising nature of the group is both a strength and a limitation. It allowed us to capture the process of sense making as participants shared thoughts as they arose and considered meaningful. Due to the nature of the social media group, we were unable to collect demographic and work-related data, such as whether they worked from home pre-pandemic, so cannot comment on whether this had an impact on participants' experiences of boundary construction.

Conclusions: Our study highlights the value of netnography for gathering rich data on the unfolding social narratives of work. Moreover, it captured reactions to an ongoing debate within the business community around the longer-term plans for returning to offices, permanent homeworking, or adopting a flexible hybrid approach. Our findings will inform interventions or strategies to assist workers navigating homeworking as part of routine working environments beyond Covid-19 and help organisations support them in doing so. Through using netnography to explore social narratives around work, a deeper understanding of employee experiences and sense-making can be achieved. The routine use of work-based social platforms, such as MSTEams, offer opportunities for narrative research of organisational phenomena

*Keywords: Home-working, Netnography, work/non-work interaction*

## Oral presentation OP86

### Work-life balance in the armed forces - In times of uncertainty

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#### Introduction

Work-life balance is a well-established concept that has been studied comprehensively. Overall, work-life balance considerations help to explain how well employees feel that they manage to combine their work and non-work roles (Casper et al., 2018). The perception of balance is based on a subjective experience, which means that individuals' commitment to each role must be proportional to how they value these roles. In contrast, work-life conflict emerges when role expectations between work life and non-work life are incompatible in some respect (Greenhaus & Beutell, 1985). The conflict can be bidirectional, which means that work life can interfere with non-work life and life outside work can interfere with work life. In recent years, interest in the different ways in which military employment affects individuals' work-life balance has grown. Military personnel face unique challenges in balancing their military commitments and home-related responsibilities, and sometimes have to act in demanding and stressful situations with little or no advance notice. Finding an appropriate balance between work and non-work is particularly complex during military training and deployments that require lengthy periods away from home. Throughout their career, military personnel are likely to face repeated separation from home, family, and friends while participating in training and deployments. Furthermore, military personnel's perceptions of work-life balance are likely to influence their job satisfaction and future career intentions (Sachau et al., 2012). Research shows that after serving abroad, personnel report lower satisfaction with their personal relationships and an increased desire to leave the armed forces (Andres et al., 2012). However, the offer of organizational support, and thus being better equipped to handle the conflicting demands from work and non-work life, has a positive impact on work-life balance (Anderson & Goldenberg, 2019; Sachau et al., 2018).

Work-life balance in a military context is a highly relevant issue that calls for further attention, and interest in the different ways in which military employment affects individuals' work-life balance has grown. Military members are facing unique challenges in balancing their military commitments and home-related responsibilities, and sometimes to act in demanding and stressful situations with little or no advance notice. Finding an appropriate balance between work and non-work is particularly complex challenge in all phases of military employment, including throughout military training and deployments that require lengthy periods away from home. Throughout their career, military members are likely to face repeated separations from home, family, and friends while participating in training and deployments. Moreover, military personnel's perceptions of work-life balance are likely to influence their job satisfaction and turnover intentions (Sachau et al., 2012).. Research shows that after serving abroad, employees report lower satisfaction with their personal relationships and an increased desire to leave the armed forces (Andres et al., 2012). Being offered organizational support and thus being better equipped to handle the conflicting demands from work and other life, however, has a positive impact on work-life balance (Johnson & Goldenberg, 2019; Sachau et al., 2018).

#### Aim and method

The aim of this study is to investigate how work-life balance and different work-related demands and resources affect well-being, job satisfaction, commitment to the organization, and willingness to remain in the organization among military personnel.

A comparative approach was used wherein questionnaire study was carried out in Sweden, Finland, Norway, Denmark, Switzerland, Canada and the Netherlands. The questionnaire was translated into each country's native language. Denmark used an English version. The questionnaire was constructed drawing in the work from Netemeyer et al (1996), Osipow & Spokane (1982), Spector (1985), Eisenberger et al (1986), Baruch-Feldman et al (2002), Sinclair & Wallston (2004) and Mowday, Steers & Porter (1979).

#### Results

Results are at the time of this abstracts writing, under construction, but will be completed during the fall of 2022. Initial results from the Nordic countries show that between 30-45 % of the personnel frequently think of quitting their job, that work-life balance predict retention and that the Nordic countries face considerable challenges in the years ahead when there will be huge retirements from their armed forces.

#### Discussion/conclusion

Recognition of the importance of work-life balance has increased in recent years, particularly given changes in the nature of work more broadly, and as many military organizations are growing after many years of downsizing. As many armed forces are characterized of organizational growth, the issue of retention is of utmost importance.

*Keywords: work-life balance, military , job satisfaction*

## Oral presentation OP356

### **Workplace bullying in a group context: Are victim reports of working conditions representative for others at the workplace?**

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science

Research goals: Previous research on psychosocial working conditions as risk factors of workplace bullying is based on the underlying, but rarely discussed, assumption that the targets' subjective reports of their psychosocial working conditions are shared by their non-bullied colleagues at the same workplace. We argue that this assumption is problematic since previous studies have shown that exposure to bullying influence the targets' view of the workplace and that the targets thereby have a more negative view of the working environment compared to non-bullied colleagues. The majority of previous research on antecedents to workplace bullying have applied an approach where associations between risk factors and bullying has been reported at the individual level. Hence, strictly speaking, most previous studies have really investigated whether the individual perceptions of one's work environment correlate with one's own exposure to bullying behaviours. The present study investigates differences in perception of such conditions by comparing the ratings from targets of bullying behaviours, witnesses, and non-witnesses in groups with at least one target, and groups free from bullying. As a further test, we examined if known psychosocial risk factors could predict bullying using a group level estimate of bullying behaviours even with the identified targets excluded from the analyses.

Design/methodology/approach: Data included 2215 employees in 195 work groups (112 groups free from bullying and 83 with at least one target) from three different work sectors in Sweden. We employed a new strategy to get a relevant group level estimate of the level of exposure to bullying behaviours. Previous group estimates have been based on group means or percentage of witnesses to bullying in each group. Both may be problematic. Using reports from witnesses alone may be problematic as such an approach is dependent on the openness of the bullying. For instance, it is more likely that colleagues will observe verbal attacks than more indirect behaviours such as ostracism. Using the group mean of exposure to bullying behaviours as a group level assessment of workplace bullying is also problematic in that bullying as a phenomenon is highly skewed with vast majority of group members experiencing no or very low levels of bullying behaviours. By using an estimate based on the most exposed individual in each group, we overcame these difficulties and were able to get an overall estimate for each work group that allowed differentiation of severity and inclusion of more than merely observable kinds of bullying behaviours. It also allowed exclusion of different categories of participants — targets and witnesses — when investigating associations between potential risk factors and bullying.

Results: The results showed that targets of bullying behaviours perceived the psychosocial working conditions as more negative compared to non-exposed colleagues. However, in support of the work environment hypothesis even those unaware of bullying in their own work group reported more negative working conditions than those working in groups free from bullying. The reports by witnesses were in-between the targets and non-witnesses, perceiving a significantly worse work environment than non-witnesses, but a significantly better one compared to targets. As a further support for the work environment hypotheses the associations between the examined working conditions and group level exposure to bullying behaviours were significant even when the targets were excluded from the analyses, albeit less strong. The results indicate that the examined working

conditions are risk factors of workplace bullying, but that previous studies may have overestimated the associations.

**Limitations:** The data were self-report measures susceptible to social desirability and common method variance. However, as the data collection was part of the participating organizations' regular work environment survey, the answers meant something more to the participants than merely contributing to research—something that may help improve the accuracy of the responses.

**Conclusions:** The present study found that the way bullied employees view their work environment is not shared by other members of the same work group. This suggests that target reports of working conditions alone cannot be used as a valid indicator of work-related risk factors to bullying. Nonetheless, supplementing this finding, we have also shown that even those not witnessing bullying in work groups where bullying is present perceive the working conditions more negatively than employees in work groups free from bullying. This implies work environment deficits are related to the occurrence of bullying, but that the actual working conditions may not be as negative as the target reports would indicate. It is therefore important for future research to take the differences between targets, witnesses and non-witnesses into account.

*Keywords: Workplace bullying, Work environment hypothesis, Group level*

## Oral presentation OP634

### **Workplace loneliness trajectories in the changing world of work: The effects of leadership behavior and exhaustion**

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science&practice

#### Research goals and theoretical considerations

Loneliness is on the rise (Valtorta et al., 2016), and the COVID-19 pandemic has further accelerated this trend (Li & Wang, 2020). Still, less is known about the longer-term and dynamic effects of the increase in remote work and its impact on workplace loneliness. Such insights are important because the working environment has likely changed permanently with increased home-working arrangements posing significant opportunities and challenges for organizations (Kunze et al., 2020). In general, workplace loneliness is still an understudied phenomenon, and scholars know relatively little about what drives and what prevents workplace loneliness (Ozcelik & Barsade, 2018).

Exhaustion has been found to be a possible consequence of workplace loneliness (Anand & Mishra, 2021). Using the Conservation of Resources Theory (Hobfoll et al., 2000), we suggest that it can also be an antecedent by limiting resources, thus making people less likely to engage in social communications and activities at work or decreasing the quality of interactions, increasing workplace loneliness. This difference is important and relevant to study because it would mean that the process of workplace loneliness could be even more varied than assumed (Wright & Silard, 2020).

We also suggest leadership behavior, namely initiating structure, and consideration (Lambert et al, 2012) as a possible remedy to boost resources reducing employee workplace loneliness. It is important to find factors for mitigating workplace loneliness, both to advance workplace loneliness research on reliable mediators and moderators (Wright & Silard, 2021) but also on a practical level, since leadership behavior could be an effective and relatively cheap way for organizations to positively influence employee work-related outcomes (Lambert et al, 2012).

#### Methodological Approach

To investigate the dynamic of workplace loneliness, we used a large sample of 699 German employees from different sectors followed over 4 measurements times in 2020 and 2021. We use latent growth modeling (LGM) to investigate: (a) Trajectories of loneliness and exhaustion over time, (b) how exhaustion relates to loneliness over time, and (c) how two leadership behaviors (initiating structure and consideration) affect loneliness both initially and over time. We used established scales to measure all constructs.

#### Results

Overall, our model indicates a general decline in workplace loneliness. Conditional growth curve models were estimated to examine the effects of each of the major predictors on workplace loneliness trajectories. Exhaustion at each time point had a positive effect on the workplace loneliness trajectory above and beyond the underlying growth process. Negative significant results were obtained for the longitudinal effects of leadership consideration, but not leadership structure.

#### Limitations

We tried to address issues of endogeneity by including controls that could theoretically be associated with loneliness, among others, relationship status, number of kids, remote working experience and percentage. We tried to address reverse causality by looking at crossed-lagged effects and found some evidence for these, but more experimental or natural experimental designs are needed to establish proper causality inferences.

#### Conclusions

Our study further shows the importance of leadership behavior as possible interventions to mitigate workplace loneliness over time in a remote setting. Employees whose leaders showed high consideration experienced a significant decline in workplace loneliness levels, whereas leadership structure had no significant influence. Leaders thus need to be supportive and encourage relationships at work and must be careful to not overburden employees with tasks and structures in the new hybrid world of work.

Exhaustion increased workplace loneliness at every time point despite the overall downward trend. For organizations and leaders this means that job demands in the new hybrid working environment need to be kept in check as to not exhaust employees fostering workplace loneliness. Overall, our study emphasizes the importance of continuously paying special attention to the ongoing challenges of workplace loneliness while designing changes in the new hybrid and remote work environment.

#### Relevance to the Congress Theme

Our study directly addresses the congress theme of “changing the world of work” because it looks at the understudied phenomenon of workplace loneliness in a remote and hybrid working setting, which is here to stay bringing about significant opportunities and challenges (Kniffin et al., 2020). We try to explore how leaders can mitigate some negative effects of workplace loneliness. Hence this work also addresses the UN-SDGs of “decent work and economic growth” and “good health and wellbeing” by suggesting possible interventions for improved employee well-being.

*Keywords: workplace loneliness, remote work, leadership*

## Oral presentation OP99

### **Workplace mental health disclosure, sustainable employability, and wellbeing at work: a cross-sectional study among military personnel.**

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science

#### Purpose & theoretical background

The importance of wellbeing at work for sustainable employability and mental health has increasingly gained attention. Due to the aging working population in Western countries, and the current labor shortage in many industries, this is likely to increase even further in the coming decades and has made the topic of how employers can invest in workers' health and wellbeing, a relevant topic. This is even more important for workers with mental illness, including substance abuse, as illness is a threat to sustainable employability itself.

A crucial decision for workers with mental illness, is the decision to disclose mental illness to a supervisor or not. This decision is a dilemma, as disclosure can have positive (e.g. supervisor support and work accommodations) and negative consequences (e.g. stigma and discrimination). The decision to disclose or not is expected to be an even more prominent dilemma in high-risk occupations, such as the military, as military personnel are expected to be strong, and not to show weakness. However, research on the direct association between disclosure and sustainable employability and wellbeing at work is scarce, and completely lacking within the military. The aim of this study was to investigate the association between the disclosure decision, experiences with the decision and sustainable employment and wellbeing at work among military personnel with mental illness.

#### Method

A cross-sectional questionnaire study was conducted among military personnel with mental illness (N=323). The questionnaire included questions on demographics, the decision to disclose mental illness to a supervisor (yes/no), the general disclosure experience (positive/negative), specific disclosure experiences, and several measures of sustainable employability and wellbeing at work.

To examine the association between disclosure decision, disclosure experience and sustainable employability and wellbeing at work, linear and ordinal regression analyses were performed. To examine the disclosure decisions and experiences, descriptive analyses were performed. Comparisons were made between those with positive and negative disclosure experiences.

#### Results

Disclosure decision (yes/no) was not significantly associated with any of the measures of sustainable employability and wellbeing at work. However, positive disclosure experiences were significantly associated with higher scores on almost all measures of sustainable employability and wellbeing at work.

Of those who had disclosed (N=245), 86.9% was positive about their decision. Those with negative disclosure experiences reported significantly more shame (M pos = 2.42, M neg = 2.78,  $p < .05$ ) and discrimination (M pos = 1.70, M neg = 2.84,  $p < .001$ ). Those with a positive disclosure experience,

reported significantly more supervisor support (M pos = 3.20, M neg = 1.94,  $p < .001$ ). Of those who had not disclosed (N=78), 84.6% was positive about their decision. The most mentioned reasons for a positive experience were the preference to solve one's own problems (self-management) (89.4%).

#### Limitations

First, the current study used a cross-sectional design, meaning that no conclusions about causality in the association between disclosure experiences and sustainable employability and wellbeing at work can be drawn. Future research should examine this association longitudinally. Second, an important limitation of the current study is that it only included active-duty military personnel. This means that those who had left the military, possibly after mental illness and disclosing, were not included in this study. Those with the most negative consequences of disclosure, such as loss of employment, were not represented in this study.

#### Conclusions

We did not find evidence that the disclosure decision itself is related to measures of sustainable employment and wellbeing at work. In contrast, how participants had experienced their (non-)disclosure decision was significantly related to almost all measures. This emphasizes the importance of the work environments reactions to disclosure and mental illness in the workplace. Future research and interventions should focus on increasing the likelihood of positive disclosure experiences through creating a more inclusive work environment, with more supervisor support and less stigma.

#### Relevance for congress

This research is relevant to the congress theme as it focusses on the UN Sustainable Development Goal 'Good health and Wellbeing'. The findings of the current study can help to inform future research and interventions which can create a more inclusive work environment. In a more inclusive work environment, disclosure of mental illness is possible, creating opportunities for supervisor support and work accommodations, which contribute to good health and wellbeing.

*Keywords: Mental illness disclosure, sustainable employability, wellbeing at work*

## **Oral presentation OP168**

### **Workplace Ostracism: The case of the Sultanate of Oman**

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science

**Research goals:** Workplace ostracism (WO) is defined as the omission of taking actions by an individual or a group to engage another individual or a group when it's socially appropriate to do so (Robinson et al., 2013). Research on WO has grown since the inception of the construct in social psychology. However, most of this work has been conducted in Western contexts, with a limited examination of how WO occurs in other cultural contexts. Therefore, the aim of this study concerns the role of culture in understanding the phenomenon of WO in a non-Western context. More specifically, this research examines how Omani workers experience WO to determine whether existing knowledge on the antecedents, nature and outcomes is relevant to the Middle-East by cross-cultural inquiry.

**Theoretical background:** Ferris (2019) found that social pain resulting from being excluded, rejected, and ostracised is similar to physical pain experienced by being injured. As a result, WO promotes paradoxical pragmatic consequences. On the one hand, it can lead to deviant workplace behaviours such as anti-social and counterproductive behaviours. On the other hand, it could lead to pro-social behaviours such as organisational citizenship behaviour to strengthen interpersonal relationships or increase performance (Robinson et al., 2013). Although research indicates that culture affects WO perceptions and coping strategies (Rudert & Greifeneder, 2019), much work is still needed to examine cross-cultural differences.

**Methodology:** A thematic narrative interviewing methodology was adopted in semi-structured interviews with 15 full-time Omanis who had experienced workplace ostracism in some form. The sample was aged 29-50, worked in various occupations and held a range of different positions, including managerial roles.

**Results:** The analysis of ostracism cases within the Omani context revealed that the behaviours underlying the construct are largely the same as in western workplaces. However, key differences were observed in relation to religious and cultural norms. For instance, conflict avoidance was one primary antecedent leading to WO in the Omani context due to the cultural effect of highly respecting seniority, age, status, etc. Because the only religion embraced by Omanis is Islam, Islamic values and practices directly affected coping mechanisms such as remembrance of God & Prophet's sayings.

**Limitations:** Memory bias and access to only a single source of information, the participants' narratives, are the major limitations.

**Originality & practical implication:** Methodologically, this research is among the first to evaluate the impact of culture on ostracism in work settings cross-culturally using narrative research. Theoretically, it is among the first to discuss the role of religious beliefs in the way people perceive and cope with WO. Islam avoids conflict by seeking mutual participation in decision-making and encourages harmony and forgiveness (Ali, 2009). Therefore, the research provides implications for practitioners. For example, findings are expected to help practitioners find the most effective policies and practices for dealing with WO in line with cultural norms, such as encouraging employees to accept desirable conflict, develop strategies to deal with it, and seek professional support when

ostracised. Also, the research would provide scholars insights into further investigating the impact of religious belief and culture on WO to better understand WO from a religious and cultural lens.

Relevance to the Congress Theme: Desirable changes in reducing the occurrence of WO in workplaces for a better future entail collaboration between academics and practitioners. That collaboration is only attainable when research is conducted, well communicated to practitioners and issues are clearly addressed. Then, essential changes and practical strategies are expected to take place for healthier work environments. Hence, the research will contribute to identifying the competencies and social and professional interpersonal and leadership skills needed when designing organisational development and training programs to help combat the negative effect of WO and its antecedents.

Relevance UN SDGs: The phenomenon of WO deprives an individual of the necessary visibility, promotion, or from being heard and appreciated. Consequently, WO increases employees' feelings of invisibility and unworthiness, leading to inequality, negative well-being, and a perception of injustice. Therefore, addressing the issue of WO is necessary to create awareness of the phenomenon, improve employees' overall health, develop practices to defeat it, and build strong institutional cultures.

*Keywords: Workplace Ostracism, Culture, Religion*

## Oral presentation OP309

### Workplace youngism: A scoping review

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science&practice

The objective of this work is to systematically examine the literature about ageism (age-based negative attitudes) towards younger workers, also called workplace youngism. The questions addressed in this scoping review include main methodologies, theories and ageism dimensions used to investigate workplace youngism; the age categories and terminology most often used to define younger workers; and the main antecedents and consequences of workplace youngism.

The importance of further investigating workplace youngism has been emphasized by different scholars. The ageing population in many countries and the consequent changes in the workforce composition have not only increased pressure on older workers, but also on younger ones, who are often underpaid and report not feeling valued or being perceived as competent. Whereas previous literature reviews have focused predominantly on ageism against older workers, workplace youngism remains comparatively overlooked.

As scoping reviews aim at identifying research gaps in emerging areas of evidence, this was considered the most appropriate approach. Before initiating our literature search, a protocol was registered in Open Science Framework (OSF), in November 17, 2021. The methodology followed included five key phases: 1) formulating the research questions, 2) identifying relevant studies, 3) selecting among the studies, 4) charting the data, and 5) collating, summarizing, and reporting the results. The following databases were searched: Web of Science, Scopus, and EBSCO host (including Academic Search Complete, Business Source Complete, APA PsycArticles, APA PsycInfo, Psychology and Behavioral Sciences Collection). The search string used was: ageism OR agism OR "age discrimination" OR "age stereotypes" OR "age prejudice" OR "age bias" OR "age attitudes" AND work OR workplace OR "human resources" OR employment OR organi?ation\* AND young\* OR Millennials OR "Generation Y" OR "Generation Z". Empirical studies published after 1969, in English and in peer-reviewed articles, which examined workplace youngism were eligible. Titles and abstracts, and then full-text of selected studies were screened by two independent reviewers. At both stages, disagreements were resolved resorting to a third reviewer.

Phases 1 to 4 are completed, and phase 5 is underway. In total, 699 records were identified in the database search. After removing duplicates, 356 records were screened. Of these, 124 full-text articles met the criteria for eligibility and 32 additional records were identified through references. After excluding 48 full-text articles, the remaining 108 articles went through extraction and synthesis. These originated from 21 countries, with the largest number of studies conducted in the USA (42.6%), UK (11.3%), and Germany (8.5%). When specified, samples were mostly composed of workers (57.1%) and students (24%).

Preliminary results show that, in terms of methodological approaches, most studies were experimental (49%) and cross-sectional (24.5%), followed by qualitative (14.7%), mixed methods (7.7%) and longitudinal (2.8%).

Regarding the main ageism dimensions used to investigate workplace ageism, among the quantitative studies, 70% include the cognitive dimension (stereotypes), 65.5% the behavioural dimension (discrimination) and 18.2% the affective dimension (prejudice).

In terms of the age range used to categorize younger workers, the lower age limit varies from 16 to 30 years old, with 18 being the most used. The upper age limit varies from 21 to 49 years old, with 35 as the most frequently adopted. In 91.6% of the studies, younger workers were specified as “young” or “younger”, though some studies referred to them as “millennials” or “generation Y” (3,7%).

Additional analyses will be completed in December 2022, to answer questions regarding the main theories used to investigate workplace youngism, its antecedents, consequences, gaps and future research directions for the field.

In terms of limitations, we consider that by having included only peer-reviewed papers in English in our search, we might have missed research published in other languages and/or from other sources that could have added value.

Nevertheless, by summarizing the existing evidence in the important, yet understudied area of workplace youngism, this scoping review can contribute to the advancement of research in this area, to best management and HR practices regarding younger workers and age-diverse workforces, and to policy directed at reducing age discrimination in the workplace.

This research is relevant to the Congress Theme “The Future is Now: the changing world of work” and to UN SDGs, in particular SDG 8 (decent work and economic growth) and SDG 10 (reduced inequalities). In order to build the prosper socioeconomic future we desire, we need different generations effectively collaborating and feeling fairly treated at work. Advancing research on workplace youngism can contribute to these objectives.

*Keywords: scoping review, workplace youngism, younger workers.*

## Oral presentation OP313

### Work-related rumination declines with age but not by gender

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science

Research goals and why the work was worth doing

Persistent failure to mentally switch off and unwind from work—known as work-related rumination—wears down the body's physiological restorative system, and is very detrimental to health. Work-related rumination has been associated with a range of serious psychological and physical health symptoms including: negative mood, fatigue, insomnia, and cardiovascular disease/risk.

As life expectancy increases, the age at which people can start receiving state pension is predicted to rise in most OECD countries, and as the need to continue working longer into later life takes effect, it has become vital to understand how working life affects health and wellbeing.

Given there is a growing body of literature linking the physical aspects of work to the health and wellbeing of the aging workforce, there is a notable lack of studies specifically aimed to examine how older workers disengage and mentally switch off from work. The present study aimed to explore the association between age, gender and two different types of work-related rumination (affective rumination, and problem-solving pondering).

Theoretical background

In order to assess rumination, we drew upon the conceptual model of Copley & Zijlstra (2011) and examined two types of post-work thinking called 'affective rumination, and problem-solving pondering'. Affective rumination is a negative valenced form of thinking characterised by the experience of intrusive, pervasive, recurrent thoughts, about work. Individuals who regularly engage in affective work-related rumination demonstrate high levels of fatigue, poorer psychological and physical well-being. Problem-solving pondering is a form of thinking that may be characterized by prolonged mental scrutiny of a specific problem or an evaluation of previous work to see how it can be improved, but it does not involve the emotional process that sustains arousal as in affective rumination (Copley & Zijlstra, 2011). People may ponder about work related problems because they find the act of thinking about work issues interesting. In such situations, people keep thinking about their work during their leisure time because they enjoy their work, and it helps them to solve issues that they are faced with, and there is no problem with being 'switched-on'.

Design

The present study aimed to explore the association between age, gender and two different types of work-related rumination utilising a cross-sectional sample of 3991 full-time employees (classified as working 30 or more hours per week). Age was stratified into five age bands (18-25, 26-35, 36-45, 46-55, 56-65 yrs.).

Results

Affective rumination was found to significantly decline in the older age groups (46+ yrs.), but this finding was moderated by gender. Males reported lower work-related rumination over the entire age range, but the greatest difference between males and females was observed in the 56-65 age

category. The results for problem-solving pondering mirrored those of affective rumination but with the only exception that there was no significant difference in gender between those aged 18-25 years. Qualitative interviews suggested why there are differences between genders and rumination.

#### Limitations

It is not possible within the present dataset to definitely conclude that the findings represent a true ageing effect—one that is independent of time—or whether the findings are specific for this particular period of time (i.e., a cohort effect). Further studies using longitudinal designs that track the same individuals across time, are needed.

#### Conclusions – research and or practical implications

Given the significance of promoting healthy lives for older adults, very little research has been undertaken to investigate the effects working later life has on quality of life and mental wellbeing, among older people. The present study adds to our understanding of how workers across the age span switch off mentally outside of work and the findings may serve to stimulate future investigations on age, gender and recovery from work. As differences in work-related rumination between men and women appears to increase with age, this suggests that future interventions are particularly needed to promote recovery activities in older women.

*Keywords: Rumination, age, gender*

## Oral presentation OP147

### **Workspace at home and the office: a longitudinal study of their joint effects on performance, well-being and satisfaction**

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science

#### Research goals

Greater numbers of employees now combine office working with home working. But how do these hybrid workspaces affect employees? In this paper, we test how the design of workspaces at work and at home affects employee satisfaction, engagement and performance.

#### Background

Theories of activity-based workspaces assert that the supply of workspaces support key work activities (e.g., for concentration, interaction, recovery) should result in better outcomes, such as satisfaction, well-being and performance (Engelen et al., 2019; Wohlers et al., 2017). For example Wohlers et al. (2019) showed the supply of work spaces that support concentration and interaction to be correlated with positive job attitudes. But increasingly, employees work in hybrid work spaces that straddle home and office and such hybrid workspaces have not been considered in research on workspace design. As such, we introduce a model of Hybrid Activity-Based Work Spaces (HAWKS) and test the joint and simultaneous effects of office and home workspace supply on employee outcomes.

#### Design

A longitudinal in a UK organisation generated a sample of 269 participants. We measured office workspace supply of spaces for concentration, interaction and recovery, and home workspace supply of spaces for concentration, interaction and recovery. We measured the following employee outcomes: office space satisfaction, home space satisfaction, engagement and performance. Data were analysed using cross-lagged path models (Edwards 2007, Su et al., 2019). Controls included gender, role, job design and time spent in office.

#### Results

We found that office workspaces supporting interaction at Time 1 to be positively related to performance and satisfaction at Time 2, and that home work spaces supporting interaction at Time 1 to be positively related to performance at Time 2. We found that home workspaces that support concentration at Time 1 to be positively related to engagement at Time 2,

There were also some reverse lagged effects. For example, we found that performance, engagement and satisfaction at Time 1 were associated with increases in home workspaces that support concentration.

#### Limitations

The main limitations are the use of self-report data, that the effects were only over a three month period, and that mechanisms were no addressed.

#### Conclusions

Our findings show the importance of activity-based workspaces in the office and at home such that spaces should be available for work requiring concentration and social interaction. We did not find any long term effects of supply of spaces for recovery activities, although such effects may be detected using different timeframes of measurement.

Our paper makes a number of theoretical and empirical contributions by i) introducing and testing the HAWKS model which extends models of activity based workspaces to include hybrid workspaces, i.e., home and office workspaces ii) providing longitudinal evidence to support activity based models of workspace design.

Relevance to the Congress Theme & UN SDGs

This paper addresses an important but little studied aspect (i.e., workspace design) of a key change occurring now across many workplaces, namely the shift towards hybrid work. The paper contributes to the UN SDGs by aiding our understanding of how workspace design can contribute to 'Decent Work'.

*Keywords: workspace, hybrid working, longitudinal*

## YOU DO NOT BELONG HERE: EXPERIENCES OF MICROAGGRESSION AMONG INDIAN WOMEN ENGINEERS

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science

The present study aims to understand the different micro aggressions faced by Indian women engineers. The engineering profession has a masculine culture with subtle sexist practices that create a chilly climate and resulting in low representation of women. Further research in the Indian context, in contrast to the west, provides that social context and patriarchy are reasons for the gender gap in engineering versus women's weaker abilities in science and math. Therefore, the types of micro aggressions experienced by Indian women maybe different from other cultural contexts. Additionally, gendered micro aggression has been studied widely within academic engineering contexts but not within organisations. Therefore, the present study attempts to understand how different micro aggressions unfold and are maintained within the organisational context. Examining different implicit biases that act as barriers to retaining women would provide insights for meaningful diversity initiatives

The theoretical background used in this study is of Social role theory, Gendered microaggression theory and Benevolent sexism theory. Social role theory indicates how women are expected to be nurturant and people oriented. Therefore, they should be engaged in disciplines that are congruent to their gender roles like teaching and nursing rather than in professions like engineering which value masculine social norms of competitiveness, agency and decision making. Gendered microaggression theory describes subtle sexist acts that are disrespectful and belittles women's abilities. These acts are often expressed unconsciously, in everyday behaviour through verbal and non-verbal gestures creating psychological discomfort for women. Benevolent sexism is a part of ambivalent sexist theory that describes how men propagate sexism by communicating that women are dependent on men and need their protection thereby justifying men's social power over women. Using these theoretical lenses, we examine how sexist practices create hindrances for Indian women employed in engineering professions.

The study was conducted using a qualitative research design by using semi-structured interviews. 20 female engineers were interviewed for the present study using purposive sampling with a mean age of 40.2 years and thematic analysis was used to analyse data.

The results of the present study showed following themes: "Let's not hire them: Implicit Hiring Biases", "Nudges towards occupational segregation: Role Assignment", "Disregarding women's accomplishments, competence and contribution", "Environmental Barriers at Work: Unabling Infrastructure", "Be a woman: Don't Exercise Voice" and "Encountering Benevolent Sexism: Protecting and Unabling". The traditional gender role ideas have led women to encounter different forms of microaggression within engineering organisational context. Assumptions of traditional gender roles manifested through different biased hiring practices and occupational segregation in the form of pushing women engineers towards non-technical and people-oriented roles. Assumption of inferiority is indicated in assumptions regarding women's inability to manage senior roles because of their focus on familial responsibilities. Or inability to carry out physically laborious part of engineering work despite intellectual competence. Further, women's contributions are often ignored and invalidated by men indirectly through jokes and slights about leaving work early or using affirmative action policies

for promotions. Additionally, women engineers have faced the micro aggression of being considered as a "second class citizen" as they had to put in extra effort to let their voice be known. They have also been silenced or ignored implying unimportance of their contribution. Apart from hostile micro aggressive practices, women engineers have encountered benevolent sexism whereby they have been perceived as a "mother figure" and therefore viewed only in terms of their nurturant roles. Instances of women needing to be escorted by male colleagues for meetings with external vendor indicated the belief women needed protection. However, this handicaps women engineers' growth and advancement within engineering workplaces and reinforces sexist beliefs within organisations. Finally, the environmental macroaggression that deny women of infrastructural facilities like having separate washrooms communicate that women do not belong.

The results of the study indicate how engineering as a profession needs to overcome unconscious and subtle sexist practices to make it inclusive. Moreover, the employers need to think beyond the Indian cultural stereotypes of women and value their technical abilities and contribution.

The methodology and sample size is one limitation. Men's perspectives about different hiring practices, policies and organisational culture and effectiveness of specific diversity initiatives and affirmative policies were not considered.

*Keywords: Microaggression, Engineering, Wome*

## Oral presentation OP783

### **You Keep Me Searching: An Exploration of Career Shock Event Types and Event Features Using Text Mining Techniques**

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science&practice

The current study set out to examine whether the text mining of interview transcripts on the subject of career shocks can inform our understanding of whether and if so, when and how context (as opposed to individual agency) plays a role in determining both objective and subjective career success outcomes. Akkermans et al. (2018) have characterized career shocks as being disruptive and extraordinary events that instigate rumination about the career. This characterization is compatible with Event System Theory (EST; Morgeson et al., 2015) which proposes that event novelty, disruptiveness, and criticality jointly constitute event strength and that it is event strength that determines whether a particular event commands attention and ultimately results in action. Our specific objectives in carrying out this study were to: i) Perform text mining to extract different shocks (or shock categories) from text data about careers; ii) perform text mining to see whether it is possible to recover novelty, disruptiveness, criticality, and/or other relevant dimensions of the career shocks so identified; and iii) characterize the career shocks so recovered.

Data were collected in an introductory research methods course, in which students were tasked with carrying out, transcribing, and analyzing two interviews each on the topic of career shocks. From the 2017-2018 academic year until the 2021-2022 academic year around 1340 interview transcripts, and matched survey responses pertaining to demographics and career outcomes, were collected.

In order to address our objectives we aim to perform the following analyses:

On the pre-processed and transformed text data, and the interview transcripts, we will first carry out two topic modelling techniques in an effort to achieve the objectives, namely, structural topic model (STM) and supervised Latent Dirichlet Allocation model (sLDA). We will sample 70% of the data for the training of the model and use 30% as validation data set. Using STM we can incorporate covariates (e.g., demographics) and temporal-based features (e.g., the timing of career-defining shocks in the construction of topics. The constructed topics will then be examined and interpreted by 5 subject matter experts. Each topic will be labeled as to whether or not it comprises a career shock and on the three EST dimensions, namely, novelty, disruptiveness, and/or criticality. The EST dimension may be expanded to include other emergent dimensions. Once the topics have been labelled, we will use sLDA to create a model that can automatically identify career shocks and score them on the identified dimensions for each individual in the dataset.

The results of these analyses will be available by the time of the EAWOP conference. In conclusion, we feel that new data analytic techniques deriving from the field of text mining may offer novel opportunities to inform and/or generate theory. Our submission is relevant to the conference theme "The Future is now: the changing world of work" in that it sets out to redress the limited attention that relatively unpredictable features of context (as opposed to the agentic person) has received using a relatively large sample qualitative data set. Some limitations of our abductive approach may be that it is quite exploratory and that any findings will likely need to be verified using more confirmatory approaches.

*Keywords: Career Shocks; Events systems theory; Text mining*

## Oral presentation OP149

### Young managers' identity work; A multicase interview study

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science&practice

#### Research goals

Age is an important dimension to consider in management research because young managers face specific challenges due to their age and lack of experience. Thus, to claim and be granted the managerial position, young managers need to handle age-based stereotypes. The study seek to answer how young managers (i.e., 19-29 years old) experience being nonprototypical in terms of their relation to the managerial role and how their identity work is enacted to respond to these age stereotypes.

#### Theoretical background

This article is based on the identity work (Caza et al., 2018) and implicit leadership theory (ILT; Lord et al., 2020). The concept of identity work has been fruitful in broadly capturing subjective identification processes in organizations, However, as the identity process of young managers depends on previously and currently established self-perceptions and expectations from the surrounding context, ILT can further aid in our understanding by its focus on the process (Lord et al., 2020).

#### Design/Methodology

This qualitative multicase interview study targets young managers experiences of nonprototypicality. We examined young managers' identity work in three business sectors: construction, information technology (IT), and service. In total, interviews ( N = 38) and workshops (N=6) was conducted with young managers ( n = 17), senior managers ( n = 8), subordinates ( n = 5), and support functions ( n = 8). Two workshops were organized with each organization to present our results, validate our interpretations and facilitate dialogue. We grounded our comparative analysis inspired by Gioia (2013) and worked abductively as data collection, developing theory and interpretation took place in parallell. We used data structures to create a comprehensive process model based on cross-case categories.

#### Results

The process model illustrates how the identity work of young managers is conditioned by interpersonal dynamics in the organizational context. It reveals how young managers are confronted with rites of passage, where the discrepancies between the individual and the manager role are tested and explicated. Young managers violate age stereotypes regarding management, and thereby embody contradictory or incommensurable positions. Furthermore, young managers strive to transcend their position and enact management in their identity work. The analysis also reveal thresholds narratives describing how young managers' emerge as managers through their identity work.

#### Limitations

Our sample did not specify management level, which naturally led to a sample in which first-line managers were most frequently represented. Because age is closely related to experience, most young managers hold positions at first-line management levels.

## Conclusions and practical implications

Our findings reveal that young managers face specific challenges and are put to test (i.e. rites of passage). Young managers used different strategies to handle their position and to enact management. Implicit theories of leadership in conjunction with interpersonal dynamics influenced how the identity work process developed, highlighting the importance of considering age in leadership research and providing young managers with support. Given the difficulty to extinguish stereotypes, enhanced awareness and strengthening of young managers, is important to motivate young managers to continue in this carrier choice.

## Relevance to the Congress Theme and UN Sustainable Development Goals (2015)

Young managers are future leaders of working life. Because of the impact that managers have in organizations (employee wellbeing, performance etc.) knowledge about what our future managers need in order to develop into their role is central, both for them, their employees and organizations. Thus, the present study is relevant in relation to UN SDGs goal due to its focus on prerequisites for young managers and sustainable development in the managerial role.

*Keywords: Young managers, identity work, Implicit leadership*

## Symposia

### symposium S001

#### **A shut mouth catches no flies: New perspectives on knowledge hiding between co-workers**

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science

In times in which the asset of many organizations largely consists of the expertise of their employees, the exchange of knowledge between co-workers is a crucial factor for organizational success. Accordingly, research on the antecedents, boundary conditions, and consequences of knowledge sharing receives unbroken research attention. More recently, scholars have increasingly focused on the other side of the coin: Knowledge hiding, defined as the intentional withholding of knowledge that someone has requested. Since the construct was introduced into organizational research by Connelly and colleagues a decade ago, a steadily increasing number of studies has examined the antecedents and effects of knowledge hiding at work. This research, however, is relatively limited in its methodological scope and perspective on knowledge hiding, often relying on cross-sectional survey studies and variable-centred analysis approaches comparing employees' self-reported levels of general knowledge hiding. This restrains our understanding of the complex inter- and intrapersonal mechanisms behind knowledge hiding in its various facets, what in turn limits possible approaches to prevent its occurrence. From this point of view, the present symposium combines four studies that pursue new approaches to look at knowledge hiding. The first presentation takes a person-centred approach to investigate unique patterns of knowledge exchange behaviour – considering both knowledge sharing and hiding – and to examine person characteristics that explain who is prone to share, to hide, or both. The second and third presentation also focus on the person of the hider, but still take very different perspectives on knowledge hiding. Specifically, the second contribution considers knowledge hiding as an adaptive behaviour to deal with demands, examining it as a buffer (i.e., moderator) of the detrimental longitudinal effects of supplementary work on job performance. The third presentation adds another layer to studying knowledge hiding by considering that there are not only differences between but also within people in knowledge hiding (i.e., that knowledge hiding fluctuates within person over time). From this perspective, the study sheds light on the role of guilt in the context of knowledge hiding enactment by examining and comparing reciprocal relationships of different specific knowledge hiding behaviours and guilt within person (weekly) and between persons (over two months). Finally, considering that knowledge hiding is an interpersonal behaviour that not only affects the hider but also the person knowledge is hidden from, the last study shifts the focus to the targets of knowledge hiding: Using an experimental vignette design, it examines the role of situational and target-related personal factors in the interpersonal effects of knowledge hiding. The symposium will be completed by Catherine Connelly, one of the leading scholars in research on knowledge hiding in organizations, who will discuss implications of the presented research and facilitate Q&A.

Relevance to the Congress Theme

With the growing need to respond to rapid change and ever new crises, organizations must rely on their employees and that they exchange and not withhold knowledge—today more than ever. However, it is evident that knowledge hiding in organizations exists. At the same time, research long took a rather simple perspective on knowledge hiding in organizations, considering it as uniformly

negative and using methods that do not do the complexity of knowledge hiding justice. This symposium helps overcome these limitations, enabling evidence-based practice to help organizations to successfully tackle the challenges of the future of work.

#### Implications

This symposium brings important implications for both research and practice. Considering theoretical and methodological implications, the four studies of this symposium show in a variety of ways that the prevalent perspective on knowledge hiding as a clearly defined, unambiguously negative, immoral behaviour does not adequately reflect its complexity and may lead to incorrect or at least insufficient conclusions being drawn. With considerably broadening the spectrum of research methods and perspectives applied on knowledge hiding, this symposium promotes better evidence-based practice in terms of organizational knowledge management.

#### Overall Conclusions

Taking novel research approaches and perspectives on knowledge hiding, considering intrapersonal antecedents and (positive and negative) consequences of knowledge hiding for both hiders and targets, this symposium enables a nuanced understanding of who hides knowledge when and why and of how targets react to this behaviour. The four presentations of this symposium together with the discussion lead by Catherine Connelly provide new insights into knowledge hiding in organizations. This symposium contributes to the UN SDG of decent work and economic growth, amongst others.

discussant: Catherine E. Connelly, DeGroote School of Business, McMaster University, Canada

*Keywords: knowledge hiding, knowledge sharing, knowledge management*

## Paper 1

### Knowledge sharing AND hiding: Insights from latent profile analysis

Catherine E. Connelly, DeGroote School of Business, McMaster University, Canada, Ofer Arazy, The University of Haifa, Israel; Ian R. Gellatly, Alberta School of Business, University of Alberta, Canada

#### Research goals and why the work was worth doing

Organizations invest significant resources to persuade their employees to share knowledge, to increase organizational productivity and performance. However, there is growing awareness that some employees deliberately hide knowledge from coworkers. Rather than study the effects of sharing and hiding as separate variables, we examine whether employees can be classified according to their unique pattern of knowledge exchange behaviour, and whether membership in these cohorts is predictable from motivational states.

#### Theoretical background

Given the “riskiness” of an employee’s decision to share or hide knowledge, we apply regulatory focus theory (RFT), which asserts that two motives underlie human behaviour: individuals either self-regulate towards goals that prevent negative outcomes, or self-regulate towards goals that promote an “ideal” state. When prevention-oriented motives are strong, individuals focus on minimizing risk (personal losses), meeting their responsibilities, and achieving safety and security goals. When promotion-oriented motives are strong, individuals focus on advancement, growth, or achievement.

We hypothesized that when prevention-oriented self-regulatory focus is strong, the tendency to engage in risky self-serving behaviour (i.e., knowledge hiding) will be muted with more effort devoted to satisfying collective interests (i.e., knowledge sharing). Thus, the likelihood of the sharing-only pattern should be greater when prevention focus is strong. In contrast, individuals with a strong promotion focus should exhibit greater response flexibility as they optimize self-interests. We thus expect promotion-focused individuals to share or hide knowledge, as needed. Increased promotion focus should reduce the likelihood of the sharing-only and hiding-only patterns.

#### Design/Methodology/Approach/Intervention

We tested our hypotheses with two samples ( N = 697; N = 1103) of working adults drawn from a variety of geographic locations and industries. Knowledge sharing and hiding tendencies were subjected to latent profile analysis.

#### Results obtained

Three distinct cohorts of individuals emerged: a sharing-dominant pattern, a hiding-dominant pattern, and a novel pattern that implied behavioural ambidexterity (individuals who engaged frequently in both kinds of behaviours). We also found that membership in the three cohorts was predicted by demographic characteristics (sex, age, organizational tenure) and by the self-regulatory focus (prevention- and promotion-oriented): We found that respondents with a strong prevention focus were almost three (2.68) times more likely to belong to the sharing-dominant profile than the ambidextrous profile. Respondents who reported stronger promotion-oriented regulatory focus were 71% and 64% less likely to belong, respectively, to the sharing dominant and hiding dominant profiles than they were to the ambidextrous profile.

#### Limitations

While it is appropriate to assess individuals' knowledge hiding and sharing tendencies using self-reports, perceptual biases might have increased the likelihood of certain profile configurations. However, if there was a group of individuals who responded in a socially-desirable manner, we would have captured these individuals within a single profile. We expect that the sharing-dominant pattern would be more socially desirable than the hiding-dominant or the ambidextrous patterns, and thus social desirability bias would not have altered our findings.

#### Conclusions: Research/Practical Implications

Beyond our observation that most employees tend to either share or hide knowledge – an insight unique to our analytic strategy – we found that about 10% of employees will frequently share and hide, and we uncover reasons why people pursue this knowledge exchange strategy. Our findings have implications for organizational knowledge management initiatives that are designed to limit knowledge hiding and encourage knowledge sharing.

Our results suggest that in any population of working adults there will be cohorts who exhibit a response pattern of sharing and hiding tendencies. Namely, in addition to groups who demonstrate a proclivity to share or hide, we demonstrate that there will also be a sub-population characterized by an ambidextrous response pattern.

Studying prototypical patterns that combine knowledge sharing and hiding extends theories where these behaviours are viewed as distinct phenomena that co-vary with other variables within a population of interest. A person-oriented analytic strategy explains how information-exchange behaviours might naturally combine, and whether cohorts of individuals within a population share a similar approach when responding to information requests.

#### Relevance to the Congress Theme

As workplaces continue to change and evolve, employees and organizations must continue to adapt to new pressures. Whereas many organizations implicitly expect employees to share all their knowledge with each other, this expectation is frequently unrealistic. Our more nuanced approach recognizes the tensions inherent in knowledge sharing and hiding, and how employees can strategically maintain productive relationships and their own interests.

#### Relevant UN SDGs

GOAL 8: Decent Work and Economic Growth

GOAL 9: Industry, Innovation and Infrastructure

*Keywords: knowledge hiding, knowledge sharing, knowledge management*

## Paper 2

### A longitudinal analysis

Matej Černe, School of Economics and Business, University of Ljubljana, Slovenia; Sut I Wong, BI Norwegian Business School, Norway; Aldijana Bunjak, University of St Gallen, Switzerland; Robert Buch, Oslo Metropolitan University, Norway; Dominique Kost, Oslo Metropolitan University, Norway; Darija Aleksić, School of Economics and Business, University of Ljubljana, Slovenia

#### Research goals and why the work was worth doing

The challenging situation created by COVID-19 changed the nature of work and employee behaviours. The main objective of this study was to enhance our understanding of employees' adaptive behaviours during an exceptionally challenging and demanding situation such as the pandemic. Research has shown that employees working remotely are more likely to blur the boundary between work and private lives and work longer and more irregular hours, but the phenomenon of supplemental work remains underexplored. Building on the job demand–control model, we examined two specific adaptive mechanisms, creative bootlegging and knowledge hiding, and the role they play in the relationship between supplemental work and performance. We aim to enhance our understanding of employees' behavioural adaptations during the COVID-19 crisis, thereby complementing existing research on distributed work and work behaviours during the pandemic. Moreover, we intend to contribute to increasingly relevant research on supplemental work by exploring the underlying mechanisms and boundary conditions related to irregular adaptive secrecy behaviours.

#### Theoretical background

Recent studies show the COVID-19–associated changes in the ways of organizing work (e.g., home–office work environment, digitized team processes, and virtual connection) represent a challenging work context that affects employee performance. In particular, employees have been exposed to increased work pressure, an unfavorable physical environment, and emotionally demanding interactions, which have significantly increased job demands on employees. Thus, when employees engage in supplemental work as an attempt to cope with increased job demands, it can backfire, so that employees who mobilize extra resources, such as working hours, to compensate for fatigue through mental effort become exhausted and fail to perform well due to a reduction in energy resources:

H1: Supplemental work is negatively related to performance.

Knowledge hiding and creative bootlegging (i.e., an unofficial way of pursuing innovative activities without formal support) act as discretionary adaptive behaviours that allow employees to regain a sense of job control and to regulate professional and personal demands. We argue that these discretionary adaptive behaviours interplay in interfering with the relationship between supplemental work and performance:

H2: Knowledge hiding moderates the relationship between supplemental work and performance, mediated by creative bootlegging. For high levels of knowledge hiding, the mediated relationship is positive, whereas for low levels of knowledge hiding, it is negative.

#### Design/Methodology/Approach/Intervention

We conducted a four-wave (February, March, April and May 2020), longitudinal, web-based questionnaire study with data from 198 employees working across a wide range of industries collected before, during, and after the first wave of COVID-19 emergency in Slovenia, applying quota-based sampling representative for the Slovene workforce.

#### Results obtained

Across-time effects revealed a negative and significant direct effect of supplemental work on employee performance, supporting Hypothesis 1. The results provide partial support for Hypothesis 2: for low levels of knowledge hiding, the mediated relationship was negative, whereas for high levels of knowledge hiding, it was positive, but it was insignificant.

#### Limitations

As our research was designed before the pandemic outbreak, with the aim of longitudinally examining adaptive behaviour and performance in the work-from-home context, we did not control for different flexibility arrangements among employees before the COVID-19 pandemic occurred and other contractual agreements concerning overtime work.

#### Conclusions: Research/practical implications

The results indicated that supplemental work generally had a negative effect on performance, and that knowledge hiding and creative bootlegging serve as important employee adaptive behaviours in this relationship. It is important for managers, organizations, and societies to gain insight into supplemental work's influence on other, more proximal, employee behaviours and organizationally relevant outcomes, such as how well the employees perform over time. Our findings provide implications on whether supplemental work needs to be regulated but also give insight into how this could be done in a post-pandemic work environment.

#### Relevance to the Congress Theme

Our study provides a valuable insight on one's adaptive behaviours in the time of COVID-19, with implications for other challenging situations in the changing world of work. Along with new technology changing the workplaces, the COVID-19 pandemic altered individual reality and created "the new normal" work conditions.

#### Relevant UN SDGs

GOAL 8: Decent Work and Economic Growth

GOAL 9: Industry, Innovation and Infrastructure

*Keywords: knowledge hiding, adaptive behaviour, supplemental work*

### Paper 3

#### **Once is not once? An examination of the role of guilt in employees' knowledge hiding**

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#### Research goals and why the work was worth doing

This study examines the role of feelings of guilt in the context of enacting knowledge-hiding behaviours of evasive hiding (giving incomplete/incorrect information), playing dumb (pretending not to possess the knowledge), and rationalized hiding (explaining why one does not share the knowledge). Recent research suggests that the within-person (i.e., relating to one-time incidences of knowledge hiding) and between-person (i.e., relating to more chronic knowledge hiding) intrapersonal effects of knowledge hiding might differ. Considering this, we aim to advance the understanding of the intrapersonal moral consequences of knowledge hiding for hidiers by examining both within-person and between-person effects in one study. This is an important undertaking because different prevention approaches would need to be considered depending on whether knowledge hiding has or has not intrapersonal detrimental consequences if enacted only once. Further, considering that guilt is not a dead-end state but likely triggers further behavioural responses, we add the consideration of guilt as a potential predictor of knowledge hiding to this stream of research, testing guilt as part of a knowledge hiding spiral.

#### Theoretical background

Drawing on moral self-regulation theory, we examine the relationships between employees' enactment of knowledge hiding, their subsequent feelings of guilt, and their subsequent engagement in knowledge hiding. We hypothesize that knowledge hiding is positively related to guilt and that guilt, serving a compensatory function, reduces subsequent knowledge hiding. Whereas we expect this relationship pattern to show on the between-person level of analysis, we pose the research question whether these relationships also show within person, or whether 'once is only once' in the context of knowledge hiding.

#### Design/Methodology/Approach/Intervention

We conducted a weekly survey study covering six consecutive workweeks framed by two general surveys, one week before the first weekly survey (t1) and one week after the last weekly survey (t2; two months after t1). Weekly surveys were administered at the end of the workweek. We assessed knowledge-hiding behaviours (i.e., evasive hiding, playing dumb, rationalized hiding) referring to the past two months in the general surveys and referring to the past week in the weekly surveys. We assessed state guilt referring to the end of the workweek in the weekly surveys. A total of 224 employees (=between-person level) responded to 998 weekly surveys (=within-person level). We used multilevel structural equation modelling to analyse (a) the within-person relationship of weekly knowledge hiding with end-of-week guilt with next-week knowledge hiding and (b) the between-person relationship of t1 knowledge hiding with aggregated weekly guilt (i.e., person mean) with t2 knowledge hiding (controlling for t1 values).

#### Results obtained

On the within-person level, none of the knowledge-hiding behaviours was significantly related to guilt. Also, guilt was unrelated to all three knowledge-hiding behaviours in the following week. On the between-person level, however, t1 evasive hiding was positively related to weekly guilt and playing dumb showed a marginally significant effect, while rationalized hiding was unrelated to guilt. Guilt in turn was positively related to t2 evasive hiding and playing dumb, but unrelated to rationalized hiding.

#### Limitations

All measures rely on self-reports what might have caused biased relationships. Further, despite temporal separation of most measures, no causality can be implied.

#### Conclusions: Research/Practical Implications

Our results indicate that regarding knowledge hiding, 'once is not once', as, within person, week-specific knowledge-hiding behaviours were unrelated to state guilt; state guilt was, moreover, unrelated to subsequent knowledge hiding. On the between-person level, however, evasive hiding and by trend playing dumb were longitudinally positively related to guilt, indicating that knowledge hiding may have persisting negative intrapersonal consequences when shown regularly. Further, surprisingly, between-person guilt (i.e., the person mean aggregated over six weeks) was related to \*enhanced\* evasive hiding and playing dumb. This finding challenges the idea that guilt triggers compensatory behaviours, indicating that guilt might in fact cause the opposite – maybe to reduce cognitive or emotional dissonance. This finding bears implications for organizations as they cannot rely on that knowledge hiding will somehow cure itself.

#### Relevance to the Congress Theme

In a constantly changing world of work, intra-organizational knowledge exchange is a key element to ensure organization's survival and economic growth. At the same time, however, knowledge hiding between co-workers does happen. Without understanding the intrapersonal processes underlying individual employees' decision to hide knowledge this behaviour cannot be stopped, leaving organizations unfit for the future of work.

#### Relevant UN SDGs

GOAL 3: Good Health and Well-being

GOAL 8: Decent Work and Economic Growth

*Keywords: knowledge hiding, guilt, within person versus between persons*

## Paper 4

### **Interpersonal consequences of knowledge hiding between co-workers: Boundary conditions and moderators**

Johannes F. W. Arendt, Ludwig-Maximilians-Universität München, Germany; Laura Venz, Leuphana University Lüneburg, Germany

#### Research goals and why the work was worth doing

This experimental vignette study aims to shed light on different boundary conditions that determine the direction and magnitude of the interpersonal effects of knowledge hiding, focusing on targets' emotional and behavioural reactions. A vignette study is especially suited to study the effects of knowledge hiding on targets given that the prevalence of knowledge hiding is often comparatively low in field studies and that this behaviour might often go unnoticed by its targets, what makes it difficult to study its interpersonal consequences in the field. Using experimental vignette methodology, we can "simulate" situations in which a co-worker engages in perceptible knowledge hiding.

#### Theoretical background

Although it seems evident that knowledge hiding has negative interpersonal effects, studies from related research areas suggest that whether uncooperative behaviours result in negative effects or not depends on numerous boundary conditions. Against this background, we argue that the interpersonal consequences of knowledge hiding are not always "the same" but rather depend on contextual factors of the knowledge-hiding situation, for example stressors that the hider experiences, and on personal characteristics of the individuals involved, for example targets' personality.

#### Design/Methodology/Approach/Intervention

We constructed a set of scenarios (i.e., vignettes) in which the participants are or are not targets of knowledge hiding (specifically playing dumb) in co-worker interactions and in which we additionally manipulate two contextual variables that we hypothesize to play a role in targets' evaluation of and response to knowledge hiding, namely time pressure of the hider and complexity of the knowledge requested. In a pilot study with N = 238 participants, we successfully tested the functionality of the vignettes and the manipulations and choose the best-working vignette for our main study.

We will test our hypotheses based on data that we are just collecting with a two-wave experimental vignette study with working participants. At t1, we assess individual personality characteristics and past own knowledge hiding of the participants with self-reports. At t2, we present the different variations of the pre-tested vignette in a randomized between-person manner. As target responses, we examine participants' expected reactions to the presented scenario, for example emotional reactions as well as expected future behaviour towards the hider including knowledge hiding. We plan to collect data until end of October 2022 (current N = 252); the results will be available at the time of the conference.

#### Results obtained and expected

The pilot study revealed that all developed vignettes successfully manipulated participants' perception of knowledge hiding (especially playing dumb), time pressure of the hider, and complexity of the knowledge requested.

For the main study, we expect that the interpersonal effects of playing dumb on targets depend both on individual tendencies of the target to interpret and react to behaviour of others and on situational contextual factors against whose background knowledge hiding is perceived. Accordingly, we assume that knowledge hiding does not have the same and equally strong effects, respectively, on targets across situations (as manipulate in the vignette) and individuals (as measured via self-report).

#### Limitations

The use of experimental vignette methodology entails that no actual behaviour and no reactions to real experiences are assessed but only imagined reactions to imagined scenarios are reported.

#### Conclusions: Research/Practical Implications

Our study is intended to enrich research on knowledge hiding by enabling a more nuanced picture of the impact of knowledge hiding on social relationships in the workplace, focusing on effects on targets. Our study will provide insights into whether and to what extent situational context and personal target characteristics play a role with respect to the interpersonal effects of knowledge hiding among co-workers. Additionally, we see a welcome side effect in the construction of a set of scenario vignettes on knowledge hiding that could be used in future studies by other authors.

#### Relevance to the Congress Theme

In times of dynamic and knowledge-intense work environments, the exchange of knowledge between co-workers is an essential prerequisite for organizational success. Against this background, a deeper understanding of the phenomenon of knowledge hiding is important for both scientists and practitioners.

#### Relevant UN SDGs

GOAL 8: Decent Work and Economic Growth

#### Acknowledgement

This research is generously supported by an EAWOP Early Career Research Mentoring Grant.

*Keywords: knowledge hiding, playing dumb, cooperation*

## **Symposium S002**

### **Leadership and wellbeing part 1: Remote, hybrid, and challenges**

Birgit Schyns, Neoma Business School; Iris Gauglitz, University of Bamberg, Germany

science

This symposium forms part 1 of a double symposium on leadership and well-being. Part one focuses specifically on new forms of work, that is, remote or hybrid work, as well as job demands and resources and its effects on employee well-being, both in terms of followers and leaders. The symposium comprises of five contributions and a discussion lead by the moderators.

The first two contributions specifically use samples of leaders and followers working in remote contexts. Neidlinger et al. investigate leader well-being when working from home. They argue that leaders' well-being when working from home depends on their core self-evaluations, with those low in core self-evaluations differing more in their well-being depending on where they work than those high in core self-evaluations.

Investigating followers rather than leaders, Tautz and Felfe conducted research into transformational leadership and examined its role in the context of remote work and information and communication technical stressors. They found that even in remote contexts transformational leadership has positive effects on followers but that stressors relayed to the use of information and communication technologies reduce this positive effect.

Rather than emphasising remote work, Lagowska et al. take into account where people work during the week, that is, the sample they drew is from employees working in hybrid contexts. Place of work can be relevant when looking at the effects of abusive supervision on follower well-being. They argue that there is a positive path between abusive supervision and follower well-being that is mediated by adaptive rumination and influenced by cognitive sharing mode with colleagues as well as a negative one running via maladaptive rumination and influenced by affective sharing mode with colleagues. Further, these paths are influenced by where the employee works on a specific day, that is, at home or in the office.

More broadly focusing on outcomes of the pandemic in the workplace, Kiefer et al. argue that changes due to the pandemic affected followers' motivational needs, that is, autonomy, a sense of competence, and relatedness and that ambidextrous leadership, which has been shown to be effective in disruptive context, can help followers maintain their well-being in this context. They found that indeed the pandemic has influenced follower motivational needs and that leader opening but not their closing behaviours help supporting followers' well-being.

The final contribution aims at establishing a new instrument to assess leadership which is more adapted to job demands and resources. Van Rossum et al. suggest that when dealing with job demands and resources, followers might benefit from particular leader behaviours aimed at regulating those demands and resources. While they suggest to construct a general instrument, in the context of this symposium, we will also discuss how leader behaviours might have to differ depending on where leader and followers work.

The symposium includes contributions using different methods and designs, such as survey field studies, scale construction, and a diary study showing the breadth of methods used in the research on leadership and well-being.

The symposium contributes to the congress theme “The Future is Now: the changing world of work” by including news working modes such as remote and hybrid work in their design, sampling, and theoretical framework. It also contributed to the UN SDG “Good health and well-being” by focusing on well-being in the work context both of leaders and followers.

*Keywords: Leadership, well-being, new forms of work*

## Paper 1

### **Should I Stay or Should I Go (to the Office)? – The Moderating Role of Core-Self Evaluations on Leader Health and Thriving in Remote Work Settings**

Joerg Felfe, Katharina Schuebbe & Stephanie Neidlinger | Helmut Schmidt University Hamburg, Germany

#### Research goals and why the work was worth doing

Working from home increases the opportunities to save time on commute, spend more time with families or leisure, and incorporate more exercise. Although the overall role of working from home as a resource for employees is widely accepted, it is unknown whether positive effects also hold true for those in leading positions. We examined working from home as a resource for leader health and thriving and aim to enrich the literature on working from home by examining the role of leader personality and shedding light on who benefits from working from home.

#### Theoretical background

Leadership roles are characterized by unique demands and resources. Working from home may provide specific resources and improve leaders' overall health and thriving. When allowed to work from home, leaders may benefit from increased autonomy, reduced interruptions, and reduced complexity of their environment.

We draw on Job-Demands-Resources (JDR) model to conceptualize working from home as an organizational resource for leaders and hypothesize overall positive direct effects of working from home on leader health and thriving. However, it has yet not been shown whether leaders – with their specific demands – benefit from WfH. Since no study has yet examined a sample of leaders, it is of interest to examine not only direct effects of working from home on leader outcomes but also address potential moderators.

The personality concept of Core-Self Evaluations (CSE) has shown relevance for leader outcomes. High CSE constitute a personal resource and are positively related to health. Low CSE on the other hand represent the absence of a resource: people with low CSE have been found to experience poor health and increased stress and strain.

We argue that CSE may be the resource driving whether and to what extent leaders benefit from remote work. Individuals with high CSE and thus high personal resources tend to show positive outcomes at home as well as in the office and compensate the risk of a less favourable context. If resources are high, successful mastery of demands becomes more likely. If CSE however is low, leaders may depend more on a favourable context.

#### Design

We recruited a sample of 367 leaders from various occupational backgrounds and used a design with two measurements spaced five months apart to capture both direct and interaction effects of working from home and CSE on three outcomes related to thriving. We focused on health, well-being, and work-life balance to capture both general health-related and specific thriving-related outcomes.

#### Results

Results showed a moderating effect of CSE on all three outcomes, indicating that leaders with low CSE benefitted more from WfH in terms of health, well-being, and work- life balance. Conditional effects for low CSE were significant for all three outcomes. Leaders with high CSE had overall higher levels of health, well-being, and work- life balance regardless of where they worked.

#### Limitations

We used simple moderation analyses to test all hypotheses. For future studies, a longitudinal design with three or more measurements could enrich analyses by allowing hierarchical linear modelling. Effects were small, potentially to great heterogeneity within the sample. Recruiting a more homogenous sample in terms of i.e., number of followers, might be beneficial.

#### Conclusions – research and or practical implications

The study contributes to the literature in multiple ways. First, we focused on a sample of leaders, which constitute a high demand subgroup of the employee population. By allowing leaders with low CSE to work from home, positive outcomes for those leaders might be increased. Second, we added to the growing body of research on remote work, extending previous studies by adding leader personality as a moderating construct to shed some light on who benefits from remote work. Results can aid professionals in organizations to adapt current work-design practices to support health and thriving.

#### Relevance to the Congress Theme & Relevant UN SDGs

Our study contributes to the congress theme and to the UN SDG by shedding light on leader thriving under new working conditions. Understanding who benefits in terms of health, well-being and work life balance will be essential for the future of work.

*Keywords: Leadership, remote work, core self-evaluations*

## Paper 2

### **Working at home: Challenges for the effectiveness of transformational leadership on employees' well-being**

Joerg Felfe & Dorothee Tautz | Helmut Schmidt University Hamburg, Germany

Due to the Covid-19 crisis many employees and their supervisors were forced to relocate their working place from the office to their homes. As many employees benefit from working from home it can be assumed that it remains a huge part of the future world of work. However, working from home also brings challenges, especially to employees' well-being, which need to be considered and addressed. Prior research has found that the well-being of employees working from home might decrease due to limited social connectedness, limited organizational support and family conflicts. However, there is barely any research looking into the role of leadership on employees' well-being in the remote context. While we know from the traditional office context that transformational leaders are able to promote employees' well-being and buffer the negative effects of job stressors, it is unclear whether transformational leadership (TFL) does also unfold its effectiveness in the remote setting. Further we do not know, whether the use of information and communication technologies (ICTs) and the job stressors that come along with it buffer the effectiveness of TFL on employees' well-being. Therefore, in our study we aim to investigate the relationship between TFL and well-being during working from home and the moderating effects of the following ICT-related job stressors: technical problems, high workload, constant availability and communication difficulties. This study advances current literature by shedding new light into the role of TFL in the remote context and the moderating role of ICT demands. Further our purpose is to develop recommendations for organizations and HR practitioners to support effective leadership during working from home.

Literature regarding the effectiveness of TFL in the remote setting is scarce and inconsistent. While some studies provide evidence for the positive effects on employees' performance and satisfaction, others report the opposite. Also, to date we are not aware of any studies investigating the impact of TFL on well-being during working from home. We assume that TFL still works as a job resource in the remote context and positively affects employees' well-being as transformational leaders consider the individual needs of their employees, offer support and create a strong bonding. But in line with the Job-Demands-Resources Model we assume that job stressors related with the use of ICTs negatively influence the relationship between TFL and well-being.

To check our assumptions and answer the research questions we collected longitudinal data from N = 763 employees at two measuring points (July and September 2021). The employees work in different organizations in Germany from various industries, they are all employed and report to a direct supervisor. The participants worked at least one day a week from home and were asked about their subjective perspective on TFL, ICT demands and their well-being during working from home. We analyzed the data using moderation analysis.

The results confirm that even in the remote context with less interaction and communication TFL unfolds its effectiveness on employees' well-being. However, technical problems, high workload and communication difficulties have a buffering effect on this relationship. In contrast constant availability does not impair the effectiveness for employees' well-being. Our study extends previous research by explicitly examining the effectiveness of TFL on well-being when working remotely and supported the assumptions that TFL is still effective but gets weaker under the influence of ICT-

related job stressors. Therefore, organizations and HR practitioners need to make sure that employees are provided with adequate technical equipment. Also, trainings or workshops need to be offered for leaders to recognize and manage workload and decreased well-being of their employees over distance.

Although our study has strengths as the longitudinal design with allows to conclude causal relationships, it also has some limitations. First we only asked employees for their subjective perspective. Future research should extend our research by using physiological measures for employees' well-being or health status and should include leaders' perspective. Also, further research should expand the investigation of job demands during working from home. Our research is limited to four specific ICT-related job demands. However, there might be other stressors that also have an influence on employees' well-being.

Our study contributes to the congress theme "The Future is Now: the changing world of work" and to the UN SDG "Good health and well-being" as we investigated and shed new light into the well-being of employees during working from home. Flexible working arrangement like working from home immensely increased due to the Covid-19 crisis and are going to remain a part of the future world of work. Therefore, challenges for employees need to be addressed and investigated.

*Keywords: Leadership, remote work, well-being*

### Paper 3

#### **Daily abusive supervision, rumination, and follower well-being: The buffering and facilitating effects of co-worker social support and working regime**

Birgit Schyns, Dongkyu Kim & Urszula Lagowska | Neoma Business School, France

The goal of this study was to examine the mediating effects of adaptive and maladaptive rumination that underlie the relationship between daily changes in abusive supervision and employee well-being. Further, we assessed the moderating effects of co-worker social support and working regime on these relationships in order to contribute to a better understanding of the consequences of hybrid working regime and the effects of social support (cognitive and affective sharing mode) on the outcomes of abusive supervision.

Over the last two decades, research on negative forms of leadership and notably the concept of abusive supervision (Tepper, 2000) has gained a lot of interest. It is clear that those followers who work under abusive supervisor suffer negative consequences such as lower job and supervisor satisfaction, lower commitment, and also lower general wellbeing (Schyns & Schilling, 2013). At the same time, research also acknowledges that followers might experience more or less of abusive supervision each day (Vogel & Mitchell, 2017), which means also the consequences for followers might vary in reaction to the variations in the leadership they are exposed to.

In the present research, we build on the Job Demand Resources theory (Bakker & Demerouti, 2017) to investigate in how far daily variations in abusive supervision (job demands) are linked to daily variations in indicators of follower wellbeing, such as sleep quality and quantity after exposure to abusive supervision during the day and in burnout the morning after (Rath et al., 2010).

Further, we investigate processes underlying the effects of abusive supervision. Adaptive rumination refers to problem-focused rumination, maladaptive rumination refers to affective rumination (Joormann et al., 2006). Based on prior studies (Eisma et al., 2015), we assume that adaptive rumination, which can act as a resource, should result in lower negative wellbeing after being exposed to abusive supervision. Contrastingly, there is a positive path via maladaptive rumination, which can act as an additional demand, and thus should increase negative wellbeing after being exposed to abusive supervision.

Finally, we explore buffering effects on these relationships. In line with recent trends on the labour market, we investigate in how far working regime can act as a buffer. Since the Covid-19 pandemic, the number of employees working remotely and in hybrid mode has increased (McGregor, 2022). Thus, we investigated if not being directly exposed to an abusive supervisor might act as a buffer for followers' wellbeing, so that after remote working days, wellbeing is less affected than after on-site days. In addition, we assessed moderating effects of social support, understood as cognitive or affective sharing mode (Tremmel & Sonnentag, 2018). We argue that that if followers are encouraged by their colleagues to rethink in a constructive way their experiences of abusive supervision, this acts as a resource, they would ruminate in a more adaptive way, which in turn would positively affect their wellbeing. However, if the support serves as an outlet to emotions, this will lead to more maladaptive rumination.

To assess our predictions, we conducted an online diary study with UK employees from diverse industries. Over the period of 10 working days, participants filled in three online surveys per day (at the end of the workday, at bedtime, and the next morning) which were accessible via computer and

smartphone. Data will be analyzed using multi-level modelling in Mplus and multi-level panel data analysis in STATA.

We expect to find that abusive supervision experienced during the day is positively related to both employee a) adaptive and b) maladaptive rumination during the recovery, and that while adaptive rumination is negatively related to negative employee well-being the next day, the relationship between maladaptive rumination and the well-being is positive. Further, we expect that cognitive sharing enhances the indirect relationship between abusive supervision and wellbeing through adaptive rumination whereas affective sharing mode enhances the indirect relationship between abusive supervision and well-being through maladaptive rumination. Finally, when working from home, the direct effect of abusive supervision on well-being should be weaker than when working on site.

Our study contributes to the congress theme “The Future is Now: the changing world of work” and to the UN SDG “Good health and well-being” as we explore the consequences of abusive supervision on employee sleep quality and burnout depending on the working regime. We assess how new forms of work change the perception of bad leadership and, in turn, affect the health of individuals in organizations.

*Keywords: Leadership, well-being, hybrid work*

## Paper 4

### **Understanding the role of ambidextrous leadership behaviours for employee wellbeing during the Pandemic**

Matt Chennells, Warwick Business School, UK; Laurie Barclay, University of Guelph, Canada; Tina Kiefer, Warwick Business School, UK

Research goals and why the work was worth doing:

The Covid-19 pandemic has presented most employees with a significantly different working context. This meant, similar to other radical organisational change contexts, employees and leaders needed to navigate these new experiences of work. The pandemic has raised attention to questions such flexibility and work-life-balance, the meaning of work, effectiveness at work, and an increased workload. Employee wellbeing was a focus during the Pandemic given these factors are all known to affect employee wellbeing. Leaders were called upon to support and guide employees through the changes that the pandemic presented, while at the same time dealing with and adapting to the same changes. This research firstly aims to understand how the changes to the experience of work triggered by the pandemic affected employee wellbeing; and secondly, how leader behaviours affects both positive and negative employee wellbeing.

We make three main contributions of theoretical and practical significance: Firstly, we apply self-determination theory to understand how and why the shifts in employee experience during the pandemic affected wellbeing; secondly, we extend ambidextrous leadership theory to demonstrate the importance of leader supporting behaviours for employee wellbeing, and thirdly, we focus specifically in on leader behaviours that foster a sense of belonging and connection.

Theoretical background: We draw on self-determination theory to argue that the pandemic has affected the experience of the three core motivational needs, autonomy, a sense of competence, and relatedness. We argue that shifts in all three components are likely to affect employee wellbeing. In order to understand the role of leadership in employee wellbeing, we draw on ambidextrous leadership (AL) theory (Rosing et al., 2011) because it focuses on both on leader opening behaviours (triggering explorative follower behaviours) and closing behaviours (triggering exploitative behaviours in followers). Leader opening and closing behaviours are well suited to lead employees through disruptive change, by allowing and encouraging new ways of doing things as well as focusing on establishing new routines and provide guidance through unstructured contexts. Though very little is known about the impact of AL behaviours on employee wellbeing, we argue that opening and closing behaviours affect competence and autonomy in different ways. However, AL theory does not consider leader behaviours directed towards enhancing relatedness. We introduce leader supporting behaviours as a complementary AL dimension and argue that supporting behaviours are a relevant mechanism by which AL behaviours affect positive and negative employee wellbeing.

Design/Methodology: This is a two-wave survey study of employees and leaders in a multi-national financial services company, conducted during the second half of the Covid-19 pandemic. The survey uses self-report measures due to the nature of the research questions.

Results: Results indicate that leader opening behaviours have a positive indirect effect on both positive and negative wellbeing via competence, and on positive wellbeing via autonomy. Relatedness does not predict positive wellbeing, but is negatively related to negative wellbeing.

Results further suggest that Leader closing behaviours restrict autonomy, but that the relationship is moderated by leader supporting behaviours. When leader supporting behaviours are high, then the relationship between leader closing behaviours and autonomy is positive, while the relationship is negative, when leader closing behaviours are low. We found the same moderation effect of leader supporting behaviours on the relationship of leader closing behaviours on relatedness.

Limitations: Ideally, we would have linked team member perceptions and their supervisors perceptions to predict employee wellbeing. However, restrictions impacted by company decisions related to data protection regulations did not allow us to do so. Further, we chose to use the original validated measure for Leader opening behaviours. However, the some of the wording of the items carry a negative connotations, which may have obscured the role of leader opening behaviours. The next step in our research project aims to address this concern.

Conclusions: Our findings suggest that the Covid-19 pandemic has affected the core needs of autonomy, competence and relatedness and that leader opening behaviours in particular, were supporting employees to adapt to change and maintain their wellbeing. Leader closing behaviours could have a negative effect (i.e. on autonomy), which however was mitigated by leader supporting behaviours. This demonstrates the importance of understanding leadership behaviours beyond the traditional opening and closing behaviours.

Relevance to the Congress Theme and UNSDGs: Our research speaks directly to the EAWOP theme by addressing how the world of work has changed during the pandemic how those changes affect wellbeing. It hence also speaks to the UNSDG's goal 3 on fostering wellbeing and goal 8, which promotes decent work.

*Keywords: Leadership, well-being. ambidextrous leadership*

## Paper 5

### Effective leaders regulate employees' job demands and resources

Arnold Bakker, Kimberley Breevaart & Anne van Rossum | Erasmus University Rotterdam, The Netherlands

Research goals and theoretical background: Leaders have a significant influence on employees' well-being and performance, either positive or negative (Skakon, Nielsen, Borg & Guzman, 2010). In our research into effective leadership behavior, we build upon Job Demands and Resources theory (JD-R theory; Demerouti, Bakker, Nachreiner & Schaufeli, 2001). JD-R theory has gained traction in the past decades as it has significantly improved our understanding of employee well-being, behaviors, and performance. According to the theory, job resources and challenging demands positively influence employee work engagement, whereas hindrance demands increase employee levels of stress. Consequently, work engagement improves our job performance, while stress negatively affects our job performance (Bakker & Demerouti, 2017). In the present research, we therefore argue that leadership behavior aimed at regulating employees' job demands and resources will lead to enriched jobs and better employee functioning. We aim to develop and validate a scale that explicitly measures leaders' capabilities to regulate their employees' JD-R's.

Methodology: To develop this scale, we first determined the dimensions to be used as the foundation, based on the JD-R model. The three scale dimensions are regulating employee job resources, regulating employee challenging demands and regulating employee hindrance demands. We invited leadership experts to develop items pertaining to each dimension. We collected approximately 60 items per dimension from eight leadership experts. Based on a set of scale development criteria (Cortina et al., 2020), we rated these items on their suitability. The final scale consisted of 36 items and were tested among a leader and an employee sample. At the time of writing, the researchers are collecting data. Data will be collected until the end of 2022 with an estimate of 300 completed questionnaires, after which studies will be conducted for further scale validation in the first quarter of 2023.

Limitations: Adequate validation of the scale is dependent on a significant number of survey responses. At the time of writing, the researchers are still in the process of gathering this data.

Conclusion - Research/Practical implications: The validated scale may provide a foundation to explore the nomological net surrounding leaders' regulation of employees' demands and resources. The scale and sequential new insights may thereby help leaders to create healthier and more constructive working environments.

Relevance to the Congress Theme: Our research is highly relevant to the EAWOP Congress theme "The future is now: the changing world of work". There is an enormous challenge and opportunity for leaders to shape the changing world of work. New insights from our research will help leaders to positively involve their employees in their contribution to today's and the future's urgent problems.

Relevant UN SDG's: Our research is relevant to the UN Sustainable Development Goals "Good health and well-being" and "Decent work and economic growth". High levels of motivation and low levels of stress are preconditions for decent work and well-being in the workplace. This way, leaders and their employees will be engaged in their jobs, thereby indirectly positioning them to contribute to any of the other UN Sustainable Development Goals.

*Keywords: Leadership, well-being, job demand resource model*

## Symposium S003

### To work or not to work? Attitudes and activities fostering well-being and job search during unemployment

Greet Van Hoya, Ghent University; Edwin van Hooft, University of Amsterdam

science

What will be covered and why

Individuals are faced with the transition between non-work and work multiple times during their careers: after graduation, after job loss, or after a period of inactivity (e.g., burnout). Prior research revealed that work serves both manifest (i.e., income) and latent (i.e., time structure, status, social contact, collective purpose, personal status and identity, activity) functions that contribute to our well-being (e.g., Jahoda, 1981). Consequentially, people who are not working generally display lower levels of well-being than their employed counterparts (McKee-Ryan et al., 2005; Paul & Moser, 2009). However, the consequences of not working might not be the same for all individuals (Van Hoya & Lootens, 2013). In addition, although job search can be challenging for mental health, engaging in job search behaviour relates positively to finding employment (Van Hooft et al., 2021), which subsequently can restore the negative effects of not being at work. Therefore, we need to know what determines the well-being of non-working people and how it can be improved. Moreover, as sustainable employment might be the best long-term solution for improving well-being, we need to understand how the job search process can be stimulated.

This symposium features the latest research addressing these key questions. The symposium includes four empirical papers, with researchers from different countries (i.e., Belgium and The Netherlands) and disciplines (i.e., work and organizational psychology, clinical psychology, business economics), applying various theoretical perspectives (i.e., self-discrepancy theory, latent deprivation model, broaden-and-build theory, self-regulation theory), taking samples from multiple relevant populations (i.e., unemployed, inactive, job seekers), and using diverse rigorous methods allowing for causal conclusions (i.e., multiple time wave design, daily diary design, and field experiment).

The first paper applies latent profile analysis to develop profiles of normative attitudes towards work and non-work within the unemployed and inactive populations, and relates those profiles to well-being. The results of a two-wave survey will shed light on whether more positive attitudes towards non-work may help to improve the well-being of non-working individuals. The second paper builds further on these ideas by investigating in a 5-day diary study whether engagement in various non-work activities can support mental health (i.e., mitigate reactions of complicated grief and depression) after involuntarily job loss. The final two papers investigate interventions aimed at facilitating the job search and reemployment process as well as the mechanisms that may explain their effectiveness. The third paper tests in a randomized-controlled trial whether a positive psychology intervention, the Three Good Job Search Things, can improve job seekers' metacognitive activities by stimulating their positive affect. The fourth paper applies a field experimental design to examine if and how a job search training can facilitate older job seekers' reemployment process and whether this effect is contingent on their orientations towards future development (i.e., learning orientation and future time perspective).

Relevance to the Congress Theme

The world of work is changing, but not everybody belongs to the working population. Some may decide not to work or are not able to work, others have lost their job or are yet to find their first job

after graduating. Given the important and central role of work in our society, not being at work can have substantial consequences for individuals' well-being, as demonstrated in prior research. Therefore it is crucial to understand which attitudes and activities can foster well-being while not at work, and how the job search process leading people to (re)employment can be facilitated. By addressing these research questions, this symposium contributes to the UN Sustainable Development Goals of "Good health and well-being" and "Decent work and economic growth".

#### Research/Practical implications

By drawing together the perspectives and insights of these four papers, this symposium will contribute to a thorough and integrated understanding of how the well-being and job search of non-working individuals can be fostered. In addition to the theoretical added value, this symposium aims to contribute to practice by identifying ideas for the development of well-being and job search interventions and guidelines for employment, career, and mental health counselling.

#### Overall conclusions

Job loss and unemployment negatively impact people's well-being. The present symposium first uncovers attitudes and activities for inactive and unemployed individuals to improve their mental health. Second, because reemployment is generally the best way to restore well-being, the symposium addresses activities that improve the quality of the job search process and increase reemployment success.

*Keywords: Careers, well-being, unemployment*

## Paper 1

### **Can or should you (not) work? Normative attitudes towards work and non-work within the unemployed and inactive population: A latent profile analysis**

Sophie Cuinen, KU Leuven; Nele De Cuyper, KU Leuven; Anneleen Forrier, KU Leuven; Ilke Grosemans, Open University

**Research goals:** The aim of this study is (1) to develop profiles of normative attitudes towards work and non-work within the unemployed (i.e., actively looking for work and available for work; Benes & Walsh, 2018) and inactive (i.e., persons not looking for work, and/or not available for work; Benes & Walsh, 2018) population, and (2) to relate those profiles to well-being. Addressing those aims could help to see that the population of those who are currently not at work is heterogeneous (beyond any objective indicator), and that this heterogeneity could explain why some individuals have better well-being than others.

**Theoretical background:** To address our research goal, we conceptualized normative attitudes towards both work and non-work. Normative attitudes towards work are defined as the extent to which a person sees work as a right or duty of people in society. Normative attitudes towards non-work are defined as the extent to which non-work is seen as a renunciation of the duty to work or as a right of every individual. We will investigate whether profiles of these attitudes across the unemployed and inactive population can be identified.

Our conceptualization of normative attitudes contributes to the literature in two ways. First, research to date typically focuses on work-related attitudes (e.g., work ethic), but less on non-work attitudes. This is unfortunate, as our conception of work is not inversely related to our conception of non-work (Fryer, 1986). Accordingly, we include normative attitudes towards both work and non-work. Second, there seems to be a strong belief that unemployment is overall negative. Nevertheless, research shows heterogeneity with regard to well-being (e.g., Buffel et al., 2017; De Witte et al., 2010). Our focus upon normative attitudes advances a more complex connection with well-being. To illustrate, those who conceive work mainly as a duty to society may be particularly unhappy when not at work, while those who conceive non-work as a right, might feel relatively well during unemployment.

To understand the connection between these profiles and well-being, we use insights from self-discrepancy theory (Higgins, 1987). Self-discrepancy theory states that the greater the discrepancy between a person's selves, the poorer well-being will be. Within this research, we consider the normative attitudes as expressions of the ought self, and the current non-working situation as the actual self. Thus, we expect that profiles who experience a large discrepancy between their normative attitudes and their current situation will experience poorer well-being; and, conversely, that profiles whose normative attitudes fit well with their current situation will experience higher well-being.

**Methodology:** This research is carried out by means of a two-wave survey within the unemployed and inactive population in Flanders (Dutch-speaking part of Belgium). We developed a measure to capture the normative attitudes towards work and non-work. We will perform a latent profile analysis to identify profiles of these attitudes, and will explore the relation with well-being in a second step.

Results: At present, the first wave of data collection is ongoing. We expect to have collected all data and completed the analyses by the conference in May 2023. Confirmatory analyses of our measure based on the current response showed that the four-factor model fits the data best.

Limitations: The sample is heterogeneous but not representative. Also, we cannot exclude language barriers: the survey is only presented to the respondents in Dutch, although attention was paid to avoiding difficult words and sentence structures.

Research / practical implications: The study extends existing research on attitudes among the inactive and unemployed population, by conceptualizing normative attitudes towards both work and non-work. Identifying profiles of these attitudes across the unemployed and inactive population allows us to enrich existing, objective classifications. Additionally, we study how these profiles of normative attitudes relate to well-being.

Relevance to the congress theme: We examine the connection between normative attitudes and well-being within groups that are traditionally less discussed when talking about work and careers, namely the unemployed and inactive population.

Relevant UN SDGs: good health and wellbeing, decent work and economic growth

*Keywords: Work attitudes, well-being, careers*

## Paper 2

### Reactions of complicated grief and depression after job loss: Can engagement in non-work activities bring relief?

Janske van Eersel, Utrecht University; Toon Taris, Utrecht University; Paul Boelen, Utrecht University, ARQ National Psychotrauma Centre

#### Objective.

The present study aimed to examine whether day-level engagement in various non-work activities can mitigate reactions of complicated grief and depression after involuntarily job loss.

#### Background.

From the perspective of the latent deprivation model of Jahoda, it can be hypothesised that unfulfilled basic needs (e.g., the need for time structure, affiliation and purpose in life) play a role in the development and maintenance of job loss related complicated grief reactions. That is, the intensity of these reactions has been found to be related to the disruption in a person's day-to-day life, access to valuable activities, meaningful interactions, social relationships, loss of identity, and low self-esteem. Therefore, we hypothesised that engaging in non-work activities (e.g., meeting others, exercising, or conducting household chores) can fulfil these five basic needs and that fulfilment of these needs mitigates reactions of complicated grief as well as depression following involuntarily job loss.

#### Method.

A diary study was conducted on five consecutive days among 236 participants who had involuntarily lost their job, yielding 1,046 daily measures of the time spent on activities, the evaluation of these activities, and emotional distress. Participants were on average 52.4 years old (SD = 8.4 years), and the sample consisted of 44 males (21%) and 166 females (79%).

#### Results.

The results showed a negative relation between the fulfilment of most basic needs and job loss-related complicated grief reactions. Similar results were found for the fulfilment of most basic needs and depressive reactions. Overall, out of the 30 associations between activities and need fulfilment that were considered, 11 (i.e., 37%) provided statistically significant support for the notion that the time spent on a particular activity is related to the degree to which the five basic needs are fulfilled. These relationships can be negative (e.g., the higher the involvement in relaxing activities, the lower the need fulfilment) or positive (more involvement in meaningful, social and – to some degree – high-duty and physical activities, is associated with higher need fulfilment). Furthermore, when participants found the time invested in a particular activity useful, they were likely to report higher levels of need fulfilment. Unfortunately, the mediation of the basic needs between daily activities on the one hand and reactions of job loss-related complicated grief and depression on the other hand could not be confirmed as the effect sizes were too small.

#### Limitations.

We did not consider intrapersonal and contextual factors that might have affected the engagement in activities and symptom levels observed in this study. It seems likely that the baseline level for JLCG and depressive symptoms on which a person starts the study, can affect the daily fluctuations of

emotional distress, as well as what type of activities someone undertakes. For example, depressed participants may be relatively inactive, making it difficult to detect effects of daily activities on emotional distress due to restriction of the range of the time spent on these activities.

Conclusions.

In general, the current results suggest that in terms of their impact on the fulfilment of basic needs and levels of emotional distress, the perceived utility of daily activities is more important than the time invested in these activities. For unemployed individuals this implies that to dampen the adverse effect of their job loss, they must undertake activities which they consider useful. Mental health professionals seeking to alleviate reactions of job loss-related complicated grief or depression after job loss need to consider carefully which type of activities are suitable for individual clients.

Relevance Congress Theme.

The current study seems to best reflect topic '18. Well-being' of the Congress. Since the emphasis is on whether fulfilment of basic needs (Jahoda) and engagement in daily non-work activities can dampen the adverse effects of job loss.

Relevance UN Sustainable Development Goals.

The current study results are related to the UN SDGs 'Good health and well-being'. The study results highlight the significance of tailor-made behavioural interventions as well as preventive measures, where the evaluation of an activity by a participant must be decisive rather than general guidelines about which activities are supportive for persons with high levels of job loss-related complicated grief or depression symptoms after involuntary job loss.

*Keywords: Well-being, job loss, grief*

### Paper 3

#### **Fostering metacognitive activities during job search: The Three Good Job Search Things intervention**

Jolien Stremersch & Greet Van Hoya | Ghent University

##### Research goals

The aim of this study is to (1) test whether conducting the Three Good Job Search Things (3GJST) intervention can increase metacognitive activities, as well as positive affect, during the job search process, (2) check whether positive affect (i.e., activated and deactivated) serves as a mediating mechanism for the effect of the intervention on metacognitive activities.

##### Theoretical background

Apart from the growing interest in self-regulation, we still know very little about interventions that can help shape the self-regulation processes during job search while simultaneously fostering mental health. We build on principles from positive psychology (Seligman & Csikszentmihalyi, 2000), and the broaden-and-build theory (Fredrickson, 2001) to hypothesize how metacognitive activities can be fostered with an online positive reflection intervention based on the Three Good Things (3GT) exercise (Seligman et al., 2005). Further, we identify positive affect as a possible mediating mechanism between the Three Good Job Search Things intervention and metacognitive activities.

##### Methodology

We designed a randomized control-group pretest posttest experimental study with three conditions (i.e., 3GJST, active control, and passive control). Our sample consisted of Flemish (Dutch-speaking Belgians) recent job seekers who were actively looking for a job for less than a month. The final sample with T1 (posttest) data consisted of 117 respondents (54% women,  $M$  age = 42.57,  $SD$  = 14.39).

##### Results

First, a one-way ANCOVA was conducted to compare the effectiveness of the intervention with the control groups, controlling for pretest (T0) metacognitive activities. There was a significant difference in metacognitive activities [ $F(2,117) = 5.50, p = .002$ ] between the conditions. Post hoc tests showed there was a significant difference between the active intervention group and the passive control group ( $p = .01$ ). Comparing the estimated marginal means showed that the highest amount of metacognitive activities was obtained in the 3GJST intervention group ( $M = 3.85, SD = .67$ ) compared to passive control group ( $M = 3.72, SD = .89$ ). The active control group did not differ from the other two groups.

Second, we tested whether the effect of the intervention on job seekers' metacognitive activities was mediated by activated and deactivated positive affect. We examined these indirect effects using the PROCESS mediation macro in SPSS (Hayes, 2022). We did not observe a significant indirect effect of the intervention condition on metacognitive activities through activated positive affect ( $B = .00, 95\% CI [-.03, .05]$ ), nor through deactivated positive affect ( $B = .01, 95\% CI [-.03, .05]$ ).

##### Limitations

First, the majority of our sample was higher educated with a college or university degree, threatening the generalizability of our study. Second, positive affect was only measured at two points in time. Thus, it was not possible to investigate intermediate fluctuations of affect. Lastly, the response rate in our study was an issue across all three groups in our study.

#### Research / practical implications

The 3GJST can function as a starting point for job seekers to gain more insight into their job search process. This reflection exercise can assist job seekers in increasing their self-regulatory strategies. In addition, we describe a low-cost intervention that can be widely administered with little incremental cost per job seeker regardless of a job seeker's time or geographic restrictions.

#### Relevance to the congress theme

With this study we tried to contribute to the future of job seekers by adopting a positive psychology approach to study their job search behaviour and well-being. We hereby focus on the positive influences in job seekers' lives, instead of trying to fix what is 'wrong'.

#### Relevant UN SDGs

Good health and wellbeing, decent work and economic growth

*Keywords: Careers, positive psychology, job search*

## Paper 4

### Unique and Joint Effects of Job Search Training and Older Job Seekers' Future Development Orientation on Job Search Behaviour and Reemployment Success

Sarah van den Hee & Edwin van Hooft | University of Amsterdam; Greet Van Hooft, Ghent University

#### Research goals and why the work was worth doing

Older job seekers are confronted with unique challenges during their job search and are less likely to find reemployment than younger job seekers (Wanberg et al., 2016). Given the negative health-related and financial consequences of unemployment, it is crucial to examine what can help older unemployed individuals to find reemployment. Although there are only few studies among older job seekers, meta-analytic evidence suggests that job search interventions enhance reemployment success in this group (Liu et al., 2014). However, less is known about the mechanisms that explain why interventions may enhance reemployment success among older job seekers. Moreover, some older job seekers may benefit more from job search interventions than others, depending on their orientations towards future development. Therefore, the aim of this study was to examine if and how a job search training facilitates older job seekers' job search process and whether this effect is contingent on individual characteristics (i.e., future time perspective and learning goal orientation).

#### Theoretical background

We build on self-regulatory frameworks of job search and the attribute-treatment interaction approach to explain why and when a job search training may benefit older job seekers. Based on a self-regulatory perspective (Kanfer et al., 2001; Van Hooft et al., 2013), job search interventions that focus on improving job search skills and self-efficacy likely promote the job search process. Increasing job search skills and self-efficacy may be specifically important for older job seekers, as they often have less experience with contemporary job search methods and are confronted with setbacks and obstacles that may negatively impact their confidence. Greater knowledge about how to search for jobs and higher confidence in how to approach the job search likely facilitate job search behaviour, and subsequent reemployment success.

The attribute-treatment interaction approach (Gully & Chen, 2010) suggests that individual characteristics influence training effects. Despite age-related mechanisms that trigger the motivation to learn, there are individual differences in how future development opportunities are perceived. Two personal characteristics that have strong motivational properties and are relevant in the context of aging are future time perspective and learning goal orientation. We expect that older job seekers with a more expansive future time perspective and a higher learning goal orientation will benefit stronger from job search training, as they are more open to development opportunities and set goals that promote learning and development.

#### Design/Methodology/Approach/Intervention

The study population consisted of unemployed job seekers (aged above 50) who received unemployment benefits from the Dutch national Employee Insurance Agency. Job seekers were randomly assigned to the experimental (76%;  $n = 3331$ ) or control group (24%;  $n = 1035$ ). The training program lasted twelve weeks and consisted of ten group meetings. Central themes in the meetings concerned profiling, networking, and applying. Self-report surveys were sent to the experimental and control group three weeks before the training (T0; including future time

perspective and learning goal orientation), twenty weeks after T0 (T1; including job search self-efficacy, job search knowledge, and job search quantity and quality), and eighteen weeks after T1 (T2; including reemployment status).

#### Results expected

To formally test the hypothesized paths and model we will perform path analyses using Mplus. The results will be discussed in our presentation.

#### Limitations

Participation in the job search training was compulsory, which may have affected the training motivation of the participants. Training motivation plays an important role in facilitating learning outcomes and training transfer (Colquitt et al., 2000). However, research findings in a job search context suggest that the compulsory nature of interventions may not have an adverse effect on learning outcomes as long as participants perceive the intervention to be useful for their job search (Koen et al., 2015).

#### Research/Practical Implications

The study findings add in understanding how job search interventions for older job seekers affect reemployment success and individual orientations towards future development influence training effectiveness. These insights can be used for designing interventions for older job seekers and for tailoring interventions to their specific needs and characteristics.

#### Relevance to the Congress Theme

Not only the content of work has changed drastically in the past years, but also how individuals search for and find (re)employment. These changes ask for better insight into how specific groups with a distance to the labour market can be supported.

#### Relevant UN SDGs

This study is relevant to UN SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

*Keywords: Careers, age, training*

## Symposium S004

### The HEXACO Model in Organizational Contexts: Current Applications and Future Directions

Janneke Oostrom, Vrije Universiteit Amsterdam; Djurre Holtrop, Tilburg University

science\_practice

What will be covered and why?: Researchers as well as practitioners have long been interested in measuring personality traits and examining associations between personality traits and attitudes and behaviors in organizational contexts. Although the Big Five model remains the most predominant model, studies adopting an alternative personality model known as the HEXACO model have been increasing in the past decades. The current symposium provides an overview of current and innovative measurements and applications of the HEXACO model and provides evidence for its utility in organizational contexts.

The first (theoretical) presentation will provide an overview of the literature on the HEXACO model and its measurement and application in organizational contexts. The second presentation will offer insights into the development and validation of an innovative technique to measure HEXACO personality traits, i.e., an algorithm that automatically assesses these traits based on asynchronous video interviews. The third and fourth presentation will zoom in on the organizational outcomes of person-environment fit in terms of the HEXACO personality traits. Specifically, the third presentation will focus on the development of a dedicated scale to measure organizational preferences in terms of Honesty-Humility and the validity of this new scale for predicting work attitudes and motivations. The fourth presentation will provide insights into how leader-follower HEXACO personality fit contributes to or hinders followers' work engagement.

Finally, Reinout E. de Vries will discuss these four papers and offer a number of suggestions for how future research can continue to refine the measurement and application of the HEXACO model in organizational contexts.

Relevance to the Congress Theme: Recent societal and organizational developments have brought new challenges for employee selection and assessment. Specifically, technological advancements, globalization, immigration, and changes in the labor market and the way work is organized require that organizations reconsider and refine their current procedures. The HEXACO personality traits are among the most important predictors of organizational attraction (e.g., perceived fit) as well employees' attitudes (e.g., job satisfaction, job stress, turnover intentions) and behaviors (e.g., turnover, job performance) at work. Hence, more insights into how to refine the measurement and application of the HEXACO model, for example, by using new technology and by focusing on person-environment fit, can help organizations deal with today's societal and organizational challenges. As such, our symposium relates to the UN's Sustainable Development Goals (SDGs) of creating good health and wellbeing among employees, offering decent work and economic growth, and reducing inequalities.

Research/Practical implications: All four presentations offer a number of important and unique implications pertaining to the use of the HEXACO model in organizational contexts. Specifically, this symposium will assist researchers in developing their own research agenda when using the HEXACO model, whereas practitioners will benefit through the introduction of new approaches and suggestions for applying the HEXACO model in their everyday work.

Overall conclusions: This symposium integrates and discusses research on the measurement of the HEXACO personality traits and the associations between these personality traits and important

attitudes and behaviors (e.g., job satisfaction, job stress, organizational identification, turnover intentions, job performance, leadership, and work engagement). Importantly, two innovative measurement techniques (i.e., an algorithm-based assessments of HEXACO personality traits and a dedicated scale to measure organizational preferences in terms of Honesty-Humility) as well as two new types of person-environment fit based on the HEXACO personality traits (i.e., the attraction of people low in Honesty-Humility to hazardous organizations and leader-follower HEXACO personality fit) are introduced. Overall, this symposium offers important new insights into the utility of the HEXACO model in organizational contexts.

discussant: Reinout de Vries, Vrije Universiteit Amsterdam

*Keywords: HEXACO, personality, assessment*

## Paper 1

### Automatic Personality Assessment in Online Mock Video Job Interviews

Janneke Oostro, Reinout de Vries & Ward van Breda | Vrije Universiteit Amsterdam; Djurre Holtrop, Tilburg University; Sina Ghassemi & Antonis Koutsoumpis | Vrije Universiteit Amsterdam

Research goals and theoretical background : With the advent of new technology, the traditional job interview process has been supplemented with asynchronous video interviews (AVI). AVIs are one-way interactions where candidates record video responses to interview questions and share them with employers. A recent development in AVIs is the automatic assessment of candidates' responses with algorithms, trained (typically using machine learning techniques) to identify personality traits that are of interest to employers. The advantage of automatic assessment of AVIs is the sheer amount of information that computers can process as compared to humans, something that reduces costs and speeds up the selection process. Large companies are steadily embracing algorithmic assessment and AVI options, but the research on whether this type of automatic assessment complies to the reliability and validity standards which characterize more traditional assessment methods (e.g., personality questionnaires) is lacking.

To this end, the main goal of the present study was to use state-of-the-art methods in machine learning to develop an algorithm that automatically assesses the HEXACO personality traits of individuals who have taken an online AVI (analyzing their verbal and non-verbal behavior). Other goals of the present study were to test whether the type of interview questions affect the accuracy (i.e., explained variance) of HEXACO personality assessment, whether automatic personality assessment has incremental validity over self- and observer reports in predicting hireability scores (assessed by HR consultants), and, finally, explore the effect of four common workplace biases (age, gender, attractiveness, first impressions).

Methodology and results : 710 participants (recruited through Prolific or through a snowball procedure) took an online AVI responding to 8 questions specifically developed to activate the traits of Extraversion and Conscientiousness. Participants completed personality self-reports (HEXACO-60) and, later, their personality traits were assessed by judges. We also collected hireability, attractiveness, and first impression ratings (e.g., attire, quiet environment). We automatically extracted the words, facial expressions, and voice characteristics from the videos and applied state-of-the-art machine learning approaches to automatically predict personality traits and hireability scores. Our algorithm explained a significant proportion of personality variance in Extraversion and Conscientiousness (for self-reports, average  $R^2 = 6.1\%$ ; observer reports average  $R^2 = 32.5\%$ ) and hireability ( $R^2 = 42.4\%$ ). Furthermore, we found that the explained variance increased when participants responded to trait-relevant, compared to trait irrelevant questions. A few months after data collection, a sub-sample of the participants ( $n = 154$ ) took the AVI again, and the test-retest reliability was on average  $r = .27$  for self-reported Extraversion and Conscientiousness (and  $r = .53$  for observer reports).

Limitations : An inherent limitation of any type of machine learning assessment is that the output accuracy can never exceed the input. For instance, if the ground truth is based on personality self-reports, the accuracy of the algorithm will never surpass this ground truth. Furthermore, machine learning techniques perform to their full extent when trained on big data. The sample size of the present study was typical for psychology research, but sub-optimal for machine learning approaches.

Conclusions - Research/Practical implications : On the theoretical side, we show that the explained variance of algorithmic personality assessment increases when participants respond to trait-relevant questions. This finding provides support to the Trait Activation Theory, postulating that it is easier to observe a trait that has been previously activated. The practical implication is that AVIs might benefit from the development of trait-relevant interview questions. Furthermore, even though we have not yet finalized data analysis (expected to have finished by end October, 2022), the present results will test whether hiring recommendations made by HR consultants can be accurately predicted by our algorithm, whether algorithmic prediction of hireability offers incremental validity over self- and observer reports of personality traits, as well as whether predicted scores show group differences (i.e., age, gender, attractiveness, first impressions).

Relevance to the Congress Theme: Companies are already using AVIs and automatic personality assessment methods to pre-screen their candidates. However, little is known about the accuracy of such methods, especially when personality is measured under the HEXACO model. The present study addresses this lack of research on the construct validity and reliability of algorithmic personality assessment. Furthermore, we explore whether algorithmic personality assessment from AVIs is affected by four common workplace biases.

Relevant UN SDGs: In the present work, we study the possible effect of some common workplace biases (age, gender, attractiveness, first impressions). Hence, the present work aligns with the 'Gender equality' and 'Reduced inequalities' themes of the UN's SDGs.

*Keywords: HEXACO, automatic personality assessment, asynchronous video interviews*

## Paper 2

### **HOT and Attractive? The Hazardous Organization Tool as an Instrument to Avoid Attracting People Low in Honesty-Humility**

Reinout de Vries, Wendy Andrews & Bo Wang | Vrije Universiteit Amsterdam

Research goals and theoretical background: Honesty-Humility from the HEXACO model is an important trait to be considered in hiring decisions. Employees high in Honesty-Humility are more likely to show beneficial organizational behaviors (e.g., organizational citizenship behavior; Pletzer et al., 2021), while employees low in this trait are more likely to engage in detrimental organizational behaviors (e.g., workplace deviance; Pletzer et al., 2019). However, the organizational preferences of people low in Honesty-Humility are insufficiently understood. The situation activation mechanism from the situation, trait, and outcome activation (STOA) model suggests that people are attracted to situations that match their traits (De Vries et al., 2016). Furthermore, the attraction-selection-attrition model of Schneider et al. (1995, p.749) suggests that “people find organizations differentially attractive as a function of their implicit judgments of the congruence between those organizations’ goals (and structures, processes, and culture as manifestations of those goals) and their own personalities.” In the current study, we argue that people low in Honesty-Humility (Ashton et al., 2004; De Vries, 2018) are more likely to be attracted to hazardous organizations in which managers and/or employees are more tolerant of sexual misconduct, support power inequality, are strongly motivated by monetary incentives, disregard ethical standards, and hide knowledge.

Methodology: The main goal of the current study is to construct and validate an instrument—Hazardous Organization Tool (HOT) that is descriptive of hazardous organizations attractive to people low rather than high in Honesty-Humility. We (a) developed an initial item pool to describe hazardous organizations, (b) iteratively selected items from this initial item pool to construct the HOT, and (c) examined its validity as a tool to measure people’s willingness to work for hazardous organizations. Therefore, we based the factor analysis and item selection on people’s ratings of the attractiveness of the HOT items (the Hazardous Organization Tool-Attractiveness, HOT-A), and used these ratings for most of the validity assessments. However, we also used the HOT items to measure the extent to which people perceive an organization as hazardous (the Hazardous Organization Tool-Perception, HOT-P). Some validity assessments were based on this second potential use of the HOT items.

To examine the HOT’s convergent and divergent validity, we correlated HOT-A to HEXACO traits, dark traits, organizational culture preferences, and work motivations. To examine the predictive validity of the HOT, we correlated HOT-P to work attitudes and motivations. We also assessed the predictive validity of the HOT by investigating the effects on work attitudes and motivations of the fit between attractiveness of hazardous organizations and the perception of the organization as hazardous. Based on the outcome activation mechanism of the STOA model, fit should lead to desirable individual outcomes (De Vries et al., 2016).

Results: The validity of the scale was tested in three samples ( N =952). Scores on the HOT-A had a moderate negative correlation with Honesty-Humility, moderate to strong positive correlations with dark traits, weak to moderate correlations with organizational culture preferences for Integrity, Collaborative, Adaptability, and Results-Oriented, weak to moderate correlations with work motivations, and weaker correlations with theoretically unrelated constructs as hypothesized (e.g., HEXACO traits other than Honesty-Humility), thus demonstrating convergent and divergent validity.

The predictive validity of the HOT was supported by significant correlations of the HOT-P with work attitudes and motivations, and by the finding that the fit between the HOT-A and HOT-P was associated with desirable work attitudes and motivations.

Limitations: The current study used a cross-sectional survey. Further experimental or longitudinal studies are needed to determine the causal relations between the hazardous organizational characteristics, organizational attractiveness, and job application.

Conclusions - Research/Practical implications: Together these findings suggest that organizations that are perceived as hazardous are not only more attractive to applicants low rather than high in Honesty-Humility but also more likely to repel employees low in attractiveness to hazardous organizations (who are more likely to be high in Honesty-Humility). Organizations can utilize this tool to know whether they are at risk of attracting and retaining people low in Honesty-Humility and in what ways they might be able to avoid this.

Relevance to the Congress Theme: The current study introduced a new instrument (i.e., the HOT) to measure people's willingness to work for hazardous organizations and the extent to which people perceive an organization as hazardous, with potential to inform both research and management practice, and thereby changing the world of work.

Relevant UN SDGs: The presentation relates to the UN's SDGs of offering decent work and economic growth and reducing inequalities.

*Keywords: Hazardous Organization Tool, Honesty-Humility, organizational attractiveness*

### Paper 3

#### Follower-Leader HEXACO Personality Fit and Follower Work Engagement

Jan Pletzer & Kimberley Breevaart | Erasmus University Rotterdam

Research goals and theoretical background: Drawing on the person-environment fit literature (Kristof-Brown et al., 2005), research shows that employees who craft their resources and demands in such a way that they better fit their needs, for example by asking others for advice or by getting involved in a new project, are able to increase their engagement in their work. In the current study, we build on the idea that employees will become more engaged in their work when they experience a better fit between themselves and the environment they work in. Specifically, we extend existing knowledge on antecedents of employee engagement by examining how person-supervisor (in this paper referred to as follower-leader) personality fit contributes to or hinders followers' engagement in their work. We hypothesize that follower-leader discrepancy in the HEXACO trait Emotionality is positively related to followers' work engagement, whereas follower-leader discrepancy in Openness to Experience is negatively related to followers' work engagement. Studying how follower-leader fit in terms of their personality affects followers' work engagement is important because leaders have a major influence on how followers' feel and behave at work (e.g., Skakon et al., 2010). Moreover, personality is a relatively stable, dispositional characteristic, meaning that it is unlikely that personality will change much across time (Costa et al., 2019). As such, both followers' and leaders' personality fit may have a long-lasting influence on followers' work engagement. Our study extends the nomological network surrounding work engagement by focusing on (1) dispositional characteristics related to work engagement and (Young et al., 2018), and (2) follower-leader personality fit as an antecedent of followers' work engagement.

Methodology: Both followers and leaders rated their own personality on the 100 item HEXACO personality measure (Ashton & Lee, 2018). Followers then also rated their own work engagement. In total, 130 unique leader-follower dyads completed our online questionnaires.

Results: To test our hypotheses, we used polynomial regression analyses (Edwards, 1994) with response surface analysis (Box & Draper, 1987). Although we tested the fit in follower-leader personality dimensions for all HEXACO dimensions, we focused on the findings for the hypothesized dimensions Emotionality and Openness to Experience. First, the results show that the higher the discrepancy between follower-leader Emotionality, the more engaged followers are in their work. Surprisingly, the direction of this discrepancy did not matter. This means that followers are more engaged in their work when they are higher in Emotionality compared to their leader, which support our first hypothesis, but also when followers are lower in Emotionality compared to their leader. Next, we found that the higher the discrepancy between follower-leader Openness to Experience, the less engaged followers were in their work. That is, when followers are more open to new experiences compared to their leader, followers are less engaged in their work. Additionally, when followers score lower on Openness to Experience compared to their leader, followers are also less engaged in their work. Follower-leader fit on the other four HEXACO traits did not relate significantly to followers' work engagement.

Limitations: First, the current study is only focused on personality traits, but not on the behavioral manifestations of those traits. Although we argue that, for example, increased task-oriented leadership behavior of leaders low in Emotionality could be responsible for the increased levels of work engagement among followers scoring high on Emotionality, we did not formally test this

proposed mechanism. In addition, it would be interesting to investigate if the current findings also hold for perceived rather than actual differences in personality.

Conclusions - Research/Practical implications : Organizations should gather and use information about the personality traits of their leaders and followers when creating new follower-leader dyads. Another possibility could be to recruit both leaders and followers based on their Emotionality and Openness to Experience scores, and to subsequently match dyads in ways that promote levels of work engagement among followers.

Relevance to the Congress Theme: Most research either holds that leaders exert significant influence on followers' work-related well-being or that employees' individual differences predict their own well-being. Combining these two approaches, we demonstrated that it is crucial to examine the incongruence between leaders' and followers' personality traits. These insights contribute to increasing the well-being of employees as well as the overall productivity of organizations.

Relevant UN SDGs: The presentation relates to the UN's SDGs of creating good health and wellbeing among employees and offering decent work and economic growth.

*Keywords: leadership, personality, work engagement*

## Symposium S005

### Erring Outside the Box – (Learning from) Errors in Organisations and Beyond

Alexander Klamar, Federal University of Applied Administrative Sciences; Dorothee Horvath, Technical University of Darmstadt

science

The world of work is ever changing. Errors are a natural by-product of any change, particularly when the direction of change is not known a-priori. In our work environment that is characterized by an increase in tasks and communication, the question of how to deal with occurring errors becomes increasingly important.

Errors can lead to disastrous consequences (e.g., economic damage; loss of lives). It is thus not surprising that organisations usually try to prevent errors from happening, which is denoted as error prevention or avoidance approach. However, one must acknowledge that despite best efforts, it is impossible to be completely error-free. Organisations fare better if they adopt practices and procedures aimed at constructively dealing with errors after they have occurred, that is, an error management approach.

Error management has become a buzzword. Error management aims at minimizing negative error consequences and puts emphasis on maximizing potential positive ones, such as long-term learning and innovation. Supporting this idea, research has shown that error management is linked to a number of desirable individual, team and organisational outcomes such as learning, team performance, firm profitability, safety, and innovativeness.

The topic of errors in organisations has gained increasing attention: In academia, two influential journals in the field of Work and Organisational Psychology have published special issues on this topic ( Academy of Management Discoveries , late 2021; the call for papers for Frontiers in Psychology, section Organizational Psychology has ended in 09/22). In practice, the idea that errors can be a rich source of learning is increasingly acknowledged. Probably the most prominent example is the proliferation of so-called “F\*ck up nights”. In these, employees from different organisations and entrepreneurs alike share their errors to a broad audience so that everyone can learn from them.

Our symposium deals specifically with the connection between error management and learning: learning from errors is vital for individuals, teams, organisations, and society alike. In our symposium, the presentations focus on different levels of analysis. We aim to widen the focus of research in order to gain a deeper understanding of how approaches towards errors on levels interact.

On the individual level, Tabea Scheel addresses the relation between error orientation, intrinsic motivation, and procrastination. Intrinsic motivation can be a relevant facilitator of learning, whereas the tendency to procrastinate may inhibit learning. Her study shows that a negative orientation towards errors (i.e., stress and strain caused by errors, covering up errors) is positively related to procrastination.

On the organisational level, Wioleta Kucharska summarises findings from a Polish-US cross-country study including over 2.000 knowledge workers from different industries. Her research reveals that the accepting errors as part of a learning culture positively affects knowledge sharing. This boosts intellectual capital and innovativeness. Alexander Klamar presents an ongoing research project which addresses the question to what extent organisations’ “mission statements” that are in line with error

management principles, as expression of organisational (error management) culture, predict firm success in contrast to mission statements that are in line with error avoidant principles.

By and large, research has either focused on the role of errors for individual learning (e.g., by experimentally testing error management training against typical step-by-step instruction approaches) or has taken a team or organisational perspective (e.g., by investigating processes of team error management culture or climate, or organisational outcomes such as profitability or safety). Questions of the interconnectedness between the levels of analysis or of the problems research may face when attempting to measure one concept on different levels (i.e., individual, team/organisational, societal) have largely been neglected. Michael Frese's presentation sheds light on the latter – from the questions of what constitutes the concepts on different levels to what meaningful outcomes can be in the focus of interest. On the micro-level, outcomes include individual learning from errors, reduced negative affect following errors, and more innovative ideas. On the meso-level, error management culture has been linked to improved profitability of companies. Particularly on the macro level, measuring societal error culture is not a trivial issue.

With the help of our discussant, Sebastian Fischer, who has profound expertise in the areas of error management and its relations with attitudes towards errors at work, innovation, and performance, we attempt to bridge the gap between the different foci and measurement levels of the symposium's presentations. Thereby, we aim to facilitate the discussion with and encourage questions from the audience.

discussant: Sebastian Fischer, Hamm-Lippstadt University of A

*Keywords: errors, error management, organisational climate / culture*

## Paper 1

### The Relationship between Error Orientation, Intrinsic Motivation and Procrastination at the Workplace

Tineke Sondag & Tabea Scheel | Europa-Universität Flensburg

#### Research goals and why the work was worth doing

The present study aims to investigate the relationship between employee's error orientation and procrastination at the workplace. Furthermore, autonomous motivation was considered as a mediator of this relationship. Error orientation is an important determinant of positive, motivated job attitudes. Deficits in motivation may foster procrastination, which in turn can lead to individual suffering, reduced performance and economic loss. This is the first study investigating the relationship between error orientation and procrastination at the workplace, which also underlines the relevance of error management in organisations.

#### Theoretical background

The error orientation of employees is related to error management in the organisation and thus, is part of the organisational culture. A positive error orientation (e.g., communicating about errors) is regarded as an indicator for better performance, increased learning, proactive action, and job satisfaction. A negative error orientation, which is associated with an error prevention strategy in the organisation, has the opposite effect. An aversive attitude towards mistakes favours stress and negative emotions as well as reduced work performance. Previous research provides support for an association of individual error orientation and self-efficacy as well as self-regulatory competencies. These, in turn, play an important role concerning procrastination. At least in the context of academic procrastination, correlations with autonomous motivation have been shown.

In sum, employee's positive error orientation should be related to lower procrastination (H1), and the negative error orientation should be related to higher procrastination (H2). Autonomous motivation was hypothesized to mediate both relationships between error orientation and procrastination (H3a,b).

#### Method

A sample of 104 German employees participated in a cross-sectional online questionnaire. Established and validated scales were used, that is, the Error Orientation Questionnaire (EOQ, Rybowskiak et al., 1999; eight subscales falling in two dimensions), the Multidimensional Work Motivation Scale (MWMS, Gagné et al., 2014; two subscales identified regulation, intrinsic motivation) and a short version of the General Procrastination Scale (GPS-K, Klingsieck & Fries, 2018). Reliabilities ranged between Cronbach's  $\alpha = .79$  and  $\alpha = .96$ . Sex was included as a control variable. Regression and mediation analyses were conducted with SPSS and PROCESS.

#### Results obtained

Positive error orientation was not related to procrastination (H1 not supported); however, negative error orientation was related to higher procrastination (H2 supported). A mediation of both relationships by autonomous motivation was not found (H3a,b not supported). However, positive error orientation was related to higher autonomous motivation. As a side note, men procrastinated more than women.

## Limitations

The cross-sectional self-report data may suffer from common method bias. Also, no causal relationships can be inferred; that is, higher procrastination could also lead to a negative error orientation. Additionally, mediation analyses in cross-sectional samples should be avoided. The sample size was small, however, sufficient when compared with the precalculated optimal sample size of  $N = 71$ .

## Conclusion – Research/Practical implications

For causal conclusions, longitudinal data should be assessed. Further mechanisms beyond motivation are worth considering, for instance, self-regulation capacities or self-efficacy could mediate the relation between error orientation and procrastination. Furthermore, motivation might be a moderator rather than a mediator (these additional results will be presented).

For organisations, the differentiation between a positive and a negative facet of error orientation seems to be reasonable. While an error management approach may foster positive error orientation and thus, autonomous motivation, an error prevention culture may increase negative error orientation and abet procrastination tendencies.

## Relevance to the congress theme

The changing world of work is accompanied by increasing responsibility on employee's side, higher complexity of tasks and lack of work structures. Thus, errors are more likely and opportunities for procrastination are increasing.

## Relevant UN SDGs

As procrastination at work is related to individual suffering and decreasing performance, our study about error orientation, motivation and procrastination refers to two SDGs, that is, to good health and well-being as well as to decent work and economic growth.

*Keywords: error orientation, procrastination, autonomous motivation*

## Paper 2

### **Influence of Mistakes Acceptance Component of Learning Culture on Tacit Knowledge Acquisition among Knowledge Workers**

Wioleta Kucharska, Gdansk University of Technology

#### Aim

My presentation purpose is to give a comprehensive summary of the research project entitled “The Influence of Tacit Knowledge Sharing on Innovativeness: A Sector Analysis,” financed by the National Science Center of Poland (NCN) that briefly summarizes the project’s findings that expand the knowledge about the meaning of the mistake’s acceptance component of a constant learning culture for organisational innovativeness.

#### Theory

The presented findings refer to the Social Learning Theory (Bandura, 1971) by exposing that the sensitive issue of knowledgeable employee learning from mistakes is tremendous for the entire organisation’s learning.

#### Method

The given synthesis of empirical research and implications is based on the Polish-US cross-country study analysis of 2,168 knowledge workers from the healthcare, IT, and construction sectors. The presented synthesis is justified by five structural equation modeling (SEM) models.

#### Findings

The project revealed that the mistake acceptance component of a constant learning culture significantly affects knowledge sharing and hiding. This way also affects human-related components of intellectual capital that are tremendous for innovativeness and sustainability. These findings create an interesting perspective for the discussion about the future changes in the world of work planned for the EAWOP2023 Congress. Altogether, the designed synthesis exposes the other vital facets of the meaning of knowledge workers’ ability to learn from errors for organisations next to such important and broadly discussed in the scientific literature facets of organisational functioning, such as error management, safety assurance, performance improvement, or failure prevention.

#### Practical implications

Knowledge workers are the main knowledge creators today and, in this way, their collective ability to reveal, acquire and transform tacit knowledge into explicit main make their minds a focal source of value in the knowledge-driven economy. The constant learning culture with its mistake’s acceptance component facilitates the knowledge workers’ ability to gain tacit knowledge from mistakes and avoids such knowledge hiding. Therefore, from the practical point of view, implementing the mistakes acceptance component of learning culture fosters intellectual capital and innovativeness development thanks to smooth tacit knowledge flow among knowledge workers. So, workplaces with a mistakes acceptance component implemented are workplaces that are needed to achieve sustainability.

#### Limitation

The limitation of the presented synthesis is that it bases on a cross-country study of two countries only. Moreover, the US men's sample is affected by a bit of bias concerning such variables as internal and external innovations and knowledge, learning, and collaboration (KLC)-cultures.

#### Conclusion

By facilitating learning from mistakes among knowledge workers: specialists, team leaders, managers, and CEOs, we strengthen the innovativeness of not only processes but also business models that are significant for sustainability. But such learning might be problematic because of the existing common belief that "bosses never make mistakes."

#### Relevance

EAWOP Congress 2023 focuses on the needed changes in the work environment that matters today for tomorrow's better future. I aim to contribute to this topic by exposing the meaning of the mistake's acceptance component of a constant learning culture for gaining tacit knowledge from knowledgeable employees' mistakes. My synthesis leads to the conclusion that the existing mental convention that "bosses never make mistakes" can be an obstacle for bosses learning from mistakes. EAWOP23 gives a perfect opportunity to discuss it.

Funding Acknowledgement: The presented research is a result of the project Tacit Knowledge Sharing Influence on Innovativeness. The Sector Analysis No. UMO-2018/31/D/HS4/02623 is financed by the funds of the National Science Center of Poland (Narodowe Centrum Nauki-NCN).

*Keywords: innovations, knowledge workers, constant learning culture*

### Paper 3

#### **The Tip of the Iceberg – Can a Positive View on Errors in Mission Statements as Expression of Organisational Error Culture Predict Firm Success?**

Alexander Klamar, Federal University of Applied Administrative Sciences; Nina Keith & Dorothee Horvath | Technical University of Darmstadt

Following Schein's Iceberg model, much of organisational culture is left in the dark. Only the tip of the iceberg is visible; usually, this includes "hard facts" such as Key Performance Indicators (KPIs) or symbols such as logos. So-called "mission statements" aim to shed light on some aspects of the iceberg that are usually under the surface: an organisation's values. Mission statements can be helpful to differentiate oneself from competitors, for example by explicitly stating one's unique selling proposition (USP). Moreover, in the ongoing war for talents, mission statements can also be used as an employer branding tool as they convey how supervisors understand their (leadership) role and what atmosphere prevails in the workplace. In that sense, mission statements are typically a combination of, on the one hand, the description of the status quo and, on the other hand, express a desired state. Mission statements are among the most commonly used and most important management tools in the business world.

One aspect of an organisational culture is the understanding of how errors are considered within an organisation and what is the "correct" and desired approach of dealing with errors. Previous research on organisational error management culture has typically focused on questionnaire studies with questionnaires administered to individual organisational members. However, the aspect of the organisation's self-expression has largely been neglected.

Our study aims at investigating how addressing errors in company mission statements may benefit firm success. Research has shown that mission statements can have a significant impact on both employee and company performance. In line with previous research that indicates that error management culture is beneficial for firm success, we assume that organisations that explicitly and positively address errors in their mission statements will show more firm success than organisations that explicitly and negatively address errors in their mission statements, or do not address errors at all.

#### Method

We collected mission statements of companies (approx. 825 before data cleaning) that were publicly available on their websites. Two raters blind to the study's objectives independently rated the mission statements as to whether they explicitly address the issue of errors and error management with a positive view on errors ( errors positive ), whether they explicitly address the issue of errors and error prevention with a negative view on errors ( errors negative ), whether they include error-related topics but without direct reference to errors (e.g., innovation, risk-taking; errors indirect ), or whether they are neutral as to the topic of errors ( neutral ). Cases of disagreement were reviewed and resolved by a third blind rater. Currently, we are in the process of data cleaning and of assessing firm success indicators using publicly available data bases that list various yearly measures of firm success (e.g., return on investment) such as the German Bisnode database.

#### Expected results

In line with previous research indicating that error management culture predicts firm success, we expect a significant difference in firm success in that firm success is higher in the errors positive group than in the errors negative group or other groups. The effect should remain stable when controlling for company size and line of industry. In a second step, we plan to parallelize both groups with direct reference to errors (i.e., errors positive and errors negative ) based on company attributes (e.g., size or line of industry) and re-analyse the data. We expect to have our results in the beginning of 2023.

#### Limitations

As described above, mission statements always contain a component that expresses how an organisation strives to be. Thus, one critical question is to what extent the view on errors described in the mission statements reflects the actual values and behaviour in the organisations.

#### Conclusion – Research/Practical implications

Proving error management to be a valuable error handling strategy for organisations may promote the importance and usefulness of this strategy and may motivate organisations to adopt error management in their daily routine and explicitly address errors in their mission statements.

#### Relevance to the congress theme

Organisational error culture has a great impact on organisational members; it may determine whether one is fired for an error or rewarded for the knowledge the organisation has gained through it. By demonstrating the beneficial effect of a positive error culture, we strive to change negative perspectives on errors in organisations that may still prevail.

#### Relevant UN SDGs

The topic of organisational error culture is relevant for the UN SDG “Decent work and economic growth”.

*Keywords: error management culture, mission statements, organisational performance*

## Paper 4

### **Error Management for Individuals, Teams, Companies and Societies: Important for Safety, Performance, and Innovation**

Steven Brieger, University of Sussex; Michael Frese, Asia School of Business

Errors are a central topic in philosophy of science (falsificationism), biology (mutations), medicine (medical errors), and in psychology ever since Freud. Errors relate to safety, reliability, quality, performance, innovation, and learning. Surprisingly, in spite of its importance whenever there are actions to be done, there is no scientific work in the area of errors and error management as a cultural issue. The only exception is the analysis of culture by Festinger (cultural development as overcoming errors) (Festinger, 1983). However, there is no empirical study that examines the way errors are treated in the society.

Fortunately, it is possible to use an item from the GLOBE study – a study that is encompassing different dimensions and that is an important improvement to Hofstede's famous IBM study that was not originally intended to be a cross-cultural study.

Error management can be distinguished from error prevention as it happens after an error has occurred but it also attempts to reduce potential negative consequences of errors. Error management clearly differentiates between an error and error consequences. Error management is about reducing negative error consequences but not necessarily about preventing errors from occurring. In contrast, error prevention attempts to reduce the errors per se; there is good evidence in the study of human errors that full error prevention is not possible (Frese & Keith, 2015). One negative effect of a strong error prevention approach is that there is a negative effect on the actor who made an error. Error management attempts not just to reduce the negative error consequences, but also to maximize positive consequences of errors, such as exploration, innovation, and learning.

There may be, however, important differences in the effectiveness of error management depend on which level error management is measured:

1) Individual level: error management leads to improved learning from errors and it has other positive effects on individuals, e.g., less strain, more innovation, more communication about errors. Many of these studies are causal experimental studies.

2) On the level of teams and small companies: Error management culture is related to high profitability in companies and error management culture is related to higher innovativeness and better communication on errors. In the last analysis, errors are better managed and, therefore, there are fewer accidents in those companies.

3) Up to this point, all studies have looked at small to medium sized firms and not to whole societies. Thus, the current focus of my talk is on societal error tolerance (not exactly the same as error management): Here the relationships are very different to those of smaller organisations (e.g., below 1000 employees). Our new study (not yet published) shows that error tolerance is negatively related to a number of positive features of a society, such as societal wealth, road safety and accidents and health. Thus, these results are much more negative in contrast to the above individual and smaller organisation level studies. The only exception to this negative picture of societal culture of error tolerance is entrepreneurship – at least new entrepreneurship is related to error tolerance.

Limitations

The national culture study is based on limited data per country and the relationships are not to be interpreted as causal.

#### Practical conclusions

The naïve extension that national culture should be changed into the direction of error management (which is often suggested by consultancy firms that – based on our studies – propagate general advantages of error management even for large organisations and societies) needs to be qualified – at least until we have better data and more sophisticated measures of cultural measures.

*Keywords: error management, national error culture, levels of analysis*

## Symposium S006

### Playful Work Design: New Insights and Developments

Yuri S. Scharp, Tilburg University, The Netherlands

science\_practice

What will be covered and why

Imagine an Uber driver who makes a game out of steering as smoothly as possible. How does this affect their driving experience? What happens when an accountant imagines an amusing narrative that explains the items on an invoice? What about a security officer in a retail shop who tries to predict where a customer will walk next? Play is an integral part of being human. Throughout our lives, we engage in play. These workers exemplify that the work context is no exception. However, playing is a phenomenon rarely examined in the context of work. We contend that play does not constitute a specific set of activities but constitutes approaching and performing activities with humor and imagination, and as challenges and competitions. In this symposium, we focus on playful work design (PWD), which refers to the proactive cognitive-behavioral orientation aimed at designing fun and challenge during existing work activities. Initiating play during work activities exemplifies a proactive strategy by employees that does not change work activities. Instead, this strategy changes one's relationship with existing work activities.

Previous research suggests that PWD represents an important source of well-being and driver of performance for individuals in a variety of occupations. However, various questions remain unanswered. What are the antecedents of PWD? While various studies have shown that PWD relates to well-being and performance, less is known about when PWD occurs. Similarly, although play and learning are considered to be closely related, does this apply to PWD? How does PWD relate to knowledge and learning behaviors? Another important question concerns to what degree PWD extends beyond the work domain. Building on the proposition that play concerns a way of approaching and performing activities, does self-initiated play also occur in the home domain? Finally, is PWD malleable? That is, can we teach individuals to design fun and competition during work activities? In this symposium, we present the efforts of four scholars from several countries (Germany, the UK, and The Netherlands) that aim to answer these questions.

In the first presentation, Scharp builds on the model of proactive motivation to formulate hypotheses regarding who initiates play during work activities and when. The experience sampling study demonstrates under which conditions PWD especially occurs and how this helps employees stay engaged with work. In the second presentation, Junker conceptualizes and develops the measurement of knowledge integration and knowledge specialization. This daily diary study reveals how knowledge behaviors interact with PWD to predict radical creativity and task performance. Importantly, Junker demonstrates that PWD may inhibit performance. In the third presentation, Rofcanin builds on the work-home resources model to investigate how PWD relates to boredom and playful home design. Additionally, this 10-day daily diary study identifies boundary conditions that modulate the cross-over process from work to the home domain. Finally, in the fourth presentation, Gerpott presents findings derived from a randomized, placebo-controlled theory-based field experiment that compared three interventions (ludic work design, agonistic work design, and cognitive biases) in PWD and autonomous motivation. In addition, Gerpott uses qualitative analyses to understand the findings further.

Relevance to the Congress Theme

Professionals in various occupations are creating our future. Their ability to shape the future depends partly on regulating their resources. Our research identifies PWD as a worthwhile strategy for managing resources. Hence, PWD may support professionals in shaping the future.

#### Research/ Practical Implications

The symposium has several important implications. First, playful tendencies manifest when individuals have a reason to and feel energized to design fun and competition. Second, while designing fun bolsters the association between knowledge specialization and radical creativity, designing fun inhibits its association with task performance. Third, PWD extends to self-initiated play in the home domain. Personal and contextual resources modulate this cross-over mechanism. Finally, the tendency to use PWD appears to be malleable. The findings highlight that PWD is malleable and facilitates resource management, but that boundary conditions are important to consider. Taken together, this symposium calls for tailored interventions.

#### Overall conclusions

This symposium aims to introduce PWD to scholars and practitioners. PWD constitutes a novel proactive strategy that individuals use to improve their affective and cognitive experiences during work activities. We hope the symposium inspires colleagues and practitioners to use PWD and further advance our understanding of PWD.

discussant: Sharon K. Parker, Curtin University, Australia

*Keywords: Playful Work design; proactive behavior; work design*

## Paper 1

### **Predicting Playful Work Design and Work Engagement: Investigating Who, When, and Why**

Yuri S. Scharp, Tilburg University, The Netherlands; Arnold B. Bakker & Kimberley Breevaart | Erasmus University Rotterdam, The Netherlands

#### Research goals and why the work was worth doing

Play is a naturally occurring phenomenon—also during work activities. A flight attendant may perform flight safety as a rap; a professor may imagine delivering an inspiring speech while writing; an office worker may aim to outperform their previous record of answering e-mails within 15 minutes; and, a delivery worker may “race” other cyclists while biking. They proactively play during their work activities. Indeed, the nascent literature on playful work design (PWD) indicates that various employees naturally initiate play during work activities to design fun and design competition. Moreover, findings thus far suggest that PWD benefits both employees and organizations in terms of well-being and performance outcomes. Yet, research on the antecedents of PWD remains scant. Existing research on the potential antecedents of PWD is mainly cross-sectional. This is problematic because PWD is a dynamic phenomenon. Hence, our understanding of the nature of play during work activities remains limited. Why and when do people initiate play during work activities? We aim to answer this question by investigating who initiates PWD as well as when and why.

#### Theoretical background

Playful work design constitutes a proactive cognitive-behavioral orientation characterized by volition, cognitive categorization of work activities as opportunities for play, interactive involvement in terms of seeking, finding, and resolving surprises and complexities, momentary focus, and an autotelic focus (i.e., behavior for the sake of fun and/or competition). The conceptualization of playful work design integrates the literature on proactivity and play. Therefore, to investigate the antecedents of playful work design, we draw on the tenets of the model of proactive motivation to contextualize the literature on play at work. The model of proactive motivation suggests proactivity especially occurs when individuals feel they are capable of successfully performing the proactive behavior (can do), have a reason to be proactive (reason to), and feel energized to (energized to). Similarly, the literature on play suggests that individuals with certain cognitive meta-skills will play to regulate their activation level. That is, playful individuals may use play to (a) maintain or (b) up-regulate their activation levels. Therefore, we expect that individuals who have the tendency to use PWD will express this tendency when they either experience activation or deactivation in terms of personal resources and situational characteristics.

#### Research methodology

A heterogeneous sample of 201 employees filled out a general survey one week before the daily surveys (i.e., trait PWD, demographics). The daily surveys were sent before work, at noon, and in the afternoon. To minimize retrospective bias and overlap, we programmed questionnaires to stop recording responses when the next questionnaire was administered or stay open for a limited time. Specifically, they received a questionnaire in the morning about vigor before work (7:00-12:00; N = 706), during noon about work conditions in the morning (12:00-16:00; N = 706), and after work about PWD and work engagement in the afternoon (16:00-23:59; N = 583) for five consecutive days.

#### Results obtained

The results partially supported our hypotheses. The largest differences between playful workers (high PWD tendency) and non-playful workers (low PWD tendency) in PWD and work engagement occurred on days characterized by high vigor and high situational activation (motive for maintenance) as well as low vigor and low situational activation (motive for up-regulation). These differences indirectly promoted work engagement. In contrast, the differences in PWD and work engagement between playful and non-playful workers were relatively small on days characterized by low-high and high-low combinations of vigor and situational activation.

#### Limitations

First, while the antecedents were temporally separated in time, we cannot make claims of causality. Second, we measured all constructs with self-reports, which may increase concerns regarding bias associated with common method variance. However, we partially remedied this issue by separating most measures in time.

#### Conclusions

The findings suggest that individuals with the tendency to use PWD especially differed from their less playful counterparts in the use of play to maintain or up-regulate activation levels. This suggests that we may conceptualize PWD as a proactive self-regulation strategy that is idiosyncratic.

#### Relevance to the Congress Theme

In virtually every occupation, work is becoming more dynamic. Complementary to proper top-down job design, This calls for the regulation of resources. The present findings highlight that employees may use PWD for this purpose.

#### Relevant UN SDGs

Good Health and Well-Being; Decent work and economic growth.

*Keywords: Play at work; Proactive Behavior; Playful Work Design*

## Paper 2

### **Approaching Knowledge-Work in a Playful Way: Implications for Task Performance and Radical Creativity**

Tom L. Junker, Erasmus University Rotterdam, The Netherlands

#### Research goals and why the work was worth doing

The present study aims to make three contributions to the literature. First, we develop a new scale that captures the day-to-day tradeoff in allocating time to specializing versus integrating knowledge. Second, we test a contingency model that outlines which playful work design strategies benefit task performance and radical creativity during knowledge work. Third, we contribute to organizational scholarship by bringing the topic of play to the serious domain of knowledge work.

#### Theoretical background

A classic distinction in organizational theory is that firms need both specialized and integrative functions in order to compete in knowledge-intensive industries (Lawrence & Lorsch, 1967). Although the distinction between specialization and integration is prominent in macro-oriented organizational scholarship (e.g., Ghosh & Wu, 2021), this distinction is rarely considered in the study of day-to-day behaviors of knowledge workers. We propose that knowledge-workers face a tradeoff in their daily activities in terms of allocating time to developing specialized knowledge (e.g., reading a scientific paper) versus integrating their knowledge with others (e.g., discussing in a meeting). Given their complementary nature, we hypothesize that knowledge specialization and integration explain unique variance in daily task performance and radical creativity.

Beyond making daily decisions regarding whether to focus on specializing or integrating knowledge, employees can approach their activities in different ways to enhance their task performance and radical creativity. The present study investigates whether a playful approach to knowledge work behaviors is functional for performance and creativity. According to Scharp et al. (2022) employees can approach their work in a playful way by designing elements of fun in their activities (e.g., using humor) and by designing activities in a competitive way to create challenge (e.g., setting time limits to tasks). Building on theories of creative performance (Nijstad et al., 2010), we hypothesize that designing fun when enacting knowledge work behaviors promotes radical creativity, whereas a designing competition benefits task performance. In sum, we propose that workers can optimize their daily functioning by utilizing different playful work design strategies to facilitate the benefits of knowledge specialization and integration.

#### Research methodology

We conducted a one-week daily diary study to validate the Knowledge Integration-Specialization Scale (KISS) and test the proposed model. Data were collected by three student assistants in their social networks to reach a heterogeneous sample of 151 employees. Most participants came from the Netherlands (44%), followed by Germany (25%), Greece (23%), and other nationalities (8%). We analyzed the data of participants who completed at least three daily diary surveys ( N = 46 employees, n = 236 observations).

#### Results obtained

Multilevel CFAs supported the two-factor structure of the KISS. While knowledge-integration and specialization were positively correlated at the between-person level, their association was non-significant at the within-person level – supporting the temporal tradeoff perspective. Results of multilevel regression analyses showed that on days when employees engaged in more knowledge-specialization than usual, they reported higher levels of task performance and radical creativity. Main effects of knowledge-integration were not significant. Similarly, only designing fun (but not designing competition) significantly predicted daily task performance and radical creativity. Finally, designing fun strengthened the relationship between knowledge-specialization and daily radical creativity, as hypothesized. Unexpectedly, designing fun weakened the relationship between knowledge-specialization and daily task performance. None of the other interactions reached statistical significance.

#### Limitations

Current results are limited by the small sample size, which made it harder to detect significant interaction effects. Future research may test the proposed model with more statistical power and also examine mediating mechanisms.

#### Conclusions

The main empirical findings of this study are as follows. First, it appears that employees face a daily tradeoff in terms of allocating time to specialized versus integrative knowledge work activities. Second, by approaching knowledge-specialization activities in a fun way, employees may enhance their radical creativity but appear to simultaneously undermine their task performance on the given day.

#### Relevance to the congress theme

Knowledge-based work is becoming even more prevalent in future of work. As such, a better understanding is needed regarding how knowledge workers can take charge of their creativity and performance. The present study investigates this question from the angle of playful work design.

#### Relevant UN SDGs

The study would be relevant for the UN SDGs: “Good health and wellbeing”, “Decent work and economic growth”, as well as “Industry, Innovation and Infrastructure”.

*Keywords: Creativity; Performance; Knowledge*

### Paper 3

#### **Playful Work Design or Playful Distraction? The Consequences of a Ludic and Agonistic Playful Work Design Intervention in a Rigid Work Environment**

Carl Marcus Wallenburg & Fabiola H. Gerpott | WHU – Otto Beisheim School of Management, Düsseldorf, Germany

##### Research goals and why the work was worth doing

Increasing employees' autonomous motivation at work – i.e., the inner drive to act because it is perceived to be consistent with intrinsic goals – is crucial because it positively relates to employees' psychological well-being, knowledge sharing, and ultimately also their commitment and performance. Against this backdrop, scholars have long studied how work can be (re-)designed to increase autonomous motivation through job enrichment and enlargement activities. However, such work design interventions are often not feasible in rigid or bureaucratic organizations due to legal requirements and a lack of resources. Furthermore, a high degree of bureaucratic rigidity also makes job crafting – i.e., the self-initiated change of job characteristics within set boundaries without the involvement of the management – difficult. A promising approach to still increase motivation in such rigid work environments is Playful Work Design, which refers to the proactive cognitive-behavioral orientation that employees engage in to incorporate play into their work activities to promote fun (ludic work design, LWD) and challenge (agonistic work design, AWD). Both forms of Playful Work Design are possible in rigid work environments because they represent self-initiated bottom-up approaches that are grounded in a person's attitude toward a job while not changing its characteristics or design.

##### Theoretical background

The emerging research stream on Playful Work Design has indicated that LWD (e.g., the application of humor, fantasy, or entertainment to work activities) and AWD (e.g., creating competitions, (self-)challenges, or (small) goals to stretch skills) differentially relate to relevant outcomes. Yet, there is a lack of causal evidence on whether both forms of Playful Work Design can be increased through interventions targeting employees. Consequently, important questions remain unanswered: Theory would suggest that interventions addressing LWD and AWD, respectively, may impact employees' LWD and AWD and the subsequently implemented Playful Work Design strategies differently – is this true? If yes, do these different interventions have potentially unique downstream effects on employees' autonomous motivation in a rigid work environment? How long would it take to see improvements in AWD or LWD and accompanying motivation levels after the intervention? Do such interventions work equally well for all employees?

##### Research methodology

227 employees working for different departments in a German district government (that exemplifies a bureaucratic organization) voluntarily signed up for our field experiment. Employees were randomly assigned to one of three theory-based intervention workshops (AWD, LWD, and a control workshop on cognitive biases) and participated in a two-hour training. Two weeks before, and two, four, and eight weeks after the intervention workshops, we captured participants' Playful Work Design with six items each for LWD and AWD, as well as their autonomous motivation via a survey that also included open-ended qualitative questions.

## Results obtained

We found no significant increase in LWD in the ludic treatment group at all measurement points after the intervention. In contrast, participants in the agonistic treatment group reported higher AWD four weeks after the intervention. This finding is similar to previous intervention research that found that the target behavioral variable increased after a “flux phase”. Moreover, the increase in AWD four weeks after the intervention was positively associated with an increase in autonomous motivation eight weeks after the intervention.

To understand whether participants in the different treatment groups also developed different PWD strategies, we analyzed their qualitative responses through automated theme detection and subsequent manual coding. We found that employees indeed developed different strategies depending on whether they were in the LWD or AWD treatment group. By analyzing all strategies with respect to their treatment group, we found that strategies can be sorted into a 2x2 matrix to classify strategies that were (1) related to work activities, (2) outside of work activities, (3) self-focused, and (4) other-focused.

## Limitations

Our data collection is limited to rigid work environments; thus, the generalizability to different work settings still needs to be tested.

## Conclusions

The AWD intervention constitutes a promising workshop for increasing employees’ autonomous motivation in a rigid work environment. Contrarily, participants in the LWD treatment mainly created strategies outside of work activities that could be argued to distract them from their job.

## Relevance to the congress theme

In a changing working world, it is essential to equip employees with competencies that allow them to rethink work positively. Our test of theory-based intervention workshops helps organizations to make evidence-based decisions about how and whom to train in which form of Playful Work Design.

## Relevant UN SDGs

Good Health and Well-Being; Decent Work and Economic Growth

*Keywords: field experiment; autonomous motivation; work design*

## Symposium S007

### Job Insecurity – Symposium 1: How do employees and leaders react to job insecurity?

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science\_practice

What will be covered: Significant changes in the business, economic, political, and technological backdrops surrounding work have led to fundamental changes to the nature of work. Consequently, workers around the world are experiencing increased uncertainty, and are unsure how much longer they can stay in their current employment or maintain desirable job features.

In the literature, quantitative job insecurity refers to the threat of job loss, while qualitative job insecurity refers to the threat of losing valued job features. We present two symposia with ten papers on job insecurity. In this first symposium, we include five papers focus on employee behaviour or behavioural intentions when facing job insecurity, while the second symposium including additional five papers focuses on attitudinal and well-being outcomes of job insecurity and their reciprocal relationships.

Liang et al. examine the moderating role of technology-induced insecurity in the positive associations of quantitative job insecurity with ego-depletion and turnover intentions with a two-wave sample of IT engineers from China. They find that the positive relationship between job insecurity and turnover intentions is only significant for those with low technology-induced insecurity. However, technology-induced insecurity does not significantly impact the positive relationship between job insecurity and ego-depletion.

The following three papers investigate employee qualitative job insecurity. Lazauskaitė-Zabielské et al. propose that perceived justice and participative decision-making can attenuate the adverse effects of qualitative job insecurity on in-role performance, extra-role performance, and innovative work behaviours. With data from Belgium, Lithuania, and Switzerland, perceived justice and participative decision-making, unexpectedly, exacerbate the negative effects of job insecurity on these three types of performance.

Huang et al. examine the mediating role of the desire for job control in the relationship between qualitative job insecurity and voice, and the moderating role of employee regulatory focus in the indirect relationship between qualitative job insecurity and voice via desire for control. With three-wave data from China, they confirm that: 1) desire for control mediates the relationship between qualitative job insecurity and voice, and 2) prevention focus strengthens the indirect relationship.

Although the above papers examine the linear effects of job insecurity, the final two papers explore the curvilinear outcomes of job insecurity. Jiang et al. examine whether the curvilinear relationships of qualitative job insecurity with issue selling and skill development depend on masculine orientation and uncertainty avoidance. With two-wave data from Australia, Chile, New Zealand, and the U.S., they show a U-shaped relationship between qualitative job insecurity and issue selling for those reporting low masculine orientation, and a U-shaped relationship between qualitative job insecurity and skill development for those reporting high uncertainty avoidance orientation.

Finally, Wang et al. takes a different perspective by investigating leader job insecurity and their the behavioural reactions to job insecurity. With 95 leaders from China, they find that leader job

insecurity has an inverted U-shaped relationship with their abusive supervision towards subordinates, but U-shaped relationships with their task-oriented and relation-oriented behaviours.

Relevance to the Theme: Job insecurity has become ever-present in the modern world of work. By focusing on how employees and leaders may react to job insecurity, this symposium contributes to our understanding of how people across eight countries (i.e., Australia, Belgium, Chile, China, Lithuania, New Zealand, Switzerland, the U.S.) may behave in the face of the changing world of work featuring job insecurity.

Implications: The symposium contributes to our understanding of employee and leader behavioural reactions to job insecurity. Practically, organisations may create resourceful conditions to minimize job insecurity and/or attenuate the negative behavioural outcomes of job insecurity.

Overall conclusions: Papers in this symposium: 1) reveal moderators that may alter how employees may react to job insecurity (i.e., technology-induced insecurity, perceived justice, participative decision-making, regulatory focus, cultural value orientations), 2) demonstrate a underlying mechanism that may explain employee reactions to job insecurity (i.e., the desire for job control), 3) showcase whether job insecurity may linearly or nonlinearly relate to employee performance, and 4) highlight how leaders who experience job insecurity may interact with their employees. Thus, the symposium deepens our understanding of behavioural reactions to job insecurity by focusing on its moderators, a mediator, linear and curvilinear relationships, and employees and leaders with diverse samples from eight countries.

*Keywords: Job Insecurity, performance, stress*

## Paper 1

### **Job insecurity and performance in academia: the role of perceived justice and participative decision-making**

Hans De Witte, KU Leuven & North-West University; Ieva Urbanavičiūtė, Vilnius University & University of Lausanne; Jurgita Lazauskaitė-Zabielskė, Vilnius University

Research goals and theoretical background. Over the recent decades, the way academic life has been organised has witnessed substantial shifts. Technological, organisational, and managerial changes, pressure to redefine and broaden the role of academia in society (Alexander & Manolchev, 2020; Shin & Jung, 2014), as well as the need to be highly adaptive to unexpected shocks, such as the global COVID-19 pandemic (Savic, 2020) have taken their toll on employees in academia and affected their attitudes, performance, and health. Furthermore, increased job demands and obstacles to gaining promotion and precarious job contracts indicate the prevalence of job insecurity (e.g., Biron et al., 2008; Bryson, 2004; Kinman & Court, 2010). As job insecurity poses a critical risk to employees' performance and well-being (e.g. Jiang & Lavaysse, 2018), considerable research efforts have been directed at finding the preventing or buffering factors for the negative correlates of job insecurity. However, as existing studies usually focus on attitudinal outcomes, more research is needed on the effect of job insecurity on performance, considering the equivocal results on their relationship (e.g., Rosen et al., 2010).

Building upon Fairness Heuristic (Lind, 2001; Van den Bos, Lind, & Wilke, 2001) and Uncertainty Management (UMT, Lind & Van den Bos, 2002) theories and research that suggest equity practices (Kjeldal et al., 2005), academic freedom and participation in decision-making (Silvernail et al., 2021) might be the deciding factors in the way academic employees respond to their career challenges, we investigate the role of perceived overall justice and participative decision-making in the relationship between job insecurity and performance. We expect perceived justice and participative decision-making to alleviate the adverse effects of qualitative job insecurity on three forms of performance, i.e. in-role and extra-role performance and innovative work behaviours.

Design/Methodology/Approach/Intervention. The overall sample consisted of 1444 higher education employees in Belgium, Lithuania, and Switzerland. 68.7% of the participants were female. The mean age was 40.24 (SD = 11.06) years, and the mean tenure was 10.13 (SD = 9.21) years. 28.7% of the participants held temporary contracts. Regarding the occupational position, the sample consisted of three staff categories: administrative employees (n = 400), senior academic staff (n = 507), and junior academic staff (n = 366). We tested our hypotheses using moderation analyses.

Results obtained. Roughly half of the tested moderation effects were significant. More precisely, perceived justice and participative decision-making moderated the relationship between qualitative job insecurity and three performance forms. Although higher perceived justice and participative decision-making were related to lower levels of job insecurity, the pattern of moderation effects appeared to be contrary to our expectations. Perceived justice and participative decision-making exacerbated the adverse effects of job insecurity. The negative relationship between job insecurity and performance forms was stronger under high levels of fairness and participation in decision-making. After testing moderations across different staff categories (administrative employees, senior academic staff, and junior academic staff), we found the moderation effect slightly depending on the staff category.

Limitations. Although the results are based on quite a large sample among three countries, the analyses are based on cross-sectional data.

Conclusions. Job insecurity, a significant stressor, is apparently an unfavourable experience, implying adverse outcomes. In fair academic institutions and under participative leadership, job insecurity is experienced as particularly stressful because it contradicts the idea of fair academia, which may drain employees' energetic resources when coping with it.

Relevant UN SDGs: Peace, justice, and strong institutions

*Keywords: job insecurity, performance, academia*

## Paper 2

### **The moderating roles of cultural value orientations in the curvilinear relationships of qualitative job insecurity with issue selling and skill development**

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**Research goal :** A recent meta-analysis has identified the non-linear relationships of job insecurity with task performance, organizational citizenship behaviors towards individuals and organizations, and creative performance (Jiang et al., 2022). Building on and extending upon these findings, we aim to examine whether there are curvilinear relationships between qualitative job insecurity (QJI) and proactive behaviors. We specifically focus on two types of proactive behaviors: issue selling, or calling an organization's attention to key trends, developments, and events that have implications for its performance (Morrison & Phelps, 1990), and skill development activities, or starting initiatives that lead to mastery of the various tasks involved in one's occupation (Claes & Ruiz-Quintanilla, 1998) as it is unknown how job-insecure employees may display these two types of proactive behaviors. Because employees with different cultural value orientations may react to QJI differently, we further examine how cultural value orientations (i.e., individual differences in masculine and uncertainty avoidance orientations) may alter the non-linear relationships between QJI and proactivity.

**Theoretical background :** Consistent with Jiang et al. (2022), we propose U-shaped relationships of QJI with issue selling and skill development activities. On the one hand, based on social exchange theory (Cropanzano & Mitchell, 2005), individuals reciprocate what they receive from a given relationship. Thus, as job insecurity increases from low to medium levels, it may prompt employee reciprocation motivation to get back at the organization, thereby reducing their issue selling and skill development activities, both of which can benefit the organizations. On the other hand, the job-preservation perspective (Shoss, 2017) argues that to preserve their important job features, highly job-insecure employees may engage in behaviors that benefit the organization and their career development. Such preservation motivation is particularly pronounced when QJI increases from moderate to high levels when the threat of job change becomes more salient, imminent, and vivid. Thus, integrating social exchange theory with job preservation motivation, we propose that the negative relationships of QJI with issue selling and skill development activities turn positive after inflection points.

We further explore whether masculine orientation and uncertainty avoidance orientation may alter the U-shaped relationships of QJI with proactive behaviors. Masculine orientation is the degree to which individuals are assertive, ambitious, and competitive, and strive for material success, while uncertainty avoidance orientation is the extent to which ambiguous situations are felt as threatening (Hofstede, 2001). Individuals with low (vs. high) masculine orientation and those with high (vs. low) uncertainty-avoidance orientation are more likely to perceive the possibility of job loss as threatening. Thus, we propose that for those with low masculine orientation and those with high uncertainty avoidance orientation, the U-shaped relationships of QJI with issue selling and skill development activities are more pronounced.

Method : Two-wave 1,263 employee data were collected in four countries: Australia, Chile, New Zealand, and the United States. We assessed QJI (Låstad et al., 2015) as well as collectivism, power distance, masculine, long-term, and uncertainty-avoidance orientations (Yoo et al., 2011) at Time 1, and issue selling (Morrison & Phelps, 1999) and skill development activities (Claes & Ruiz-Quintanilla, 1998) at Time 2. Collectivism, power distance, and long-term orientations were included as controls.

Results : Using hierarchical multiple regression analyses, we found that there was a significant moderating effect of masculine orientation on the relationship between QJI and issue selling where we observed a U-shaped relationship between QJI and issue selling for those reporting low masculine orientation. There was also a significant moderating role of uncertainty avoidance orientation in the relationship between QJI and skill development where we observed shows a U-shaped relationship between QJI and employee skill development among those with high uncertainty avoidance orientation. Other significant relationships were not detected.

Limitations: This study relied on self-reports, which may introduce common method bias. We used a cross-lagged design, which undermines our ability to make casual inference. We did not examine the mechanisms proposed by the integrated theoretical frameworks.

Conclusions : We conclude that the U-shaped relationships of QJI with proactive behaviors (issue selling and skill development) depend on one's cultural value orientation. The U-shaped relationship of job insecurity with issue selling only exists for those with low masculine, while the U-shaped relationship of job insecurity with skill development only exists for those with high uncertainty avoidance.

Relevance to the Congress Theme : The changing world of work inevitably involves undesirable changes to one's employment — QJI. Our findings reveal how employees with different cultural value orientations may react to QJI.

Relevant UN SDGs : decent work and economic growth.

*Keywords: job insecurity, curvilinear, proactivity*

### Paper 3

#### **Job insecurity and (un)sustainable well-being: A study of within-person effects among working adults in Switzerland**

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#### Goals

In the contemporary labour market, a threat of job loss represents a major occupational hazard that has significant repercussions for workers' health and well-being (Eurofound, 2021). Within the stressor-strain literature, existing research (e.g., Cheng & Chan, 2008; De Witte et al., 2016) points to a host of potentially detrimental effects resulting from individual strain responses to (perceived) job insecurity that still need to be better understood. In the current study, we aim to contribute to this understanding in two ways. First, we focus on within-person relationships, seeking to unravel intraindividual dynamics of job insecurity. In so doing, the present study meaningfully adds to the current knowledge on the topic that is still largely based on the interindividual differences approach. Second, we adopt a cross-domain perspective that includes testing both work-related (i.e., job satisfaction, work strain) and life outcomes (i.e., life satisfaction, health complaints). This is necessary in order to better understand how job insecurity threatens sustainable well-being, because the notion of sustainability implies thriving in different areas of life.

#### Theoretical background

Drawing on conservation of resources theory, employment is conceptualized as an important "conditions" resource that provides status and identity for the individual (Hobfoll, 1989; Hobfoll et al., 2018). Job insecurity represents a threat of losing these benefits, which is perceived as stressful and may trigger a range of strain reactions. Therefore, we hypothesized prospective negative relationships between job insecurity and well-being and expected them to occur at the within-person level after controlling for between-person differences on these variables. Moreover, resource loss and strain are thought to be reciprocally intertwined, forming a so-called loss cycle (Halbesleben et al., 2014). For this reason, we also tested the possibility of reversed pathways linking (a lack of) well-being to job insecurity.

#### Method

To test the hypotheses, we used longitudinal data from the "Career Paths" panel survey based on seven yearly measurements. The survey was carried out within the framework of the Swiss National Centre of Competence in Research—Overcoming Vulnerabilities: Life Course Perspectives (LIVES) and includes a large sample that is representative of the German- and French-speaking population in Switzerland. Our analytic sample consisted of 1134 professionally active adults (49% women, mean age at T1 = 42.34, SD = 8.41). Data analyses were conducted with Mplus v8.8, applying recent extensions to the cross-lagged panel modelling that allow to inspect reciprocal relations at the within-person level (Hamaker et al., 2015; Usami et al., 2019).

#### Results

According to the results, job insecurity had a significant (yearly) cross-lagged effect on job satisfaction and mental health at the within-person level, which was detectable after controlling for

the corresponding between-person effects. As expected, higher than usual individual job insecurity resulted in lower than usual job satisfaction and more expressed deterioration of health for that individual, highlighting the lasting setbacks people may be subject to when confronted with job-insecure situations. Interestingly, and contrary to prior findings based on the between-person approach, we found only limited support for the reciprocal relationship between job insecurity and well-being. Mental health complaints but not other outcome variables showed a bidirectional pathway, which points to mental health as a potential vulnerability factor that may predispose the person to higher job insecurity and may as well be escalated by it.

#### Limitations

The present study only included quantitative job insecurity (fear of losing the job), which is somewhat less salient in the general population than qualitative job insecurity (fear of losing valued job features). Moreover, our analyses were based on yearly time lags, which may be suboptimal for capturing more immediate effects.

#### Conclusion

Our findings showcase the risks to employees' sustainable well-being associated with job insecurity, especially highlighting the intra-individual dynamics of job satisfaction and mental health.

#### Relevance

The current study fits well to the conference theme because job insecurity is a prevalent and worrisome attribute of the changing world of work. Empirical research aimed at expanding the knowledge about its accompanying risks is crucial for promoting employee health and well-being (thus addressing UN SDG #3) and decent work for all (thus addressing UN SDG #8).

*Keywords: Work stressors, employee well-being, within-person analyses*

## Paper 4

### **The reciprocal associations between job insecurity, job satisfaction, and perceived stress. A cross-lagged panel analysis on the moderating role of or**

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#### Research goals and why the work was worth doing

Job insecurity remains a significant stressor to many workers, with short- and medium- term consequences on their job attitudes and, above all, health. Evidence about the negative effects of job insecurity on job satisfaction and health is consolidated (Lee et al., 2018), however much little is known about the reciprocal effects of these outcomes on job insecurity over time. In fact, among the available longitudinal studies on the effects of job insecurity, only a limited amount included a test of reversed or reciprocal causation (De Witte et al., 2016).

Based on these considerations, we will examine the cross-lagged associations over time between quantitative job insecurity, job satisfaction, and perceived stress, also including organizational identification as a moderator of these associations as, based on the premises of the social identity theory, it could act either as a buffer because identification towards the organization could be a protective factor or as an amplifier of negative effects because of the threat to the organizational membership deriving from job insecurity.

#### Theoretical background

Consistently with the theoretical model by Sverke et al. (2002), we differentiated, on an individual-level basis, between job satisfaction as a proximal, attitudinal, outcome, and perceived stress as a distal, health-related, outcome. Moreover, we referred to the social identity theory (Tajfel & Turner, 1979) to explain the influence of social aspects on the experience and effects of job insecurity (Selenko et al., 2017), as it can be helpful in explaining the potential moderating role of organizational identification. This latter could amplify the negative association between job insecurity and job satisfaction as well as weaken the negative association between job satisfaction and health.

#### Design/Methodology

A cross-lagged panel study was carried out over a period of six months in 2020 in the midst of the Covid-19 pandemic: t1 (March 2020), t2 (June 2020), and t3 (September 2020). 539 Italian employees filled an online questionnaire (due to pandemic restrictions). At the t3, 347 valid questionnaires were returned (attrition rate = 35.62%). Before estimating structural models (contrasting normal, reversed, and reciprocal causation) by means of structural equation modelling with latent variables, we estimated alternative measurement models to test for common method variance and we also tested for measurement invariance. Moderation was tested by means of the Process macro for SPSS (5000 subsamples).

#### Results obtained

First, we tested for alternative measurement models finding support to the distinctiveness between our study variables. Then, we tested for measurement invariance finding support for configural, metric, and scalar invariance. As for the alternative structural models, we found that the reversed causation one fitted best the data. As for the associations between variables we found that stress t1 positively predicted job insecurity t2 and job satisfaction t2. Analogously, stress t2 positively predicted job insecurity t3 and job satisfaction t3. Finally, we tested for the moderating effect of organizational identification, finding that it weakened the negative association between stress and job satisfaction, while it amplified the positive association between stress and job insecurity.

#### Limitations

The sample was heterogeneous and recruited through a convenience sampling. Future studies could include additional short- and medium-term outcomes as well as differentiate between different kinds of job insecurity (e.g., cognitive vs. affective). The use of objective measures for health (e.g., psychophysiological indicators) could provide additional insights.

#### Conclusions – research implications

Opposite to our expectations, quantitative job insecurity did not predict neither job satisfaction nor job stress. In fact, job stress positively predicted job insecurity and negatively predicted job satisfaction. It could be argued that job stress does not measure a health outcome but a transient stress state that, consistently with the Appraisal Theory of Stress (Lazarus & Folkman, 1984), impacts on job satisfaction. As for the impact on job insecurity, it may be argued that stressed employees may be more nervous, irritable, and inefficient and this may lead to several intermediate outcomes (e.g., conflicts with supervisors and colleagues, poor performance) that impair their position within their current organization and increase feelings of job insecurity. Moreover, we found that organizational identification is a protective factor of the negative effects of job stress on job satisfaction, while it amplifies its positive effects on job insecurity. As for this latter result, the sense of oneness with an organization could arouse expectations influencing perceived stress and concerns about own job continuity.

#### Relevance to the Congress Theme

CAREERS AND THE LABOUR MARKET – subtheme: job insecurity

*Keywords: Job insecurity; job stress; organizational identification*

## Paper 5

### **Subtle cutback management and employee exhaustion: the role of qualitative job insecurity as a mediator**

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#### Research goals and why the work was worth doing

As an answer to crises like COVID-19 organizations implemented more subtle forms of cutback measures like wage moderation, loan sacrifice and recruitment freezes aimed at maintaining a financially healthy organization. In this study the association between subtle cutback management and employee exhaustion is studied, and it investigated whether this potential linkage can be explained by employee perceptions of increased qualitative job insecurity or the fear that valued features of the job will decrease in the future. This research thereby extends prior research on the consequences of cutback management as well as regarding the antecedents of qualitative job insecurity.

#### Theoretical background

In this study associations are explained by relying on Psychological Contract Theory and organizational change literature on the one hand and the Job Demands-Resources model on the other hand.

#### Design/Methodology/Approach/Intervention

A cross-sectional online survey study was conducted on a sample of Dutch workers (N=218) active in various organizations in the Netherlands. Regression analysis was applied to test hypotheses. Mediation was investigated by means of Hayes PROCESS macro (SPSS).

Results obtained or expected (if not available, it must be made clear when they will be)

The results of the study indicate that there is no direct relationship between subtle cutback measures deployed at the workplace and employee exhaustion. However, the analyses further revealed that subtle cutback measures were positively related to the experience of qualitative job insecurity in workers and that enhanced qualitative job insecurity was positively related to employee exhaustion. Qualitative job insecurity fully mediated the relationship between subtle cutback measures and employee exhaustion.

#### Limitations

Because of the cross-sectional design of the study cause-effect relationships cannot be inferred. Sampling was done through 'self-selection,' thereby limiting the generalizability of findings. The measurement of subtle cutback management may not have been exhaustive to capture all forms.

#### Conclusions – research and or practical implications

This study connects organizational change and well-being literature by adding the insight that the implementation of subtle forms of cutback measures, a form of organizational change, may indirectly relate to more employee exhaustion through increased concerns about the quality of one's job in the near future. This study can contribute to the mitigation of a core facet of burnout, i.e. employee exhaustion, which is regarded as an important precursor of sickness absenteeism and diminished

work participation. This study provides leads for organizations to either turn away from unsustainable practices like the implementation of well-intended cutback measures or to better intervene in the prevention of associated feelings of job insecurity.

Relevance to the Congress Theme (The future is now: The changing world of work")

To respond to turbulent times organizations implement subtle forms of cutback management with the intent to remain a financially healthy organization and avoid lay-offs. Yet, such practices may have unintended negative health effects for employees, and hence trigger downward spirals. As such, this study addresses one of the dilemmas that organizations are facing these days as part of an open, rapidly changing society.

Relevant UN SDGs (<https://sdgs.un.org/goals>)

Relevant UN SDGs are Goal 3 Ensure healthy lives and promote well-being for all at all age and Goal 8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

*Keywords: Qualitative job insecurity, cutback management, exhaustion*

## Paper 6

### **Job insecurity as a societal belief? On the mutual relationship between trust in the government and job insecurity**

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#### Research goals and why the work was worth doing

In current times of political and economic turbulence, an increase in job insecurity seems to go hand in hand with a simultaneous decrease in trust in core political institutions (such as the government). This research wants to establish whether these two processes could be mutually related, explore the societal relevance of work and establish the political risks of job insecurity.

Work is a core social institution: It generates income, is part of people's identity and allows for participation in society, which is a fundamental social right. The workplace is also where people interact with others in society, outside their private family and friendship circle.

Job insecurity threatens all of these aspects, and has been found to have devastating health and work-behavioral effects. Given the centrality of work for people's role in society, could job insecurity also have wider political consequences and undermine the trustworthiness of a government?

#### Theoretical background

This study borrows from literature on corporate citizenship (e.g. Matten & Crane, 2005), and Jahoda's (1988) conceptual ideas which propose that work is a social institution, and organisations provide employees with the means of participating in society, thereby enabling them to exert an important social citizenship right. The governments' role is to protect citizen's rights and core social institutions.

Job insecurity could hence be understood as a threat to the institution of work and the social right to partaking in society. This can reflect badly on the government as protector of people's rights and plausibly undermines the level of trust citizens have in the government. Low trust in the government in turn will also have an effect: It can render people more insecure about their protection of social rights and social institutions, such as partaking in work.

Previous empirical studies already evidence that a relationship between work and political attitudes is plausible (e.g., De Witte & Selenko, 2021; Shoss et al., 2022; Stanojevic, 2021; Van Hootegem et al., 2021). This study hypothesizes that job insecurity undermines people's trust in their government, and vice versa, as the government protects the social institution of work and the social right to partake in society.

#### Methodology

A three-wave survey study among 1641 Belgian professionals was conducted to test these assumptions. Standardised instruments were used to measure quantitative job insecurity (Vander Elst et al., 2014), and trust in the organisation (Robinson, 1996), which was included as control variable. Trust in the government was measured by adapting Robinson's 1996 scale, the scale showed good factorial qualities.

## Results

To inspect within-person changes in job insecurity and see whether they affect the trust in the government, we used a partly time-invariant, random-intercept cross-lagged panel model. The results confirm the hypothesis by showing a reciprocal relationship between quantitative job insecurity and trust in government, and strangely no effect with trust in one's organisation. Not only did people who experienced increases in job insecurity showed subsequent decrease in trust in the government; also people who reported decreases in trust in the government, experienced increases in job insecurity. This shows that job insecurity is informed by the trustworthiness of the government, which stands for the protection of individual's social rights, of which participating in work is an important element. A government who is not trusted, will not be trusted to ensure that people can access their social right of work.

## Limitations

Our study focussed on trust in the government only, it did not assess perceived social right violations, nor did it measure to which degree people saw the government as being responsible for the protection of their social rights or the social institution of work. This renders the core elements of the theoretical assumptions as yet untested.

## Conclusions – research and or practical implications

The study makes a substantial contribution to the work and organisational psychological literature by evidencing the effect of job insecurity on political attitudes, but also by showing that job insecurity is informed by an assessment of the wider political climate in a country. By recognising the societal context of work, this study highlights the responsibility of work and organisational psychology to solve wider socially significant problems.

## Relevance to the congress theme

The future of (good) work relies on trustworthy governments.

*Keywords: job insecurity, political trust, longitudinal*

## Symposium S008

### **Blurred Lines – Empirical evidence on the importance of studying distinct forms of how work can enter nonwork roles and vice versa**

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science

#### 1. What will be covered and why:

The lines between work and nonwork roles get increasingly blurred due to changes in how and where we work. As such, technology enables employees to work anytime and anywhere and organizations support the integration of work and nonwork roles through various practices. Yet, individuals not only differ in their preferences to integrate (i.e., to create thin and permeable role boundaries) or segment (i.e., to create thick and impermeable role boundaries; Ashforth et al., 2000) but also in how they integrate such roles (Allen et al., 2014; Capitano et al., 2019). Yet, to date, when studying how individuals navigate their work and nonwork roles, the majority of studies have focused on overall degrees of role integration (or segmentation). In this symposium, we take a more differentiated perspective and zoom in on distinct ways of how work can enter nonwork roles and how nonwork roles can enter the work role. The first presentation by Humps et al. focuses on workplace friendship as a form of people integration and studies how individuals' integration preferences affect workplace friendships and what its consequences for organizational citizenship behaviors are. The next three contributions study work-related rumination as a specific form of cognitively integrating the work role into a nonwork role. In a longitudinal three-wave study, Marx-Fleck et al. show how affective rumination prolongs the consequences of defensive decision-making to chronically deplete individuals – and how chronic resource depletion affects future decision-making. In a daily diary study, Mackenbach et al. study the relevance of such cognitive role integration as a mechanism in how characteristics of the work role affect dream content. In another daily diary study, Heimrich et al. show whether and how affective rumination prolongs the consequences of work experiences (here, workplace incivility) to affect well-being and next-day work behaviors. Finally, Willemen et al. present findings from a study on how being a dog owner affects employees' well-being when teleworking (i.e., physically integrating work and nonwork roles)

#### 2. Relevance to the congress theme:

This symposium directly speaks to the congress theme as the potential for integrating work and nonwork roles is a direct consequence of the future of work. Particularly since the COVID-19 pandemic, employers have been increasingly discussing teleworking offers, thus supporting the integration of the work role into nonwork roles. At the same time, employers have been increasingly offering options to similarly integrate nonwork roles into the work role, for instance, through on-site childcare opportunities or joint sports activities

#### 3. Research/Practical Implications:

Jointly, the five contributions in this symposium provide crucial research implications, supporting the need for a more differentiated perspective on studying role integration and expanding role integration to other roles than the family role. Likewise, this symposium helps in raising employees' and employers' awareness of the many forms of how the work role can enter nonwork roles and vice versa. The results of these five studies can help employees better navigate their boundaries between work and nonwork roles and support employers in building a healthy future of work.

45. Overall conclusions:

Overall, the five presentations in this symposium help provide a more fine-grained perspective on multiple-role integration, which is increasingly common in nowadays working lives.

*Keywords: boundary management, well-being, work-nonwork interface*

## Paper 1

### **Special treatments for my friend: The centrality of workplace friendships on organizational citizenship behaviour**

Nina M. Junker, University of Oslo; Anna Deuster, Goethe University Frankfurt; Sophia E. M. Humps, University of Oslo

#### 1. Research goals and why the work was worth doing

Extending beyond formal role descriptions is essential to organisational citizenship behaviour and workplace friendships. Through organisational citizenship behaviour (OCB), employees go beyond what is formally expected of them to benefit the organisation in general (OCBO) and indirectly through benefits directed to specific individuals (OCBI; Organ, 2018). At the same time, workplace friendship extends beyond the formal role description of co-workers by including the role of a friend in the working relationship (Pillemer & Rothbard, 2018). Both concepts blur the lines of what is formally asked of employees and impact organisational behaviour and outcomes. This study aims to identify individual factors that predict when employees go beyond the formal work relationship using Boundary Management Theory (BMT) and examines the subsequent consequences for OCB.

#### 2. Theoretical background

Following the research on BMT in the work-family domain, particularly two factors influence whether individuals integrate or keep their roles segmented. First, role centrality describes the priority and value individuals place on a specific role (Kossek et al., 2012). Regarding workplace friendships, role centrality determines how meaningful friendships at work are compared to friendships outside work. When individuals prioritise their workplace friendships over other friendships, they invest more into those relationships and probably maintain more workplace friendships than those who prioritise friendships outside of work. Second, individual differences exist in the general preferences of integrating or segmenting different roles (Rothbard et al., 2005). Individuals with high integration preferences prefer blurring their personal and professional life and might therefore be more likely to engage in workplace friendships that are inherently blurred.

The prevalence of workplace friendships has profound implications for an organisation. Previous studies attested to the positive effect of workplace friendships on organisational outcomes through more job satisfaction, greater productivity, and greater trust among befriended employees (Morrison & Cooper-Thomas, 2016). As a result, employees with more workplace friendships might display higher OCBO to benefit the organisation. Additionally, through friends' support on a dyadic level, friendships benefit single individuals and, subsequently, the organisation (OCBI).

Drawing on the boundary management literature in the work-family context and research on workplace friendships, we expected that a higher role centrality of workplace friends increases organisational citizenship behaviour (both OCBI and OCBO) through a higher friendship prevalence at work and that this association would be stronger for individuals with stronger integration preferences.

#### 3. Design/Methodology/Approach/Intervention

We conducted a time-lagged survey with German-speaking employees and analysed the data using moderated mediation models.

#### 4. Results obtained or expected

We found no direct associations between role centrality and both OCB dimensions. However, supporting our assumptions, we found an indirect positive association between role centrality and OCBI via more friendship prevalence. Individuals who prioritised workplace friendships over other friendships showed a higher friendship prevalence at work, which in turn was associated with more organisational extra-role behaviour benefitting specific individuals. We did not find this indirect association for OCBO. Moreover, integration preferences did not moderate these associations. However, stronger integration preferences related to more friendship prevalence at work.

#### 5. Limitations

The present results are based on individuals' self-reports, facing the risk of common-method bias. Considering the nature of friendships and the effect of OCB on the individual level, it might be important to capture these on a dyadic level. To observe more objective consequences of workplace friendships for OCB, supervisor ratings may better capture OCB outcomes.

#### 6. Conclusions – research and/or practical implications

The present study contributes to understanding workplace friendships as multiple-role relationships and uses BMT to examine the individualistic determinants that foster these work relationships. Our findings suggest that emphasising workplace friendships over non-work friendships relates to more friendship prevalence at work, in turn, positively relating to OCBI but not OCBO.

#### 7. Relevance to the Congress Theme

In the changing world of work, a rising number of organisations blur the line between what was formerly considered purely professional and personal aspects of life by integrating leisure activities and social events in the workplace and thus fostering employee friendships. Using BMT allows us to study the unique dual-nature friendships present in today's companies.

#### 8. Relevant UN SDGs

In an integrating world of work, employee behaviour often exceeds expected behaviour. As organisations foster employee friendships, they enable social relationships contributing to employees' decent working conditions. At the same time, as our research showed, the effects of friendship go beyond the social relationship by benefitting the effectiveness of organisations through OCBI, fostering economic growth.

*Keywords: boundary management, workplace friendship, organizational citizenship behaviors*

## Paper 2

### **Affective rumination as a cognitive integration of individual's work role into their non-work role**

Nina M. Junker, University of Oslo; Rolf van Dick & Stefanie Marx-Fleck | Goethe University Frankfurt

#### 1. Research goals and why the work was worth doing

Defensive decision making aims at protecting one's resources by choosing a personally safer yet organizationally inferior option (Artinger et al., 2019). However, deliberately opting for a second-best option might threaten one's self-integrity as a personal resource, thus keeping the decision salient. We argue that this cognitive preoccupation causes employees to ruminate about their decision affectively even if they have physically left the workplace, impairing well-being and increasing work-family conflicts (Junker et al., 2021). This study aimed to test if deciding defensively (mirroring stressors within the work domain) enters the non-work domain via affective rumination, draining resources and ultimately resulting in exhaustion.

#### 2. Theoretical background

Allen et al. (2014) distinguish multiple ways of integrating work into the home domain. However, if the individual's work role interferes with the non-work role, this bears the risk of conflicts between the two domains (Ashforth et al., 2000). Individuals strive to see themselves as coherent and stable (Cross et al., 2003). Therefore, inconsistent behavior at work threatens a positive view of the self and impairs employees' well-being (Brief et al., 2001; Kammeyer-Mueller et al., 2012). Integrating these two perspectives, we propose that the behavioral inconsistency evoked by defensive decisions induces individuals to ruminate affectively about those decisions. If they fail in mentally distancing themselves from their work role after the end of work, those ruminative thoughts might serve as one mechanism through which the work domain interferes with the non-work domain, resulting in exhaustion. Thus, affective rumination represents one way of cognitively integrating the work role into a nonwork role, extending the (here, draining) consequences of work.

#### 3. Design/Methodology/Approach/Intervention

We conducted a three-wave study with 6-week intervals between measurement points to test our model. We measured all constructs at each measurement point. To assess defensive decision making, we used an adapted version of Artinger et al. (2019). Affective rumination was measured with the five items developed by Cropley et al. (2012), adapted to relate to the time after making a defensive decision. Emotional exhaustion was assessed with the nine items from the Maslach Burnout Inventory (Maslach & Jackson, 1981).

#### 4. Results obtained or expected

We found that affective rumination mediated the relationship between defensive decision making and emotional exhaustion, illustrating that individuals who are not able to stop thinking about work drain their cognitive resources even when they physically leave their workplace, resulting in the perception of prolonged exposure to the stressor. We further found support for reciprocal associations: whereas one-time defensive decision making did not inevitably result in feelings of emotional exhaustion, exhausted employees tended to decide more defensively in the future.

#### 5. Limitations

We relied on self-reports, which may be subject to social desirability and common-method bias. Furthermore, we relied on participants' ability to recall situations in which they decide defensively accurately, which might be subject to individual differences. Besides, our research design did not allow us to make strong causal inferences.

#### 6. Conclusions – research and/or practical implications

The results show that employees who aim to protect their resources by deciding defensively mentally take this decision home, thus lacking resources to spend in their nonwork roles. Instead of replenishing their resources, they further drain these, ultimately experiencing exhaustion. By strengthening boundaries between work and home, organizations can enable employees to leave their work physically and mentally behind.

#### 7. Relevance to the Congress Theme

This study highlights the need to carefully consider the psychological permeation between the work and non-work domains to sustain employees' mental health.

#### 8. Relevant UN SDGs

Defensive decision making is not limited to a particular domain. Thus, it is relevant for promoting sustainable, climate-friendly organizational decision-making.

*Keywords: defensive decision making, burnout, affective rumination*

### **Paper 3**

#### **The effects of challenge and hindrance demands on dream content and valence - a daily diary study**

Jan A. Häusser, Sascha Abdel Hadi, Janina Janurek & Anna Luca Mackenbach | Justus-Liebig-Universität Gießen

##### **1. Research goals and why the work was worth doing**

The purpose of this study was to explore if challenge and hindrance demands are related to dreaming (i.e., dream affect and work-relatedness of dream content) and if this relationship is mediated by work-related rumination before going to sleep. This research contributes to the emerging research of work influences on sleep, with broadening the scope to dreaming.

##### **2. Theoretical background**

Previous research has shown that work stressors are related to perseverative cognition which in turn has a negative influence on various sleep parameters, such as sleep efficiency or number of awakenings (e.g., van Laethem et al., 2016; van Laethem et al., 2018). Barnes and colleagues (2021) initially investigated the involvement of dreaming in the relationship between work stressors and sleep, and found that day-specific job demands are related to day-specific dream affect via day-specific work-related rumination.

Building on these findings, we investigated the effects of challenge and hindrance demands on dream content. Specifically, we hypothesized that daily challenge and hindrance demands predict work-related dream content at the successive night, and tested work-related rumination as a potential mediator of this relationship.

##### **3. Design/Methodology/Approach/Intervention**

We conducted a daily diary study with 263 employees working from home over the course of 14 consecutive days. Day-specific challenge and hindrance demands were assessed directly after work and day-specific pre-sleep rumination, dream affect and work-relatedness of dream content were assessed the following morning. 82 out of the 263 participants reported to have remembered their dreams at least once during the two-week assessment. Therefore, a total of 149 dreams from these 82 participants could be analysed.

##### **4. Results obtained or expected**

Multilevel analyses indicated no significant indirect effect of work-related rumination before going to sleep for the relationship between challenge and hindrance demands and dream affect, neither on the between-person nor on the within-person level. Nevertheless, we found a direct effect of hindrance demands on dream affect on the within-person level: Higher hindrance demands were associated with more negative dream affect. Regarding work-relatedness of dream content as an outcome, no significant indirect effect of work-related rumination at night was found on the within-person level. We did, however, find the predicted indirect effect linking high hindrance (but not challenge) demands to more work-related dreams via more work-related rumination on the between-person level.

##### **5. Limitations**

Common method bias might be an issue since all variables were measured via self-report.

## 6. Conclusions – research and/or practical implications

Our study shows that strain reactions caused by work stressors are prone to be prolonged in the form of work-related rumination in the evening and can even invade the night in the form of work-related dreams. Furthermore, our results support the idea that challenge versus hindrance demands are differently related to rumination and dreaming as we only found an indirect effect linking hindrance demands, but not challenge demands, to work-relatedness of dream content via work-related rumination. Based on our findings, we recommend that organisations contribute to healthy work environments by reducing hindrance demands. This will prevent employees from developing rumination routines and, as a result, from continuing to experience work stressors in the form of work-related dreams.

## 7. Relevance to the Congress Theme

In our study, we collected data from employees who exclusively worked from home. Since the start of the COVID-19 pandemic, remote work has become increasingly important. With home and work being at the same place, the boundary between the two has become more blurred, making it harder to mentally switch off during non-work time. Due to this, it has become even more crucial to identify the specific causes and consequences of work-related rumination during non-work hours in order to improve employees' well-being and health in the long run.

## 8. Relevant UN SDGs

By investigating the work-related antecedents of impaired sleep, our study contributes to the UN Sustainable Development Goal of good health and well-being. Sleep is crucial for recovery, and maintaining optimal functioning. Poor sleep is associated with a broad range of health problems, such as cardiovascular diseases, burnout, depression or neurodegenerative diseases. The investigation of dream affect and work-relatedness of dream content provides insight into a largely unknown aspect of sleep quality and its relationship with job stressors, and could help to improve employees sleep quality in the future.

*Keywords: challenge demands, hindrance demands, dreams*

## Paper 4

### **The relevance of workplace incivility and work-related rumination for reattachment and sleep quality**

Nina M. Junker, University of Oslo; Thomas Rigotti, Johannes-Gutenberg University Mainz & Leibniz Institute for Resilience Research; Jan A. Häusser, Justus-Liebig-Universität Gießen; Julia Heimrich, Goethe University Frankfurt

#### 1. Research goals and why the work was worth doing

Workplace incivility can be defined as a mistreatment behavior at work, characterized by low intensity and ambiguous intent to harm the target (Andersson & Pearson, 1999). Due to its ubiquity, workplace incivility is an important topic in organizational research. Although a lot is known about its antecedents and consequences (Han et al., 2021), the underlying mechanisms have received substantially less attention. We introduce affective rumination (Cropley & Zijlstra, 2011) as one such mechanism through which experienced workplace incivility indirectly affects sleep quality and reattachment the next morning. We further study how instigated incivility (targets' own uncivil behavior) moderates these associations. By studying potential spillover effects of experienced workplace incivility to the home domain and back to work and instigated incivility as a contingency factor, we aim to contribute to a better understanding of this widespread phenomenon.

#### 2. Theoretical background

Drawing on the Effort Recovery Model (Meijman & Mulder, 1998), affective rumination may inhibit recovery from the resource loss caused by experienced workplace incivility. That is, employees may not be able to replenish their resources during non-work time. Instead, by cognitively integrating their work experiences into their nonwork roles, they continue to deplete these, impeding their recovery from work (through worse sleep quality). According to Sonnentag et al. (2002), reattachment is goal-directed and relates to positive affect. Therefore, we further expected affective rumination to impair this positive mental reconnection. We assume that instigating incivility may foster a belief of retaliation and compensate for the experienced injustice, so that such behavior might buffer the adverse consequences of experienced incivility.

#### 3. Design/Methodology/Approach/Intervention

We conducted a 10-day diary study ( N = 133) with three daily measurement points to test our assumptions, whereby we used data from the morning and the afternoon survey. In the afternoon survey, participants gave information about their experienced instigated incivility behavior and momentary rumination. In the morning survey, we assessed participants' sleep quality and morning reattachment.

#### 4. Results obtained or expected

Overall, we found limited support for our assumptions. In particular, although workplace incivility was positively associated with affective rumination, there were no downstream consequences on individuals' sleep quality. Moreover, we found an unexpected positive indirect association between experienced workplace incivility and reattachment the next morning via affective rumination. Instigated incivility did not moderate any of the obtained associations

#### 5. Limitations

We did not differentiate between different sources of workplace incivility (e. g., supervisor, co-worker) and cannot make inferences on employees living alone as we exclusively sampled couples and individuals with children living at home. Finally, the average of experienced incivility and incivility towards others were low, which might explain why we found limited support for our assumptions.

#### 6. Conclusions – research and/or practical implications

Our results cautiously implicate that experienced incivility may not have immediate health-related consequences. The unexpected positive indirect association between experienced incivility and next-day reattachment via affective rumination might hint that experiencing incivility may have even positive effects. However, it is important to emphasize the crucial role of detaching from work through transitioning to nonwork roles during leisure time for effective recovery. Future research should therefore further study the influence of affective rumination on, not only the transition from work to home, but also the reconnection back to the work role and how this association influences the workday. Organizations should not only focus on reducing factors leading to adverse work-related thoughts at home but also encourage employees' goal-related reattachment.

#### 7. Relevance to the Congress Theme

The blurred lines due to ruminating about work during nonwork time may lead to a vicious circle impacting the work and non-work role as well as health and well-being of employees. For the future world of work, it is essential to draw attention on the transitions between work and nonwork. Especially as the Covid-19 pandemic has led to the increased use of teleworking, boundary management between work and home may be more difficult and work topics may increasingly find their way into the home-domain.

#### 8. Relevant UN SDGs

Our study shows the importance of reducing incivility as this impact affective rumination, resulting in severe negative health and well-being outcomes.

*Keywords: workplace incivility, affective rumination, well-being*

## Paper 5

### Teleworking in the presence of your dog: how your dog impacts your teleworking experience

Joni Delanoeijs, Marijke Verbruggen & Emma Willemsen | KU Leuven

#### 1. Research goals and why the work was worth doing

Since an increasing number of employees own a dog (FEDIAF EuropeanPetFood, 2022), companies may benefit from offering practices that facilitate employees' care for their dogs as this allows them to both attract and retain employees in an increasingly tight labour market. One such practice is teleworking. However, our current understanding of how dog characteristics and dog-related activities influence employee outcomes while teleworking is limited. This is surprising as various studies in the field of human-dog interaction have highlighted the need for including dog and people characteristics, as well as features of their interactions, to understand the impact of dogs on human outcomes (Barcelos et al., 2020). Therefore, we aim to evaluate to which extent characteristics of the dog (i.e., behaviour) and dog-related activities (i.e., walking with the dog, playing with the dog, petting the dog) impact employee job performance outcomes (e.g., concentration) and well-being outcomes (e.g., stress, positive and negative affect, social support) while teleworking in the presence of a dog.

#### 2. Theoretical background

Teleworking can have specific benefits for dog owners. Firstly, the work-home combination, including the care for the dog, is facilitated through telework (Maharaj & Haney, 2015). Secondly, as dogs are sensitive to the duration of time left alone (Rehn & Keeling, 2010), telework enables dog owners to reduce this alone time. Finally, dog-owning teleworkers may experience more well-being benefits from telework thanks to their dogs through a healthy amount of physical activity, welcoming breaks, and social interactions (Hoffman, 2021; Westgarth et al., 2019).

However, the benefits of telework for dog owners may not always be realized as they may depend on dog characteristics (e.g., dog behaviour) and dog-related activities (e.g., walking with the dog). Certain dog behaviours, like barking, can create distractions during the workday (Hoffman, 2021), which may lower the well-being and performance benefits of having a dog at home while teleworking. This expectation is in line with research on the harmful impacts of work interruptions (e.g., Delanoeijs et al., 2019; Wilkes et al., 2017). In addition, since several of the expected benefits of having a dog while teleworking assume that the dog owner engages in interactions with the dog (Barcelos et al., 2020), it is likely to assume that the benefits will be lower on days the dog owner had less dog-related activities while teleworking.

#### 3. Design/Methodology/Approach/Intervention

We conducted a daily diary study in a sample of 302 dog-owning employees who worked at home regularly. They filled out a background survey and, three weeks later, daily surveys at the end of the evening during ten consecutive working days. The background survey included demographics and questions about personality and psychological closeness to the dog. The daily surveys included measures of dog behaviour, dog-related activities, job performance, and well-being during that day. Data will be analysed using multilevel modelling.

#### 4. Results obtained or expected

Results will be available at the beginning of 2023.

#### 5. Limitations

We collected data during COVID restrictions. Besides, we did not take into account the presence of other companion animals while teleworking.

#### 6. Conclusions – research and or practical implications

Our findings will shed light on which dog characteristics and dog-related activities influence employee outcomes while teleworking. As we know little about the factors related to the presence of a dog that determine the beneficial or harmful effects on employee outcomes, elucidating this will improve our understanding of the effects of teleworking in the presence of a dog on employee job performance and well-being outcomes.

#### 7. Relevance to the Congress Theme

This research fits within the conference theme 'The changing world of work', as teleworking, even after the pandemic, will stay to exist and both owning a dog and teleworking impacts employee well-being and performance (Barcelos et al., 2020; Delanoije & Verbruggen, 2020; Hoffman, 2021).

#### 8. Relevant UN SDGs

Good health and well-being

*Keywords: telework, dogs, well-being*

## Symposium S009

### Predicting Leadership, Negotiation, Aggression, and Faking: With Implicit Measures

Malte Runge, Oslo Metropolitan University; Jonas Lang, Exeter University

science\_practice

What will be covered and why?

Implicit personality constructs are typically described as nonconscious thoughts affecting behavior, affect, needs, cognition, or attitudes (Uhlmann et al., 2012). Prominent examples are implicit motives describing stable preferences for classes of affectively charged incentives such as need for achievement, power, affiliation, or aggression (McClelland, 1987). Implicit personality constructs are commonly measured through indirect means, such as picture story exercises, conditional reasoning tests, or implicit association tests because they are not accessible through introspection. Researchers have long been interested to study the effect of implicit personality on people's work life. Earlier research found that implicit personality assessed using indirect measures are promising and predict outcomes like performance (Lang et al., 2012), career success (Spangler, 1992; Winter et al., 1998), entrepreneurial success (Rauch & Frese, 2007; Wainer & Rubin, 1969), or counterproductive work behavior (Galić & Ružojčić, 2017; Runge et al., 2020). However, the use of implicit measures is still relatively rare compared to the use of simple self-report measures. What can the field potentially gain from adopting implicit measures more widely and how do different implicit measurement approaches work? This symposium seeks to answer questions of this type.

All five presentations contribute to the understanding of implicit personality constructs as individual differences covering central aspects of employees in organizations.

The first presentation (Galić et al.) links leaders' implicit and explicit achievement and power motives with entrepreneurial and managerial performance in a sample of CEOs. Galić et al. rely on a conditional reasoning approach to measure implicit motives and measure CEO performance using follower ratings.

The second presentation (Amory et al.) studies implicit motives as basis for moral leadership. Amory et al. rely on the Motive Self Categorization test to study implicit motives as drivers of moral leadership.

The third presentation (Moeller) studies the link between the implicit motive to aggress and deficits in correctly interpreting social situations. Moeller's study is motivated by recent issues with police violence and situations in which police officers' social perceptions were flawed.

The fourth presentation (Bakac et al.) reports three studies on the role of explicit and implicit motives in negotiations. Organizational researchers have long tried to understand predictors of negotiation performance and Bakac and colleagues identified agentic motives as predictors.

Finally, the fifth presentation (Spruyt & Altenburg) investigates the usefulness of an adapted version of the Relational Responding Task—an implicit autobiographical test—in detecting untruthful questionnaire responding.

The symposium includes empirical studies relying on three different implicit measurement approaches: Conditional reasoning (Galić et al., Moeller), fantasy-based operant measurement (Amory et al., Bakac et al.), and relational responding (Spruyt & Altenburg) and thus provides attendees a good overview of different measurement paradigms in this area while also providing a

basis for animated discussion between experts and attendees. The symposium also includes studies that focus on a number of highly important outcomes and issues within work and organizational psychology such as leadership (Galić et al., Amory et al.), transgressions/faking (Moeller, Spruyt & Altenberg), and negotiation (Bakac et al.) and thus gives a good impression what the field can potentially gain from the wider adoption of implicit measurement approaches.

#### Relevance to the Congress Theme

This symposium fits the “the future is now” congress theme well. The symposium includes research on a variety of timely topics such as virtual negotiation which becomes more and more important in an increasingly virtual work environment; startup leadership in a business world in which entrepreneurial activities are essential; moral leadership in times of #metoo and corporate scandals, and police force, which is an important issue in today’s world.

#### Research/Practical Implications

Overall, this symposium presents new findings in research on implicit personality constructs in WOP expanding existing literature on leadership, perception of social situations, and negotiation. Additionally to those theoretical contributions, the symposium has a high value for practitioners who are interested in implementing implicit measures in personnel selection.

#### Overall Conclusion

Measuring (explicit) personality is already standard practice in many organizational settings such as hiring and personnel development. This symposium proposal aims to present recent advancements and findings in research on implicit personality constructs, with a focus on how these findings can be used in practice to complement existing explicit personality approaches.

*Keywords: implicit motives, implicit measurement, selection*

## Paper 1

### **Implicit power and achievement motives as predictors of entrepreneurial leadership: The conditional reasoning approach**

Nikola Erceg, Mitja Ružojčić & Zvonimir Galić | University of Zagreb

#### Research goals

The purpose of this study was to explore usefulness of one of the most prominent methods of implicit personality assessment: the conditional reasoning approach (James & LeBreton, 2012) for understanding success in entrepreneurial leadership. Using a sample of CEOs/owners of small businesses, we compared validity of the Conditional Reasoning Test for Power motive (CRT-P), and the Conditional Reasoning Test for Achievement motive (CRT-Ach) in explaining subordinates' perceptions of CEO's leadership style/effectiveness and general entrepreneurial performance. We decided to focus on those two motivational traits because they were shown to be differentially predictive for success in entrepreneurial (achievement) and managerial (power motive) jobs.

#### Theoretical background

The trend of resurgence of interest in unconscious/ automatic/implicit psychological processes has already reflected in organizational psychology/organizational behavior (OP/OB) literature (Uhlmann et al., 2012). The use of the implicit measures in the leadership field is "quite rare" (Chong, Djurdjevic, & Johnson, 2017, p. 14), and in the nascent field of entrepreneurial leadership (Leitch & Harrison, 2018) virtually non-existing. New measures have a potential to resolve conflicting findings about importance of entrepreneur's personality for entrepreneurial activity and venture success.

#### Design/Methodology

The participants supposed to satisfy the following criteria: (a) are owners and CEOs of companies with more than two but less than 50 employees; (b) have been occupying their current position for over a year. We asked the CEOs to provide contact information for 3 to 5 of their subordinates. The only requirement for inclusion was that subordinates had worked in the company for at least 6-months (in order to have sufficient opportunities to observe leader/entrepreneur across a broad range of situations). A research associate visited each CEO in the company's offices to collect the data, and contacted subordinates directly to give them rating forms and envelopes with a prepaid response. The subordinates were instructed to fill the form at their homes and send them back to the researchers.

In total, we collected the data from 53 small business owners and 157 of their subordinates. CEO's implicit power and achievement motives were captured with the CRT-P and CRT-Ach. We also assessed CEO's explicit power and achievement motives with self-report scales taken from the Unified Motive Scales (Schönbrodt et al., 2012) Subordinates reported about leadership style and effectiveness using the Multifactor Leadership Questionnaire (MLQ). We also collected employees' ratings of CEO's entrepreneurial performance by asking subordinates about their employer's effectiveness on a set of job tasks defining entrepreneurial job such as searching for opportunities, creating new products or raising funds.

#### Results

Data aggregated at CEO's level showed that implicit achievement motive was significantly related to employee's ratings of active leadership style and perceived success in the leadership role. Additionally, CRT-Ach was significantly correlated with the employees' ratings of CEO's overall entrepreneurial performance. The obtained effects were moderate in size (the correlations ranged between .33 and .42). Neither CRT-P nor self-reported achievement and power motive measures were related to the outcomes.

#### Limitations

Our study was conducted on a relatively small sample of managers/organizations. Moreover, our sample comes from a specific cultural context that may limit generalizability of the findings.

#### Research/Practical Implications

Leadership is a crucial factor in the success or failure of small businesses because they are characterized by non-formalized structures where leaders' personality has a potential to play important role. Our study points that CEOs'/business owners' implicit achievement motive is a significant determinant of their entrepreneurial leadership success. Though their jobs include managerial activities, managers of small businesses are foremost entrepreneurs and that reflects in psychological determinants of their performance. Our findings suggest that CRT-Ach might be used to identify individuals who are more likely to succeed in entrepreneurial activity.

#### Originality/Value

Entrepreneurial leadership is a field that exists at the intersection of entrepreneurship and leadership. Within that context, little is known about psychological determinants of entrepreneurial leaders' success. Our study indicates that scientifically valid and practically convenient psychological instruments that measure implicit motivational traits, such as conditional reasoning tests, have a potential to advance both current research and practice in the field.

#### Relevance to the Congress Theme

The rapidly changing world of work includes moving away from classical, large hierarchical organization structures toward more entrepreneurial endeavours. With our study we want to contribute to understanding of psychological determinants of successful leadership in such organizations.

#### Relevant UN SDGs

Decent work and economic growth

*Keywords: entrepreneurial leadership, achievement and power motive, conditional reasoning tests*

## Paper 2

### **What Drives Leaders to Be Moral? An Investigation of the Explicit and Implicit Motives of Servant, Ethical, Humble, and Authentic Leaders**

Malte Runge, Oslo Metropolitan University; Bart Wille & Justine Amory | Ghent University

#### Research goals and why the work was worth doing

Despite a surge in interest in moral (i.e., ethical, authentic, servant, and humble) leadership styles over the past two decades, it is still unclear what drives leaders to behave morally. Existing research on the antecedents of moral leadership has typically focused on explicit traits and operationalized these with the Big Five framework. As a result, two potentially important antecedents have remained unexplored: the role of more subconscious motivations (i.e., implicit motives) and the explicit trait “honesty/humility”.

#### Theoretical background

Past research has shown that leaders do not only differ based on their expressed personality (i.e., explicit motives) but also on what inherently motivates them (i.e., implicit motives): a high desire for power (control, impact, and influence on other people), affiliation (close and warm connections with others) or achievement (accomplishment, excellence, and success). According to the channeling hypothesis, these explicit and implicit motives work together to influence behavior and should therefore be studied jointly. This is especially relevant for morality, as moral action manifests itself in both deliberated (e.g., moral dilemmas, decisions under high accountability) and spontaneous (impulsive urges, decisions under low accountability) processes, which are best captured by explicit and implicit measures respectively (Perugini & Leone, 2009).

#### Design/Methodology/Approach/Intervention

This research uses subordinate-supervisor dyads (N = 127, we aim to collect a total of 200 dyads by the end of January) to examine the relationship between leaders’ implicit and explicit motives and their subordinate ratings on four moral leadership styles (i.e., ethical, servant, authentic, and humble leadership). More specifically, this study uses multiple regression analyses to investigate whether 1) implicit motives predict moral leadership styles above and beyond explicit motives, 2) implicit and explicit motives interact to predict moral leadership styles, and 3) associations are similar across the four moral leadership styles (i.e., if there are common antecedents of moral leadership). To address these questions, we rely on recent theoretical (Lemoine et al., 2019) and methodological (e.g., the motive self-categorization test; Runge & Lang, 2019) advances, as well as the HEXACO framework (Ashton & Lee, 2007).

#### Results obtained or expected (if not available, it must be made clear when they will be)

Contrary to our expectations, implicit motives did not provide incremental validity over — nor interacted with — explicit motives to predict moral leadership. Surprisingly, the trait honesty/humility did not significantly predict any of the four moral leadership styles. Instead, emotionality appeared as the only important antecedent of moral leadership and was significantly associated with three of the four (i.e., authentic, servant, humble) moral leadership styles.

#### Limitations

One limitation of this study is its cross-sectional design. Although implicit and explicit motives are typically considered early antecedents of leadership behavior, the possibility of a causal link in the opposite direction (unfolding over a longer period of time) cannot be excluded. Another limitation is that, due to our current sample size, this study is likely underpowered to find the hypothesized effects.

#### Conclusions – research and or practical implications

Results of this study suggest that moral leadership is best predicted with explicit rather than implicit measures. A possible explanation is that leaders are highly accountable in nature, and therefore generally rely on conscious rather than unconscious processes when adopting moral behavior. In general, the current study sheds light on the antecedents of moral leadership and can be particularly relevant for leadership selection and development.

#### Relevance to the Congress Theme

Corporate scandals and vivid public debate (e.g., #MeToo Movement) have recently increased awareness about the importance of workplace morality. As a result, expectations towards leaders are likely to have changed, leading moral leaders to be more relevant, efficient, and competitive than in the past.

#### Relevant UN SDGs

Moral leadership styles have in common that they promote broad positive behaviors such as openness, fairness, trustworthiness, integrity, and consideration. More specifically, research shows that moral leaders are concerned with sustainability (e.g., Kalshoven et al., 2011), are gender-integrative (e.g., Reynolds 2011), and generate high justice perceptions among their subordinates (e.g., Xu et al., 2016). Therefore, we believe this research works toward three main UN Sustainable Development Goals : 1) Peace, justice, and strong institutions, 2) Responsible consumption and production, and 3) Gender inequality.

*Keywords: implicit motives, personality, moral leadership*

### Paper 3

#### The Implicit Motive to Aggress and Deficits in Mentalizing: An Initial Investigation

Amanda Moeller, Penn State University

**Research Goals:** Police misconduct is a troubling issue that has received much attention in recent years. Police officers are entrusted with protecting and serving the public, but incidents involving police officers using excessive force or committing acts of inappropriate aggression continue to be a concern. Police officers undergo rigorous testing prior to employment, but police misconduct persists. This begs the question of how systems used to select police officers could be updated to better “select out” candidates that are most likely to engage in acts of excessive aggression.

Police officers must frequently make decisions about what others are thinking and feeling and respond appropriately. In many cases of unwarranted police aggression, officers misread the social situation, citing that a non-threatening person posed a threat to the officer or to others, necessitating the use of force. This indicates potential impairments in mentalizing, which describes the ability to understand what others are thinking and feeling and to accurately read social situations and react appropriately.

The current research represents the first step in understanding the relationship between the implicit motive to aggress and deficits in mentalizing. The implicit motive to aggress describes a person’s implicit, or unconscious, preparedness to harm others (James et al., 2005; James & LeBreton, 2010).

The relationship between the implicit motive to aggress and deficits in mentalizing is tested here using a sample of undergraduates. However, plans are underway to conduct this research among a sample of police officers. If such a relationship is found, a case can be made for the measurement of the implicit motive to aggress to be used in police selection systems.

#### Theoretical Background:

Within applied psychology, the implicit motive to aggress is typically studied under the conditional reasoning theory of personality, which posits that individuals with an implicit motive to aggress are likely to adopt cognitive biases, called justification mechanisms, that allow them to rationalize, justify, and legitimize behavior intended to harm or injure others (James, 1998; James & LeBreton, 2010; 2012). Justification mechanisms shape a person’s reasoning and thought processes in a way that enhances the rational appeal of aggressive behavior.

#### Design & Methodology:

The sample consisted of  $n=108$  undergraduate students. Participants completed an online test battery including the Reading the Mind in the Eyes Test (RME; Baron-Cohen et al., 2001), a measure of mentalizing ability, and the Conditional Reasoning Test for Aggression (CRT-A; James & LeBreton, 2010), a measure of the implicit motive to aggress. The relationship between the constructs was tested using linear regression.

#### Results:

The implicit motive to aggress was significantly related to the misperception of neutral facial expressions as negative ( $r=0.19$ ,  $p=0.05$ ). In other words, individuals with a higher implicit motive to aggress were more likely to view images of faces displaying neutral emotional expressions (e.g.,

bored, calm) and incorrectly indicate that they were displaying negative emotional expressions (e.g., hostile, angry).

#### Limitations:

One limitation of the research concerns the format of the RME, which requires respondents to view images of eye regions and select one word from a bank of four words that best describes what the person in each image is feeling. For each image on the RME, there is not always a positive, neutral, and negative word available to select from, limiting respondents' ability to demonstrate the errors of interest.

#### Conclusions:

This research suggests that the implicit motive to aggress is related to the misperception of neutral faces as negative. Thus, the measurement of the implicit motive to aggress could be useful to organizations hiring individuals into positions, such as policing, where it is particularly beneficial for individuals to accurately appraise the mental states of others.

#### Relevance to the Congress Theme:

We cannot wait any longer to address the issue of inappropriate excessive force in policing. If we are to enhance human rights when it comes to policing, we must do more to prevent individuals who are more likely to see non-threatening individuals as threatening from being hired into these critical roles. Social change in this area is urgently needed, and the field of organizational psychology can play a pivotal role in addressing the issue of police excessive force.

#### Relevant UN SDGs:

This research most closely contributes to SDG VIII: Peace, justice, and strong institutions. Peace entails freedom from harm. Justice concerns fair treatment. The goal of this research is to improve the selection practices of police organizations in order to diminish the occurrence of inappropriate police aggression, and therefore, to increase peace, reduce conflict, and ensure fair behavior and treatment of citizens by police officers.

*Keywords: implicit motives, personality, aggression*

## Paper 4

### Linking Implicit Motives and Explicit Motives with Negotiation Outcomes

Jonas Lang, University of Exeter; Hugo Kehr & Cafer Bakac | Technical University of Munich

#### Research goals

Negotiation researchers have recently called for revival of research on individual differences in negotiation outcomes (e.g. Elfenbein, 2015; Sharma et al., 2018). Recently, especially after this call, a number of studies have appeared in this area (e.g., Kugler et al., 2018; Volkema et al., 2013). However, these studies have exclusively relied on trait characteristics as antecedents of negotiation outcomes and ignored motivational perspectives of personality. Next to trait measures of personality, motivational perspectives to personality has traditionally been the second source of individual differences (see Winter et al., 1998). The purpose of this study is to examine the role of implicit motives on negotiation performance.

#### Theoretical background

Implicit motives are generally referred to as “motivational dispositions that operate outside of a person’s conscious awareness and are aimed at the attainment of specific classes of incentives and the avoidance of specific classes of disincentives” (Schultheiss & Brunstein, 2010, p. 603) while explicit motives are termed as conscious intentions and strivings (Sheldon et al., 2004). Implicit and explicit motives represent different motive systems, do not typically correlate and predict different behaviors (e.g., McClelland et al., 1989). Furthermore, implicit motives are activated by task-inherent incentives and explicit motives are activated by explicit incentives such as experimenter instructions, money or praises. As motivation scenarios generally include at least two parties negotiating over scarce resources, individual with high implicit motives could find such situations (un)pleasurable and (not) engage in negotiation behaviors. Building on McClelland's (1987) motives framework, achievement motives, affiliation motives and power motives are characterized by the need for improving one’s standards of excellence and skills, building and maintaining positive relationships with other individuals, and having influence and control over others or environments respectively. Based on these, we hypothesized that individuals with high implicit achievement and power motives have a high self-reported negotiation performance and concede at high points in a negotiation task. However, individuals with high implicit affiliation motives have low self-reported negotiation performance and concede at low points in a negotiation task.

#### Design/Methodology

To test these hypotheses, in study 1, we collected data from 241 individuals using an adapted self-reported negotiation performance measure (Sharma et al., 2018). We used the Motive Self Categorization Test (Runge & Lang, 2019) and the Unified Motive Scales (Schönbrodt et al., 2012) to measure implicit and explicit motives respectively. In study 2 and 3, we adopted a validated virtual mixed-motive negotiation experiment (e.g., De Dreu & Van Kleef, 2004) and collected data from 84 and 147 participants. In study 2 and 3, we used the Motive Self Categorization Test (Runge & Lang, 2019) to measure implicit motives. Furthermore, we used Personality Research Form (Jackson, 1984) in study 2 and the Unified Motive Scales (Schönbrodt et al., 2012) in study 3 to explicit motives.

#### Results

Overall, results showed that implicit achievement and power motives were positively related to self-reported negotiation performance ( $\beta = .17$  and  $\beta = .15$ ,  $ps < .05$  respectively) and objective negotiation performance measured through the negotiation task (study 2:  $\beta = .29$  and  $\beta = .24$ ,  $ps < .05$  respectively and study 3 :  $\beta = .19$  and  $\beta = .25$ ,  $ps < .05$  respectively).

#### Limitations

Possible limitations of our research include the usage of a virtual negotiation task and the cross-sectional nature of the study. Future studies should replicate our findings in real life negotiation scenarios or in the lab.

#### Research/Practical Implications

From a theoretical view, we strengthen the claim that motives are important personality constructs next to trait measures and add to the literature using implicit and explicit motives as predictors of negotiation performance. A practical implication of our study is that understanding individuals' motives might help practitioners in addressing the conflict that arises as a result of salary or overall negotiations at organizations.

#### Relevance to the Congress Theme

We measured objective measure of negotiation performance through a virtual negotiation task, where participants engaged in a negotiation scenario with another counterpart online. The cover story told that the work interactions get increasingly online and we are interested in how individuals interact online. This clearly fits the congress theme, where the focus is on the "changing world of work".

#### Relevant UN SDGs

Our research contribute to UN's peace, justice, and strong institutions SDG. By understanding the possible antecedents of conflict in organizations, practitioners can facilitate peace in institutions and organizations.

*Keywords: Implicit motives, explicit motives, negotiation performance*

## Paper 5

### **Lying About Lies: Using the Autobiographical Relational Responding Task to Detect Fraudulent Survey Responses**

Daria Altenburg & Adriaan Spruyt | Ghent University

#### Research goals and why the work was worth doing

Every single day, thousands of (managerial) decisions are based on the answers people give to questionnaires. The aim of the present research was to develop a new implicit measure capable of detecting fraudulent survey responses.

#### Theoretical background

After 25 years of academic research into (the use of) implicit measures, these ‘innovative assessment tools’ are only rarely, if ever, used in applied settings. We argue that for implicit measures to be useful outside the laboratory, it is key (a) to establish their potential to alleviate real-life problems, (b) to focus research efforts on fields of application in which the correspondence between implicit measures and self-report measures is low by definition, and (c) to engage in a careful analysis of their sensitivity and specificity as a function of the diagnostic goals that one is attempting to achieve. The reported research meets these requirements.

#### Design/Methodology/Approach/Intervention

In each of four (online) experiments (total N = 600), respondents first completed a short questionnaire. In Experiments 1-3, this questionnaire probed simple autobiographical facts (e.g., country of origin). In Experiment 4, the ‘Honesty – Humility’ scale of the HEXACO-PI-R was used. In each experiment, one group of respondents was asked to respond truthfully and one group was asked to provide false information. Next, both groups completed an adaptation of the Relational Responding Task aimed at detecting fraudulent survey responses (i.e., autobiographical Relational Responding Task, or a-RRT). To evaluate the sensitivity and specificity of the a-RRT, Receiver Operating Characteristic (ROC) curves were computed for all experiments (and conditions, in the case of Experiment 2).

#### Results obtained

Results showed that the accuracy of the a-RRT is quite good, with AUC-values ranging between 86.72% (Experiment 2) and 95.28% (i.e., Experiment 1). Second, the internal consistency of the a-RRT was relatively high in comparison to other implicit measures, with  $R_{sb}$  values ranging between .59 (i.e., Experiment 3) and .88 (i.e., Experiment 2). Third, using the theoretical zero point of the measurement scale, the true negative rate (or specificity) was perfect (i.e., 100%) both in Experiment 1 and Experiment 3

#### Limitations

The current experimental setting was atypical in the sense that there were no real-life consequences of being exposed as a person who provided false information. We are thus unable to rule out the possibility that respondents might do a much better job at manipulating their a-RRT results if the stakes are high. In addition, it remains an open question to what extent the a-RRT enables the detection of survey fraud when respondents provide a mix of truthful and untruthful answers, a scenario that is more likely than the one implemented in the current set of experiments.

### Conclusions: Research/Practical Implications

Our findings suggest that the a-RRT might be useful in increasing the validity of classic survey data. The observation that the true negative rate was perfect (i.e., 100%) in two out of four experiments is particularly interesting from an applied point of view, as it implies that one can place a great deal of confidence in cases marked as 'positive', even at the level of the individual test taker.

### Relevance to the Congress Theme

This research is relevant to the theme of the conference in that it aims to integrate recent innovations in the domain of cognitive-experimental psychology into the HR domain with the aim of improving the validity of classic survey instruments (i.e. "The future is now. Contribution").

### Relevant UN SDG's

This research is primarily relevant to UN SDG 8 (i.e., "promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all") as it will help increase economic productivity through optimizing HR assessment practices.

*Keywords: survey fraud, online lie detection, implicit measures*

## **symposium S010**

### **New working environments**

Sandra J. Diller, LMU Center for Leadership and People Management at LMU Munich & Private University Seeburg Castle; Irmgard Mausz, LMU Center for Leadership and People Management at LMU Munich

science\_practice

Especially during the Corona pandemic, it became apparent that new working environments and digitalisation are playing an increasingly important role. On the one hand, this can mean spatial changes such as working from home or in coworking spaces. On the other hand, it could also change how we work with each other and which tools we use in our work. The current symposium therefore integrates research providing different perspectives on new work environments.

Specifically, the contributions zoom in on spatial changes in the workplace, such as working from home (Contribution #1) and working in coworking spaces (Contribution #2). Additionally, the contributions address challenges and implications for how we work with each other by providing meta-analytic insight into the consequences of agile project management (Contribution #3). New working environments are increasingly associated with the use of AI-enabled systems. Accordingly, Contributions #4 and #5 offer an implementation perspective by shedding light on the factors that influence the implementation and use of AI recommendations and tools in the workplace.

The symposium offers an integrative and holistic perspective on various challenges and chances of transformations in new work environments.

*Keywords: new work, coworking, artificial intelligence*

## **Paper 1**

### **The Influence of Working From Home in 2021 on Organisational Measures and the Power of Mindfulness**

Sandra J. Diller, LMU Center for Leadership and People Management at LMU Munich & Private University Seeburg Castle; Andrea Kübler, Julius Maximilian University of Würzburg; Magdalena Weber, Private University Seeburg Castle

Due to Covid-19, working from home became part of many people's everyday working lives. While working from home (WFH) can have positive consequences, it could also negatively affect organisational measures. The present research (N = 463 working people) investigated whether WFH negatively influenced organisational measures. As mindfulness can positively affect organisational measures, the research further explores the effect of mindfulness while WFH. The sample consisted of working people with different percentages WFH in 2021 during the second year of the Covid pandemic. The results show that WFH increased feelings of fatigue, sadness, and distress as well as decreased feelings of social integration, organisational identification, and organisational commitment. In contrast, mindfulness positively affected all organisational measures, including the decrease of negative work-related emotions and distress as well as the increase of positive work-related emotions, organisational integration, organisational identification, organisational commitment, job satisfaction, and even work performance. However, mindfulness did not moderate the relationship between WFH and organisational measures. Theoretical and practical implications are discussed.

*Keywords: Working from home, work attitudes, workplace health*

## **Paper 2**

### **The Emergence of Transactive Memory Systems in Coworking Spaces**

Simon Hensellek & Jonah Weißwange | Technical University of Dortmund

The concept of transactive memory systems (TMSs), a mechanism that allows teams to collectively encode, store, and retrieve knowledge, has sparked vivid interest in work and organisational psychology. It positively influences team performance and innovation. However, TMS research beyond work teams remains scarce. Our research aims to investigate the development of TMSs within loosely affiliated work groups, i.e. coworking spaces (CWSs). CWSs enjoy surging popularity among knowledge workers by providing affordable office space and serving as a supportive community of knowledge exchange and networking. Using data from coworkers from German CWSs, we investigate the emergence of TMSs inside CWSs also taking into account the potential moderating effects of CWS offerings, amenities, and their hosts.

*Keywords: Coworking spaces, coworking, transactive memory systems*

### **Paper 3**

#### **The Affective, Behavioral, and Cognitive Outcomes of Agile Project Management: A Systematic Review and Preliminary Meta-Analysis**

Carsten C. Schermuly, Ivana Drazic & Jan Koch | SRH Berlin University of Applied Sciences

Agile project management (APM) refers to a set of project management frameworks that are increasingly common in a range of industries. In this meta-analysis, we examine the effects of APM on affective, behavioural, and cognitive outcomes based on  $K = 40$  records (with  $k = 41$  independent studies,  $N = 73,825$ ). Our analyses indicate the beneficial effects of APM across outcomes: For the affective outcomes of job satisfaction, affective strain, and organisational commitment, the effect sizes were, on average, small. The effect sizes were medium to large for the behavioural outcomes of performance and innovative behaviour. For the cognitive outcome of psychological empowerment, the results of our meta-analysis suggest a medium effect. Compared to studies conducted with software developers, the effect sizes are stronger in other occupations. Moreover, stronger effect sizes are found in published than in unpublished records.

*Keywords: Agile project management, meta-analysis, review*

## **Paper 4**

### **The Effect of Explainable Artificial Intelligence on People's Decision-Making in an HR Task**

Susanne Gaube, LMU Center for Leadership and People Management at LMU Munich & University Hospital Regensburg; Eva Lermer, LMU Center for Leadership and People Management at LMU Munich & University of Applied Sciences Augsburg; Matthias Hudecek, University of Regensburg; Julia Cecil, LMU Center for Leadership and People Management at LMU Munich

Despite the increasing use of AI-based decision support systems in personnel selection, recruiters' understanding of the technology's underlying processes is often limited, leading to low user acceptance and trust. Explainable AI-based systems have the potential to reduce this discrepancy. In our study with N = 300 participants, we examined the effect of type of advice (no advice vs. AI advice without explanation vs. AI advice with visualised explanation) and accuracy of advice (80% correct advice) on the decision performance, perceived quality of the advice and confidence in one's decision in a personnel selection task. Receiving correct advice had a significant positive effect on performance, quality, and confidence, whereas explainable advice resulted in non-significant effects.

*Keywords: Explainable AI, HR, personnel selection*

## Paper 5

### **The Implementation of AI-Enabled Medical Support Systems: A Systematic Review and Meta-Analysis Based on the Universal Theory of Acceptance and Use of**

Susanne Gaube, LMU Center for Leadership and People Management at LMU Munich & University Hospital Regensburg; Eva Lermer, LMU Center for Leadership and People Management at LMU Munich & University of Applied Sciences Augsburg; Anne Kleine, LMU Center for Leadership and People Management at LMU Munich

Artificial intelligence (AI) enabled clinical decision support systems (CDSS) may help clinicians diagnose diseases and forecast disease courses, select appropriate treatment regimens, and predict treatment outcomes. The use of AI tools has become widespread in some healthcare areas. At the same time, healthcare practitioners often do not adopt available tools due to a general reluctance to base decisions on algorithms, data privacy concerns, or the belief that these tools do not offer any benefits for their care. Based on the unified theory of acceptance and use of technology (UTAUT), the current meta-analysis examines the predictors and boundary conditions of the intention to use AI-enabled CDSS. The meta-analytic insight may provide means to ease the adoption of AI-enabled CDSS, thus enhancing efficiency and effectiveness in healthcare.

*Keywords: UTAUT, clinical decision support systems, meta-analysis*

## Symposium S011

### Leadership and wellbeing part 2: Forms of wellbeing, negative leadership and a meta-analysis

Tina Kiefer, Warwick Business School; Urszula Lagowska, NEOMA

science

This symposium forms part 2 of a double symposium on leadership and well-being. Part two focuses specifically on the role of different leader behaviours in follower well-being as well as negative leadership events and how they affect follower well-being. The symposium comprises of five contributions and a discussion lead by the moderators.

The first contribution by Knight et al. presents a meta-analysis on different types of leadership behaviours and their relationship to employee well-being. The authors examine this relationship taking into account work design issues such as motivational job characteristics. Seen how work changes (see part 1 of the symposium) this is highly relevant, particular as it highlights the broader role of leaders not only in directly shaping follower affect and well-being but also in shaping the environment people work in.

Acknowledging that work place conditions, including frequent changes can be stressful and lead to organisational cynicism. Schilling suggests a new theoretical model, looking at the relationship between organizational cynicism and well-being, arguing the traditional positive relationship might not capture the full spectrum of the effects of cynicism. Indeed, Schilling proposes that cynicism can foster solidarity and relatedness between employees who share their negative experiences on their employer with each other. In that sense, this contribution continues the discussion on support by colleagues in difficult work situations (see also Lagowska et al. in part 1 of this symposium).

Extending the work on negative aspects of leadership which often focuses on the leader exclusively, Gauglitz et al. examine the dyadic effects of leader and follower narcissism on well-being. Similar to other studies in part 1 of this symposium they take into account not only follower but also leader well-being by incorporating both leader and follower job satisfaction as a well-being indicator. They propose leader and follower narcissism to be related both to the actor's job satisfaction (due to a frustration of narcissistic needs) and the partner's job satisfaction (due to aggressive tendencies of narcissists).

Breevaart et al. remind us of the importance of an in depth investigation of how victims perceive abusive supervisory relationships and why leaving such a relationship can be so difficult. Interviewing former victims of abusive supervision, they derive barriers that keep victims from leaving abusive supervisory relationships. These insights can be used to develop meaningful support mechanisms on individual, organisational, and societal levels.

Finally, Castanheira and Neves shed light on the dark side of usefulness of technology to work, an argument often used by leaders to facilitate engagement with technological tools. When technostress and perceived usefulness of technology are high, an addictive spiral is initiated (i.e., uncontrollable compulsion to use ICTs), with consequences for their ability to work (i.e., heightened production deviant behaviors).

The contributions to this symposium employ different designs, such as meta-analyses, theoretical frameworks, actor-partner approaches, qualitative interviews and thus highlight the breadth of possibilities to conduct research on leadership and well-being.

The symposium contributes to the congress theme “The Future is Now: the changing world of work” by including highlighting the role of leader behaviour in well-being and the dangers of negative work events and suggesting ways forward for organisations but also the wider society to protect employees. It also contributed to the UN SDG “Good health and well-being” by focusing on well-being in the work context of followers.

*Keywords: leadership, wellbeing*

## Paper 1

### **Why Leadership Behavior Relates to Employee Well-being: A Meta-analysis of the Specific Role of Motivational Job Characteristics**

Sharon Parker, Centre for Transformative Work Design, Curtin University, Perth, Western Australia; Maximiliano Escaffi-Schwarz Escuela de Psicología, Universidad Adolfo Ibáñez, Santiago, Chile; David Holman, Organisational Psychology Group, Alliance Manchester Business School, Manchester, UK; Olga Epitropaki, Management & Marketing Department, Durham University Business School, Durham, UK; Anja van den Broeck, Department of Work and Organization Studies, KU Leuven, Belgium; Daniela Andrei & Caroline Knight | Centre for Transformative Work Design, Curtin University, Perth, Western Australia

#### Research goals and value

Leadership and motivational work design have both been extensively examined as influences on employee wellbeing. Theory suggests that leadership can affect employee well-being partly through shaping work design. However, empirical research on this possibility is scattered and poorly integrated, with studies focusing on a limited set of leader behaviors, and with diverse conceptualizations of work design. In this meta-analysis, we synthesize evidence on whether and how relational-oriented, task-oriented, and change-oriented leadership styles affect well-being outcomes through five core work characteristics: autonomy, variety, task identity, task significance, and feedback. Our study spurs theoretical integration of leadership and work design literature, and suggests integrated practical interventions to boost worker wellbeing.

#### Theoretical background

Work design refers to the tasks, activities, relationships, and roles involved in a worker's job (Parker, 2014). The Job Characteristics Model (Hackman & Oldham, 1976) identified five key work characteristics that foster motivation and wellbeing, which are the focus of this research. Multiple reviews and meta-analyses have shown how these work characteristics affect employee wellbeing (e.g., Humphrey et al., 2006). Theory suggests that leaders can shape the work design of followers objectively, by changing task allocations, policies or procedures, or subjectively, by influencing how work is perceived and how meaningful it is (Parker et al., 2017). This suggests that shaping work design is one important way that leaders can positively impact wellbeing.

Adopting the tripartite leadership behaviours taxonomy (Yukl et al., 2002; DeRue et al., 2011), we focus on three constructive leader behaviours which are linked to positive wellbeing. Change-oriented leadership behaviours inspire and motivate change, relational-oriented behaviours foster follower respect and welfare, and task-oriented behaviours promote role expectations and performance standards. We propose 9 hypotheses about how these types of leadership differentially affect work design and hence wellbeing.

#### Methodology

A systematic literature search for published studies measuring at least one of our three focal leadership styles and one of our five key work characteristics was conducted in three key databases. We included all field study designs involving working participants, both cross-sectional and longitudinal. Hunter and Schmidt (2004) meta-analytic techniques were applied to identify relationships between leadership styles and work characteristics. Studies which also measured either

positive or negative wellbeing were involved in metaSEM, to determine the role of work characteristics as mediators between leadership styles and wellbeing. We also conducted a relative weights analysis and tested for heterogeneity and publication bias.

## Results

Direct effects from meta-analytic results involving 144 independent samples showed that relational and change oriented leadership positively affected all core work characteristics, whereas task-oriented leadership predicted all but autonomy and variety. Relative weights analysis showed that change leadership was the strongest predictor of all work characteristics, except for task significance, which was most strongly predicted by relational leadership. Mediation analyses revealed a more nuanced picture: relational and change-oriented leadership improved well-being outcomes through significantly enhancing autonomy, variety, and task significance, while task-oriented leadership had a negative impact due to indirect negative paths through all core motivational characteristics except for feedback.

## Limitations

Our results are based on cross-sectional data due to the limited amount of longitudinal data available, limiting causal conclusions. Sample sizes were small for some analyses, however, tests for publication bias suggest they are robust.

## Conclusions

We show that different leadership styles affect well-being differentially through work design. It is likely that leaders who display characteristics of both change and relational-oriented leadership will have the most optimal impact on wellbeing through positively shaping employee's work design. Practitioners can use this knowledge for leadership development and training programmes.

## Relevance to congress theme & UN SDGs

The nature of work is shifting rapidly. Work is increasingly flexible, more reliant on technology, and demanding, with psychological distress high (Knight et al., 2022). Many are re-evaluating their career goals and values, and choosing to leave jobs amidst the "great resignation" (Newman et al., 2022). This means leaders are tasked with managing and motivating employees in an unpredictable world. Good work design is motivational, and leaders design jobs, yet we have very little evidence as to whether and which leadership behaviours positively shape which follower work characteristics, and how this impacts wellbeing. For organisations to remain adaptable in this fast changing world of work, it is imperative that we understand how leaders can actively shape work design for optimal outcomes.

Relevant UN SDGs are "Good health and wellbeing", and "Decent work and economic growth". We identify how leaders can shape work design and promote optimal wellbeing so that every employee has the opportunity to reap the rewards of "decent work".

*Keywords: Leadership, Wellbeing, job characteristics*

## Paper 2

### The relation between Leader and Follower Narcissism with Job Satisfaction of both parties

Astrid Schütz, Marco J. Held & Iris K. Gauglitz | University of Bamberg

Research goals and why the work was worth doing:

The goal of this research was to examine actor and partner effects of leader and follower narcissism on leader and follower job satisfaction. This research expands prior research by examining if leader and follower personality reciprocally predict job satisfaction of both dyad members.

Theoretical background:

In the last decades, narcissism has been studied intensely in organizational psychology research. Previous research showed that narcissism is related to important workplace criteria, such as job satisfaction.

One line of research has examined the relationship between employees' narcissism and their job satisfaction. Narcissistic individuals are preoccupied with grandiose fantasies and have an intense desire for admiration and respect. Therefore, they tend to think that there are and that they deserve better jobs than they currently have. Furthermore, narcissists have inflated self-views. For instance, they think they perform better than others do, when in fact they do not. Thus, it is likely that narcissistic employees receive feedback at work, which is more negative than they expected - and this might negatively impact their job satisfaction. Accordingly, research has shown that employee narcissism is associated with reduced job satisfaction.

Another line of research has examined if leader narcissism is associated with their followers' job satisfaction. This research builds on findings, which show that narcissism is associated with a lack of empathy, aggression, and superficial relationships. Accordingly, it was shown that leader narcissism is associated with reduced follower job satisfaction.

Yet, recently a shift in focus has occurred and increasing attention has been paid to leaders' well-being and how their followers affect it. We assume that follower narcissism is negatively related to leaders' job satisfaction because narcissistic followers may act egoistically, aggressively, and show little empathy for their leaders.

Accordingly, with the current research we expand previous research and examine the relationship of leader and follower narcissism with their own and with the other party's job satisfaction. We assume that leader and follower narcissism will be negatively associated with their own job satisfaction, as these individuals would think they deserve a better job or that they do not receive the admiration and respect at work that they deserve. Furthermore, we assume that leader and follower narcissism is negatively associated with the other party's level of job satisfaction in each dyad, because narcissists tend to behave in unempathetic and aggressive ways. However, we suggest that the assumed negative association between leader narcissism and follower job satisfaction will be stronger than the negative association between follower narcissism and leader job satisfaction, because followers are more dependent on their leaders than the other way around.

Design/Methodology/Approach/Intervention:

We conducted an online field study with leader-follower dyads from diverse industries across two measurement points (one month apart). At the first measurement, leader and follower narcissism

were assessed via self-reports. At the second measurement, leaders and followers reported their level of job satisfaction.

Data will be analyzed using an Actor-Partner Interdependence model using structural equation modelling in Mplus.

Results obtained or expected:

Data are currently gathered, expected end date of data collection is December 2022.

Limitations:

Even though we collected data across two measurement points, we cannot draw causal conclusions. Future research should employ longitudinal research designs and experimental studies in order to be able to support causal interpretations. Conclusions – research and or practical implications:

As we do not have study results yet, we cannot yet derive specific theoretical and practical implications already. As for now, we hope to gain a more holistic understanding of the relationship between leader and follower narcissism and leader with follower job satisfaction. Furthermore, knowing if and how leader and follower narcissism is related to leader and follower job satisfaction is an important prerequisite to derive practical implications and to ensure that leaders and followers are satisfied with their jobs.

Relevance to the Congress Theme:

Our research highlights the fact that it is important to foster well-being in both leaders and followers (i.e., in terms of their job satisfaction) and shows how leaders and followers reciprocally influence each other in that respect.

Relevant UN SDGs:

This research aims at promoting good health and wellbeing of leaders and followers at work.

*Keywords: Leadership, Narcissism, job satisfaction*

### Paper 3

#### **Abusive Supervisory Relationships: Insight from Former Victims**

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Research goals and theoretical background: While abusive supervision refers to the sustained display of hostile verbal and non-verbal behaviors (Tepper, 2000) such as invading employees' privacy, isolating employees from important others and blaming employees for something they did not do, not much is known about the duration of abusive supervision. We therefore lack critical knowledge about one of the most fundamental aspects of abusive supervision. In The Barriers Model of Abusive Supervision (Breevaart, Wisse, & Schyns, 2022), we explain the longevity of abusive supervision by outlining the barriers that make it difficult for victims of abusive supervision to escape. Specifically, we argue that employees may experience a range of barriers at the societal level (e.g., lack of awareness for the problem), the organizational level (e.g., lack of policies regarding unacceptable behavior), the supervisor-employee relationship level (e.g., being brainwashed), and the individual level (e.g., being highly agreeable) that make it difficult to break the abusive supervisory relationship. In the current study, we ran the first empirical test of The Barriers Model of Abusive Supervision in a sample of former victims of abusive supervisors.

Methodology: 121 self-labelled former victims of abusive supervision filled out the questionnaire in which we asked them to indicate the duration of the relationship, the reasons why the relationship ended, what help they received and what help they missed.

Results: Participants were mostly female ( N = 77) and came from a variety of countries and industries. The average age was 41.26 ( SD = 14.25). The preliminary result showed that on average, the abusive supervisory relationship lasted 2.67 years ( SD = 3.97). In the majority of cases, the relationship ended because the victim left (50%). Other reasons were that the victim got transferred to a different department (8.3%), the leader left (8.3%) or the victim got fired (6.7%). The relationship duration was significantly lower for those reported they got help from friends ( M = 1.765) versus those who did not report receiving help from friends ( M = 3.029). Many reported to have missed help from important stakeholders in the organizations such as higher management, HR, and confidants. More results will be available by the end of 2022.

Limitations: The data is mostly qualitative data and future research is needed to collect additional quantitative data.

Conclusions - Research/Practical implications : The study shows preliminary support for The Barriers Model of Abusive Supervision. Interestingly, former victims of abusive supervision seem to have suffered for a long time and indicated that they could not rely on their organization to help them. This shows that there is much work to be done for organizations to better protect their employees from abusive supervisors.

Relevance to the Congress Theme: While awareness for psychological abuse in intimate and family relationships is raising, this awareness is still lacking when it comes to workplace abuse. Too often, organizations fail to protect their employees from abusive supervisors because they do not hold supervisors accountable for the abuse (Courtright et al., 2016). Research among former victims of abusive supervision is needed to learn how long abusive supervisory relationship generally last and we as scientists, but also as organizations can do to break these relationships.

Relevant UN SDGs. The presentation relates to the UN's SDGs of creating good health and wellbeing among employees and offering decent work and economic growth.

*Keywords: Leadership, Abusive supervision, victims*

## Paper 4

### **Technostress and addiction to technology: The augmenting effect of perceived usefulness of technology**

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#### Research goals

We contend that the ability of ICT use to act as a reinforcer of addictive patterns may be heightened by the perceived usefulness of that technology to work. That is, the interplay between technostress and perceived usefulness should trigger an addictive process. We also argue that these individuals may be at a particular risk by stepping into an uncontrolled spiral of resource loss (Hobfoll, 1988). Thus, we predict that as mobile technologies become more invasive and overburdening, individuals develop an addiction to those technologies, especially when they believe that these are extremely helpful in dealing with work, with consequences for organizational deviance. When perceived usefulness is low, the lack of the cognitive reinforcing element of addiction should lead individuals to engage in the typical response to stressors and disengage from ICT use to the point where they are no longer at risk of developing an addictive usage pattern.

#### Theoretical background

There is more to Information and Communication Technologies (ICTs) at work than designing, purchasing or simply applying technologies. On the one side, there is an assumption that the use of technology is predominantly positive (Davis, 1986). On the other side, there is evidence demonstrating that the overuse of technology may be sapping individuals' well-being and performance (Tarafdar, Gupta, & Turel, 2015), and creating a maladaptive and obsessive dependencies (Tarafdar, Maier, Laumer, & Weitzel, 2020). According to the stress literature (Lazarus & Folkman, 1984), the latter is a rather counter-intuitive response: individuals suffering from technostress, rather than disconnecting from the ICT stressor, continue using it, often developing an addiction to that same stressor. Addiction to technology often includes inducing and reinforcing features that may contribute to the promotion of addictive tendencies (Griffiths, 1995) and usually includes an uncontrollable compulsion to use ICTs 'everywhere and anytime'.

The present research makes several contributions: a) by analyzing the potential interplay between technostress and perceived usefulness on the development of addictive behaviors, we enrich the scope of TAM (Davis, 1986); b) we demonstrate the addictive potential of ICTs at work, moving beyond contexts such as social networking sites, sampling teenagers and young adults (Griffiths, 1995; Kuss & Griffiths, 2017); and c) we show how this process contributes to deviance as a coping response to workplace stress (Henle & Blanchard 2008; Weatherbee 2010).

#### Design/Methodology/Approach/Intervention

We tested our hypotheses with a sample of 230 employees and their respective supervisor. The subordinate measures provided acceptable reliabilities: techno-invasion (Ragu-Nathan et al., 2008;  $\alpha = .68$ ), techno-overload (Ragu-Nathan et al., 2008;  $\alpha = .84$ ), perceived usefulness of technology (Davis, 1989;  $\alpha = .93$ ), and addiction to mobile technology (Turel, Serenko & Bontis, 2011;  $\alpha = .81$ ). Supervisors assessed the subordinate's production deviance (Robinson & Bennett, 1995;  $\alpha = .89$ ).

#### Results

To analyze our data, we used the bootstrapping PROCESS macro (Preacher et al., 2007). Techno-invasion was significantly related to addiction, while techno-overload was not. Both interaction effects with perceived usefulness on addiction were significant: when perceived usefulness was high, both techno-invasion and techno-overload were positively related to addiction to mobile technology; when it was low, techno-invasion was still significantly related to addiction, albeit less strongly, while techno-overload was not related to addiction. We also found a significant moderated mediation for techno-overload. As techno-overload increased, so did production deviance via addiction to mobile technologies, but only when perceived usefulness was high; when it was low, the effect was not significant.

#### Limitations

The design is cross-sectional (although it relies on two sources of information).

#### Conclusions

Taken together, our findings show that the impact of techno-invasion and techno-overload on addiction to mobile technology (and production deviance) depends on the perceived usefulness of technology. By doing so, we unveil the interplay between usefulness of technology and technostress, demonstrating that the negative impact of technostress is particularly pervasive when workers perceive the technology to be useful. This is important given that organizations often provide a context where the usefulness argument is very salient. We hope our findings raise awareness and contribute to the discussion of the potential addictive side of ICTs and its unintended consequences.

#### Relevance to the Congress Theme

The changing world of work is signaling the use of technology does not only carry positive effects and is demanding solutions to help organizations, especially those that rely on the usefulness of technology as an argument to promote behavioral change.

#### Relevant UN SDGs

Good health and well-being (3); Decent work and economic growth (8).

*Keywords: Stress, technology*

## Symposium S013

### **Making diversity work better for employees: Valuable top-down and bottom-up approaches**

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science\_practice

What will be covered and why: Workplace diversity is described as differences based on any characteristic on which employees differ or perceive themselves to be different from their co-workers (Guillaume et al., 2017). Managing and utilizing diversity (e.g., diversity in generation, ethnicity, education, and functional background) is creating incomparable challenges for leaders and employees over the world. While organizations promote diversity anticipating higher productivity and innovation, diversity is found to strain interpersonal trust, integration and undermine well-being. Therefore, the critical question remains on how contemporary organizations can make the best of diversity in the workplace, unlocking its potential and overcoming its risks. Incorporating both the management level (a top-down perspective) and employee level (a bottom-up perspective), this symposium aims to provide some valuable insights into this issue. Five empirical papers in the symposium will add to our understanding of (1) how organizational climate (e.g., diversity and inclusion policy, synergy climate, intergenerational climate) can help to increase the level of diversity in organizations and employee outcomes; (2) how inclusive leadership can play a beneficial role in enhancing employee work states (e.g., engagement) and behaviors (e.g., customer orientation behavior, helping behaviors, resources-seeking behaviors) in a diverse workplace; (3) how employees themselves engage in proactive, self-customized strategies (e.g., job crafting) to gain necessary job resources and optimize job demands presented by a diverse work environment. This symposium will present an integrated understanding of what organizations, leaders, and employees can do to unlock more potential of diversity.

Relevance to the Congress Theme: Contemporary workplace is more diverse than it used to be. It is now no longer possible to ignore the pervading influence of diversity in organizations. The concept of diversity has transformed from being a governmental or legal obligation to a strategic priority. The aim of attaining sustainable competitive advantage has instigated organizations worldwide to embrace the concept of diversity.

Research/Practical Implications: Our symposium aims to make several theoretical and practical implications. First, we add to the diversity management literature by presenting recent work on both top-down and bottom-up approaches of diversity management. We suggest that organizational climate, diversity-oriented leadership, and employee self-initiated behaviors are three important inputs that can bring out the benefits of diversity. Therefore, effective diversity management tools should be multilevel and multidimensional. Second, this symposium particularly focused on the effects of diversity on employees, which shifts the attention from the team-level (Hentschel et al., 2013; Roberge & van Dick, 2010; van Dijk, 2022) and organizational-level (Cunningham, 2009; Mohr & Puck, 2005; Van De Ven et al., 2008) to the individual-level. This angle is largely overlooked but equally important because employees are the main actors of an organization and the most important assets for an organization. Teams and organizations might not gain the benefits of diversity if we fail to understand what diversity means to individuals and how individuals enact in a diverse workplace. Employee-level outcomes (e.g., engagement, well-being, career development) should not be neglected because employees have the need for self-development and self-actualization and highly performed and engaged employees can make a significant difference to organizations.

This symposium also provides valuable practical implications. First, we suggest that organizations should foster a higher level of synergy climate and intergenerational climate as these types of organizational climates are helpful to release the benefits of diversity and make employees feel psychologically safer and more justice. Second, we suggest that leaders engage in more inclusive leadership in order to manage diverse employees and create a more inclusive and cohesive work group. Thus, training on inclusive leadership is essential. Third, we suggest that organizations and leaders should also not ignore the capabilities of employees themselves in terms of utilizing diversity in the workplace. Organizations should give employees more autonomy to craft their own job conditions in a diverse work environment. As such, employees can fully reflect upon their own interests, preferences, and goals to engage in the most appropriate strategies to navigate and grow up in a diverse workplace.

Conclusions: Diversity is a double-edged sword for organizations and employees. To maximize the potential of diversity, organizations should initiate more synergy and intergenerational climate, leaders should be more inclusive, and employees should be allowed to craft their own job conditions in a diverse work environment.

*Keywords: diversity management; inclusive climate and leadership; employee proactive behavior*

## Paper 1

### **The Art of Diversity: Creating Cultural Organizations That Are Diverse in Their Personnel, Public, Program, and Partners**

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**Research goals:** This paper aims to uncover the role of Diversity & Inclusion (D&I) policies, diversity climate, and inclusive leadership in creating diverse cultural organizations on the four Ps: Personnel, Program, Public (i.e., audience), and Partners. We propose a moderated mediation model in which inclusive leadership moderates the relationship between D&I policies and diversity climate (i.e., fairness and synergy), and the diversity climate mediates the association between D&I policies and diversity on the four Ps.

**Theoretical background:** Research indicates that setting goals and targets helps to increase personnel diversity (Klettner et al., 2016). Whereas prior research mostly speaks to how such policies enhance diversity in organizations' personnel, goal-setting theory suggests that any outcome is more likely to be achieved when specific goals and targets are set, and responsibilities and budgets are assigned to those goals (Locke & Latham, 2006). We therefore expect that the overall D&I policies will foster diversity on all four Ps (H1a). Furthermore, because goal-setting theory suggests that specific goals direct attention and effort towards those specific (and not other) goals (Wright & Kacmar, 1994), we argue that the D&I policies that target a specific P relate more to diversity outcomes on that specific P than diversity outcomes on the other Ps (H1b). In addition, we argue that the setting and implementation of D&I policies will indirectly contribute to diversity outcomes via an organization's diversity climate. Diversity climate refers to "employees' perceptions about the extent to which their organization values diversity" including the fairness and synergy components (Dwertmann et al., 2016, p. 1137). Signal theory (Connelly et al., 2011) suggests that employees are likely to interpret policies aimed at improving diversity as signals that the organization values diversity. As such, D&I policies are likely to contribute to diversity in the four Ps through a diversity climate in which employees experience that the organization values diversity (H2). For the experience of a diversity climate, especially inclusive leadership is likely to shape employees' understanding of the value of diverse perspectives (van Knippenberg & van Ginkel, 2021). We therefore also hypothesize that inclusive leadership strengthens the relationship between D&I policies and diversity climate, such that the relationship between D&I policies and diversity climate is more positive for higher levels of inclusive leadership (H3).

**Methodology:** This study used the data from an online D&I scan for organizations in the Dutch cultural sector. The scan, built by two of our authors, functions as an instrument to improve policies on diversity and inclusion. We tested the hypotheses based on data from 295 unique organizations.

**Results obtained:** In line with H1a, we found a positive association between the overall D&I Policy and overall diversity outcomes ( $\beta = .61$ ,  $SE = .05$ ,  $t(295) = 13.08$ ,  $p < 0.001$ ; model fit:  $F(1, 293) = 170.99$ ,  $p < .001$ ,  $R^2_{adjusted} = .37$ ). Our results showed that D&I policies that target a specific P (e.g., personnel) are stronger related to that specific type of diversity (e.g., personnel) than to other types of diversity (e.g., public) by comparing their standardized coefficients and effect size (H1b). Unexpectedly, parallel mediation analysis did not support H2 that the fairness and/or synergy component of diversity climate mediated the relationship between the overall D&I policies and diversity in the four Ps. Partially supporting H3, we found that inclusive leadership strengthened the

positive relationship between D&I policies and the fairness component ( $\beta = 0.65$ ,  $SE = 0.04$ ,  $t(291) = 2.40$ ,  $p = 0.017$ ) but not the synergy climate ( $\beta = 0.20$ ,  $SE = 0.03$ ,  $t(291) = 1.00$ ,  $p = 0.317$ ) of a diversity climate.

**Limitations:** This study is a cross-sectional survey study. Whereas the use of multiple respondents per organization minimized the risk of single source bias, the ability to infer causality is still limited (Setia, 2016).

**Research and practical implications:** This study increases the understanding of the impact of D&I policies on diversity. We found support for an important principle of Goal Setting Theory within enhancing organizational diversity at multiple aspects of diversity. We demonstrate that D&I policies should be targeted at specific diversity types, and we are the first to suggest distinguishing diversity into four Ps. We also found that inclusive leadership is essential in strengthening a fair climate. Overall, this study further adds to the pile of evidence regarding the roles of diversity climate and inclusive leadership in creating more diverse and inclusive organizations.

**Relevance to the Congress Theme:** This paper highlights the contribution aspect of the theme “the future is now.” We tried to uncover the mechanism to achieve four P’s diversity in cultural organizations by investigating the roles of HR Policies, diversity climate, and inclusive leadership.

**Relevant UN SDGs:** this study contributes to “gender equality goal (SDG.5)” as it concerns the equality among underrepresented populations by investigating the fairness component of a diversity climate in the cultural organizations. This study also contributes to “decent work and economic growth goal (SDG.8)” by creating a diverse and inclusive working environment that is helpful for both employees’ and organizations’ health and growth.

*Keywords: Diversity and inclusion, Workplace climate, Inclusive leadership*

## Paper 2

### Enhancing employee sustainable career in the age-diverse workplace: The role of intergenerational climate

Anqi Chen, Hai-jiang Wang & Jian-Qiao Liao | Huazhong University of Science and Technology, China; Beatrice Van der Heijden, Radboud University, the Netherlands

**Research goals :** The present study aims to reveal the beneficial role of workplace intergenerational climate (WICS; King & Bryant, 2016) in influencing the sustainable career of older employees under an increasing age diversity context. We explore how and when WICS can enhance employee sustainable career development. Specifically, we examine how meaning at work plays a mediating role and how occupational future time perspective (OFTP; Zacher & Frese, 2009) plays a moderating role in the relationship between intergenerational climate and individual sustainable careers (Van der Heijde & Van der Heijden, 2006) in terms of career satisfaction, employability, and health among older workers.

**Theoretical background :** We employ the Social-emotional Selectivity theory (SST; Carstensen, Isaacowitz, & Charles, 1999) to understand the relationship between WICS and sustainable careers. First, we argue that positive WICS has a positive influence on sustainable career outcomes (i.e., career satisfaction, employability, and general health; H1a, H1b and H1c). Based on SST, people prioritize the meaning of interactions as their future time perspective begins to become limited. In positive WICS, they suffer less discrimination and may have a better social experience, therefore contributes to their satisfaction, well-being as well as employability. In addition, older workers enhance the meaningfulness of their work during intergenerational interactions through generative striving (Carstensen, 2002) or knowledge transfer (Erikson, 1963). In a positive WICS, elderly employees are more likely to support future generations actively, leading to higher meaning at work (H2). Deriving meaning from individuals' professional activities contributes to their career sustainability (Van der Heijden, 2005), research on ageing has shown that meaningful work provides richer, more satisfying, and more productive employment for individuals (Steger et al., 2013). Subsequently, we hypothesize meaning at work mediates the relationship between WICS and their sustainable career (H3a, H3b and H3c). However, the above inferences are based on the core assumption of SST that older workers have more limited perspective of the future. Conversely, if the OFTP is more positive, the relationship we assume will be weakened. We hypothesize OFTP negatively moderates the positive relationship between WICS and meaning at work (H4) as well as the overall moderated mediating model (H5a, H5b, H5c).

**Methodology :** A longitudinal survey was conducted among a sample of older workers over 45 years from 13 different industries and 77 companies participated in China. We used structured questionnaires across three waves with a time lag of two weeks, resulting in a sample size of 267 participants. All the instruments used in the study had acceptable reliability and validity. Our hypotheses were verified by a moderated mediating structural equation model with MPLUS version 8.3.

**Results obtained :** The direct effect of WICS on general health ( $\beta = .20, p < .001$ ) was significant while on the other dimension were not, supporting H1c. It also positively influence meaning at work ( $\beta = .36, p < .001$ ), H2 was supported. Moreover, we found significant effects of meaning at work on employability ( $\beta = .18, p < .05$ ) as well as general health ( $\beta = .30, p < .001$ ).The results suggested WICS had significant indirect effect on both employability (  $b = .03, t = .01, CI [.004, .060]$ ) and general

health (  $b = .09$ ,  $t = .03$ , CI [.035, .152]) but had no significant effect on career satisfaction, thus, H3b and H3c were supported. In addition, the interaction term of intergenerational climate and OFTP with respect to predicting perceived meaning at work was significant ( $\beta = -.18$ ,  $p < .001$ ), H4 was supported. Finally, the analysis of the conditional indirect effect indicated the differences between indirect effects at low levels of OFTP and at high levels of OFTP were significant with regard to employability ( $\Delta b = -.02$ ,  $t = .01$ , CI [-.057, -.004]) and general health ( $\Delta b = -.07$ ,  $t = .03$ , CI [-.143, -.025]), supporting H5b and H5c.

Concluding Remarks : This study found that intergenerational climate, as a top-down approach to managing age diversity in the workplace, was associated with sustainable career outcomes. We contributed to intergenerational climate and sustainable career literature through revealing a contextual antecedent to predict career outcomes.

Relevance to the Congress Theme : We highlight the urgency aspect of “The future is now!”. We expect to contribute to the sustainability of workforce in the context of the increasing global trend of ageing.

Relevant UN SDGs : This study contributes to “Decent Work and Economic Growth” (SDG.8) since inclusive leadership is not only a moral imperative but also has a business argument to it.

*Keywords: age diversity; intergenerational climate; employee sustainable career*

### Paper 3

#### **Inclusive leadership and customer orientation: The mediating role of employee engagement and moderating role of perceived organizational support**

Ayfer Veli Korkmaz, Tilburg University; Lena Knappert, Vrije University of Amsterdam; Robin Bauwens, Tilburg University; René Schalk, Tilburg University; Marloes van Engen, Radboud University

**Research goals:** This study wishes to understand the influence of inclusive leadership (IL) on customer orientation (CO), considering the mediating role of employee engagement (EE) and moderating role of perceived organizational support (POS). IL enables employees to show inclusive behaviours to their customers. These inclusive behaviours contribute to building relationships between employees and their customers; to an inclusive society as diverse customers' daily life experiences improve; to organizations' competitive advantage as they become preferable suppliers for diverse profiles; to improving the optimal service delivery which is relevant for organizations' business success. Lastly, by doing this research, we contribute to the inclusion literature with a novel validated IL scale.

**Theoretical background:** Customer-oriented employees show a set of behaviours ensuring a good service (Brown et al., 2002) towards their internal and external customers. Based on social learning theory (Bandura, 1977), we suggest inclusive leaders, who give attention to employees' uniqueness, belongingness, feeling of being appreciated and organizations' efforts (Veli Korkmaz et al., 2022), will be role modelling inclusive behaviours to their employees. Accordingly, we suggest IL will influence employees' customer-oriented behaviours positively (H1). Secondly, based on self-determination theory, we suggest employees' engagement, experience of vigour, dedication, and absorption at work (Schaufeli, 2022), will play a mediating role between IL and CO. This is because IL will contribute to employees' innate needs of autonomy, competence, and relatedness as proposed by self-determination theory (Deci and Ryan, 1985) which will promote their engagement (H2). Next, based on broaden-build-theory, we suggest that high level of engagement will be reflected in employees' customer-oriented behaviours (Frederickson, 2001) which results in engagement's mediating role (H3). Lastly, we include POS, employees' perception of organizations' treatment (Eisenberger et al., 1986), to the equity. Organizational support theory suggests POS as a resource for employees which will strengthen the relationship between IL and engagement (H4a) and between IL and CO (H4b).

**Methodology:** The quantitative data was collected from a financial sector company located in Europe (N=271) from various teams in the organization using following surveys: Customer Orientation Scale (Susskind et al., 2003); UWES-3 (Schaufeli et al., 2019); Perceived Organizational Support (Eisenberger et al., 1997) and Inclusive Leadership scale developed for this research. After assessing the construct validity of the new scale and controlling the statistical adequacy of the measurement model, we analysed the hypotheses using multilevel regression in R with support of packages lavaan (Rosseel, 2012), nlme (Pinheiro et al., 2017), and mediation (Tingley et al., 2014).

**Results obtained:** IL had a significant effect on both CO (H1) ( $\beta = 0.19$ ,  $p < 0.001$ ) and engagement ( $\beta = 0.26$ ,  $p < 0.05$ ) (H2). Contrary to expectations engagement had no significant effect on CO ( $\beta = 0.02$ ,  $p = 0.42$ ). Thus, no significant indirect effect was observed ( $0.01 [-0.01, 0.03]$ ,  $p = 0.41$ ) (H3). Additionally, while POS did not moderate the relationship between IL and engagement ( $\beta = -0.03$ ,  $p = 0.64$ ) (H4a), it did moderate the direct relationship between IL and CO ( $\beta = 0.09$ ,  $p < 0.01$ ) (H4b).

Limitations: Adopting a cross-sectional design and conducting the research in a limited field (financial sector, Europe context) were two of the methodological limitations. Moreover, using the same conceptualization of CO both for internal and external CO; and not focusing on variables' dimensions separately (e.g., three dimensions of EE) might have limited our understanding of the respective relationships.

Research and practical implications: Future research can investigate how focusing on customer orientation influences the relationship between employees as they are internal customers for each other; the impact organizations have on their external customers' daily-life experiences; the suggested relationships in an experimental and longitudinal setting to understand the over-time impact of inclusive leadership. Considering its impact, organizations should invest in IL by, for instance, providing training to the managers. Furthermore, improving employees' POS (e.g., by offering individualized benefits, Eisenberger & Malone, 2016) will help strengthen IL's impact on CO.

Relevance to the Congress Theme: We highlight the Delivery aspect of "The future is now?". We suggest attention to CO should persist while considering leadership styles that are needed in today's diverse workplaces to facilitate CO. This can be done by focusing on what inclusive leadership entails and how it can be fostered.

Relevant UN SDGs: This study contributes to "Decent Work and Economic Growth" (SDG.8) since inclusive leadership is not only a moral imperative but also has a business argument to it.

*Keywords: Inclusive leadership, customer orientation, employee engagement*

## Paper 4

### **Uncovering the link between inclusive leadership and employee outcomes. The explanatory role of prosocial and proactive employee behaviors**

Sonja Rispens, Eindhoven University of Technology; Huatian Wang, Lingnan University, Hong Kong; Evangelia Demerouti & Janna Behnke | Eindhoven University of Technology

**Research goals and why the work was worth doing:** This research examines employees' resource-seeking and helping behavior as possible mechanisms that explain the influence of inclusive leadership (IL) on work engagement (WE) and task performance (TP). While scholars acknowledge IL as essential in managing workforce diversity, we cannot assume that leaders' behaviors affect employees in a vacuum. Our research efforts follow the belief that employees and leaders simultaneously create inclusive work climates, but research neglects the role of employees (Nishii & Leroy, 2022).

**Theoretical background:** One possibility for STEM (science, technology, engineering, and mathematics) organizations to benefit from workforce diversity is to implement IL and boost employees' inclusion experiences (Shore et al., 2018). Randel and colleagues (2018, p.192) conceptualize IL as "leader behaviors that respond to group members' needs for belongingness and uniqueness within a workgroup." IL links to various positive outcomes (Veli Korkmaz et al., 2022). However, research lacks insight into the collective impact of employee and leader behaviors on employee outcomes in the context of diversity and inclusion (e.g., Ashikali et al., 2020; Homan et al., 2020). Based on the social learning theory (Bandura, 1971), we argue that IL sends information about desired behaviors and values, which will stimulate the employees to engage in prosocial/proactive behaviors at work (i.e., seeking resources from leaders and helping colleagues). While contributing to a more inclusive and social workplace, employees will be more engaged and productive at work (Shore et al., 2018). Additionally, diversity displays a crucial contextual aspect of IL (Nishii & Leroy, 2022). We thus assume that the relationships between IL and employee outcomes will be stronger in more diverse work groups.

**Methodology:** We collected survey data from 153 employees and their supervisors at Dutch and German STEM organizations. Employees shared their perceptions of IL (Zheng et al., 2017), their seeking-resources behavior (Tims et al., 2012), as well as their WE (Schaufeli et al., 2006). Leaders indicated the extent to which the employee engaged in helping behavior (MacKenzie et al., 1991) and TP (Williams and Anderson, 1991). Employees and leaders reported their perceptions of workforce diversity (Van Dick et al., 2008). We tested the hypotheses by utilizing the structural equation modeling (SEM) approach using SmartPLS 3.0.

**Results obtained:** In line with our hypotheses, IL related positively to TP ( $b = 0.269$ ;  $p \leq 0.01$ ) and WE (dedication:  $b = 0.245$ ;  $p \leq 0.01$ ; vigor:  $b = 0.301$ ;  $p \leq .01$ ; and absorption:  $b = 0.215$ ;  $p \leq 0.01$ ). Moreover, IL was positively related to TP through helping behavior ( $b = 0.153$ ,  $p \leq 0.01$ ,  $CI = [0.065, 0.256]$ ) and resources-seeking behavior ( $b = 0.063$ ,  $p \leq 0.05$ ,  $CI = [0.003, 0.127]$ ). Nevertheless, IL was not significantly related to WE through helping behavior ( $b = 0.019$ ,  $p = 0.375$ ,  $CI = [-0.024, 0.065]$  for vigor;  $b = 0.031$ ,  $p = 0.137$ ,  $CI = [-0.010, 0.080]$  for dedication;  $b = 0.024$ ,  $p = 0.339$ ,  $CI = [-0.022, 0.077]$  for absorption) and only the indirect effect through resources-seeking behavior on dedication was significant (one dimension of WE;  $b = 0.115$ ,  $p \leq 0.05$ ,  $CI = [0.016, 0.222]$ ). Finally, IL was only positively related to TP when workplace diversity was high ( $b = 0.236$ ,  $p \leq 0.05$ ) compared to when it was low ( $b = 0.074$ ,  $p = 0.100$ ), highlighting the important contextual role of workforce diversity.

Limitations: The cross-sectional data limits the possibility of concluding causality. Moreover, the study did not consider possible confounds, such as frequency of contact between employees and leaders or value congruence, which might impact how leaders and employees rated each other's behaviors.

Research and practical implications: Future longitudinal and experimental research should investigate the directionality of the relationship between IL, prosocial/proactive behaviors, and employee outcomes. Studies could also include the role of and the impact on a team.

Relevance to the Congress Theme: Our research contributes to the urgency aspect of "The future is now!" theme. Diversification of the workforce in STEM displays a reality and ethical imperative for organizations that they need to manage "now." By examining inclusive leadership and specific prosocial/proactive employee behaviors, we offer insights into how organizations and their members can jointly facilitate more inclusive workplaces in which employees feel engaged and productive.

Relevant UN SDGs: This study applies to the UN SDG "Decent work and economic growth." Our research shows that leaders who manage their diverse workforce more inclusively stimulate employees' prosocial/proactive behaviors and enhance employee functioning and well-being, especially in diverse workplaces.

*Keywords: Inclusive leadership, helping behavior, resource-seeking behavior*

## Paper 5

### **Successfully navigating informational diverse work environments: The important roles of job crafting and emotional intelligence**

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**Research goals:** Many employees work in an informationally diverse work environment, which is characterized by increased variations in type, source, or category of relevant information, knowledge, and perspectives in the workplace (Allen et al., 2008). While informational diversity is found to be beneficial, such as facilitating task completion (Bell et al., 2011), making high-quality decisions (Van Knippenberg et al., 2004), enhancing group creativity (Zhang, 2016), and keeping competitive advantages with other competitors (Cox & Blake, 2013), these findings largely concentrated on the team, organizational level. On the individual level, we know little about whether and how employees themselves could engage in customized, ongoing actions to profit from informational diversity, and then optimize their own work. Following the job redesign (Oldham & Fried, 2016) and job demands-resources (JD-R) (Bakker & Demerouti, 2017) perspectives, this study investigates the roles of employees' job crafting behaviors and emotional intelligence.

**Theoretical background:** Job crafting refers to the self-initiated adjustments of one's work conditions, including job resources and job demands (Tims et al., 2013). Based on the JD-R perspective, job crafting involves a motivating process whereby individuals make micro-adjustments based on their own needs, preferences, and unique job conditions. Thus, via job crafting behaviors, employees could actively mobilize valuable job resources they need from informational-diverse work environments, respond to challenging demands, and consequently, improves their work outcomes. Emotional intelligence (EI) refers to the ability to effectively manage one's emotions as well as intentionally harness and use emotions and emotional information (Mayer et al., 1997). The diversity literature indicates that when working in a diverse setting (e.g., exchanging information, ideas, and resources with people of different backgrounds), individuals likely feel more stressed and anxious and may cause discord and conflict (Clark & Polesello, 2017; Gardenswartz et al., 2010). Based on the JD-R perspective, EI is seen as a vital personal resource. We argue that high EI employees could better understand, process, and use different information presented by different people, and thus more likely take appropriate strategies for responding to complex environments.

**Methodology:** We conducted a weekly diary design over four consecutive weeks. Our sample consisted of employees from three medium-sized hospitals located in China. A total of 254 individuals, including nurses, medical specialists, and admin personnel out of 359 (71% participation rate), completed a general questionnaire and four weekly questionnaires (1,016 observations). In the general questionnaire, we measured perceived diversity, emotional intelligence, and demographic variables. In the subsequent four-weeks diaries, we measured employees' job crafting behaviors, work engagement and performance (self-rated) by the end of each week. To examine the mediation and moderated mediation effects, we conducted 2-1-1 model using Mplus. Specifically, we drew the model of the mediation and moderated mediation on Level 2 but also drew a model of the relationship between weekly job crafting and weekly employee outcomes on Level 1.

**Results:** Our results showed that perceived informational diversity indirectly improves employees' work outcomes (e.g., work performance and work engagement) via engaging in job crafting behaviors. Moreover, this indirect effect was stronger for employees with high levels of EI.

Limitations: Our constructs were self-reported, and our sample was from a single industry and a single country setting, which may raise the issue of generalizability.

Research/Practical implications: First, we add to the workplace diversity literature by highlighting the beneficial role of job crafting in informational diverse workplaces. Traditionally, studies focused on how informational diversity can be managed through top-down approaches (e.g., inclusive HRM practices, organizational justice and equality policies) (Blouch & Azeem, 2019; Jaiswal & Dyaram, 2020; Singh et al., 2013) and/or how these top-down approaches lead to higher team-level outcomes (e.g., team creativity, team productivity) (Bell et al., 2011; Kearney & Gebert, 2009). Our study uncovers a bottom-up means by which employees benefit from the heterogeneity in resources presented by an informational diverse work environment. Second, we contribute to the workplace diversity and job redesign literatures by highlighting the moderating role of EI. We highlight that EI is a vital ability to help employees to take appropriate strategies to process emotional demands presented by an informational diverse work environment. Third, we enrich job demands-resources and job crafting literature by pointing out that informational diversity offers both job resources and job demands and could be a vital antecedent of job crafting.

We suggest that organizations empower employees with more autonomy to take bottom-up approaches to manage informational diversity at work. The job crafting scholars have developed several job crafting intervention programs, which yield numerous beneficial outcomes (Dubbelt et al., 2019; Gordon et al., 2018). Management practitioners may want to use these intervention programs to boost employees' job crafting behaviors or other proactive behaviors at work, and then achieve desirable work outcomes.

Relevance to the Congress Theme: The diverse workplace makes today's work uncertain and dynamic. This study aims to highlight the important role of informational diversity at work and how job crafting, and emotional intelligence can help employees to adapt to the diverse, changing, and uncertain work environment.

Relevant UN SDGs: Good health and wellbeing; Decent work and economic growth; Peace, justice, and strong institutions

*Keywords: workplace informational diversity; employee job crafting; emotional intelligence*

## Symposium S016

### **Harnessing motivation and self-regulation via interventions: Implications for work-related well-being**

Anna Steidle, University of Applied Sciences Ludwigsburg

science

What will be covered and why: The future of work is likely to see a much greater percentage of workers engaged in remote work or blended forms of work, resulting in more flexible working patterns, poorer boundaries between work and home, and a greater need for workers to be able to motivate themselves and self-manage their work. Although individual level interventions often implicitly train workers to change something (about themselves, their environment) and thus, inherently require motivation and self-regulation, few studies to date have formally investigated the potential of interventions to promote self-regulation and motivation. In this symposium, we discuss five studies which do just this. The first paper (Althammer, Wöhrmann & Michel) examines a comprehensive six week self-regulation intervention for flexible workers, demonstrating that it increases self-regulation, well-being and work-life balance compared to a control group. The second paper (Michel et al.) focuses on how we can design interventions to help employees create better boundaries between work and home life. It contrasts two interventions, namely mindfulness as a cognitive-emotional segmentation strategy with an intervention based on different types of segmentation strategies and transitions rituals (with a control) to see which one is more effective for work-life balance and well-being. The third paper (O'Shea et al.) specifically focuses on the emotional mechanisms via which trait mindfulness and situationally induced mindfulness unfold their beneficial influence on cognitive resources. The final two papers present particularly novel methodologies and interventions. Pogrebtsova and González-Morales use appreciative inquiry to conduct a process evaluation of a job crafting intervention, highlighting how participants experience better alignment between their needs, strengths and values. Finally, Lennefer, Reis, Lopper and Hoppe combine the psychological and physical to show how the use of an activity tracker combined with an online coach can lead to increased movement and decreased strain and negative affect.

Relevance to the Congress Theme: This symposium has relevance to the conference theme as it is focused on issues pertaining to the changing nature of work and specifically on the delivery of necessary interventions to support employees in developing self-regulation skills so organisations can deliver desired changes.

Research/Practical Implications: These five studies target different aspects of self-regulation (e.g., awareness, monitoring, behaviour change, reflection) and motivational resources (impact, affect, needs, values), demonstrating that there is much potential in harnessing such approaches via interventions to improve various facets of well-being and aiding workers in managing more flexible working arrangements. Collectively they demonstrate that although such interventions can take a variety of approaches they have important implications for employees.

Overall conclusions: Combined, the research in this symposium suggests that there is scope to further explore the added value of individual-level interventions specifically targeting self-regulation and motivational resources. As the world moves into the future of work, with greater emphasis on flexible working and hybrid workplaces, employee's ability to develop their own skills and strategies to self-manage and motivate themselves will be particularly important.

*Keywords: intervention, well-being, self-regulation*

## Paper 1

### Comparing Online and Blended Training - Effects on Psychological Detachment, Work-Life Balance, and Well-Being

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**Research goals and why the work was worth doing:** In the changing world of work, an increasing share of workers has at least some temporal and spatial flexibility (i.e., autonomy in choosing their work times and locations). Flexible work designs (FWD) such as flexitime and telework can have benefits for employees (e.g., reduced commuting times, balancing work and private life). However, they come with specific challenges such as blurring boundaries between work and private life, prolonged working hours and insufficient recovery. This can negatively affect well-being and work-life balance. Hence, we developed an online training to help workers cope with these challenges. To address shortcomings of online interventions such as high dropout and feelings of isolation, we also developed a blended training intervention in which members attended three group sessions in addition to the online training. This study evaluates the effectiveness of the training approach to improve recovery, work-life balance, and well-being, and compares whether a blended training format can address the shortcomings of an online training format.

**Theoretical background:** Self-determination theory proposes that people possess intrinsic motivation to engage in a particular behaviour, facilitated by the satisfaction of basic psychological needs (competence, autonomy, relatedness). Moreover, based on social identity theory, the sense of belonging to a group and group interactions can strengthen social support. Thus, group sessions may increase intrinsic motivation to engage in the training and social support, thus improving training effectiveness.

**Design & Intervention:** To evaluate the training, we conducted a randomized controlled trial with four measurement points (pre-intervention, post-intervention, four-week follow-up and six-month follow up). Participants who completed the baseline questionnaire (n = 575) were randomly assigned to an intervention group that received the online training (IG-ON), an intervention group that received the blended training (IG-BL), or the control group (CG). The control group received the intervention after the four-week follow-up. The final sample at T2 included 340 participants (n IG-BL = 119, n IG-ON = 84, n CG = 137). The six-week online training “FlexAbility” consists of six weekly modules and short daily tasks. The training provides participants with several strategies to address the specific challenges of FWD. They learn segmentation strategies that help them manage boundaries between work and private life. They learn respite strategies that help them recover during work breaks and after work. Further, they learn strategies that help them organize their workday. Blended training participants participated in three supplementary three-hour videoconference group sessions designed to promote group interactions and social support and consolidate learnings and exercises from the online training.

**Results:** In line with our hypothesis, multilevel analyses revealed that both training formats improved psychological detachment, satisfaction with work-life balance, and well-being compared to the control group. Unexpectedly, blended training participants did not profit more from the intervention than online training participants did. However, blended training participants reported more social exchange with others (that is, sharing of experiential knowledge and emotional support)

and were more likely to be compliant (i.e., engage with modules, practice daily tasks, attend group meetings).

Limitations: Women and participants with high education were over-represented because they were self-selected. We assessed compliance via self-report due to data protection requirements.

Research/Practical Implications: Both the online and the blended training can be helpful tools in supporting workers to cope with the specific challenges of FWD. This is important as the share of workers with FWD is expected to remain at a high level in the future. The study contributes to research comparing the effectiveness of training formats in the work context. Moreover, providing an empirical test for the theoretical assumption based on social identity theory and self-determination theory, group sessions accompanying the online training can promote social exchange and increase the likelihood that participants actively participate in training. Thus, practitioners should encourage group interactions accompanying online trainings to increase training adherence. Employees who participate in online trainings can share their experiences and goals with others to increase their own commitment.

Relevance to the Congress Theme: This study contributes to the congress topic “The Future is Now: the changing world of work” as the intervention was designed specifically for workers with FWD, which is increasingly important in the changing world of work. The possibilities of digitalization and ICT use promote FWD, and the COVID-19-pandemic further increased the number of workers with temporal and spatial flexibility. This research can provide guidance how to design FWD optimally.

Relevant UN SDGs: This research contributes to the goal of achieving good health and well-being.

*Keywords: flexible working conditions, intervention, self-regulation*

## Paper 2

### **Effects of an online-self-regulation intervention on self-regulation, occupational self-efficacy and negative affect**

Alexandra Michel, Federal Institute for Occupational Safety and Health (BAuA), Dortmund, Germany / Heidelberg University, Heidelberg, Germany; Anne M. Wöhrmann, Federal Institute for Occupational Safety and Health (BAuA), Dortmund, Germany; Sarah E. Althammer, Federal Institute for Occupational Safety and Health (BAuA), Dortmund, Germany / Heidelberg University, Heidelberg, Germany; Lucia M. E. Piehl, Heidelberg University, Heidelberg, Germany

Research goals and why the work was worth doing: Aim of this study was to evaluate the effectiveness of an online self-regulation intervention teaching different self-regulation strategies to promote self-regulation, occupational self-efficacy and to reduce negative affect. Being able to self-regulate and self-organize one's working life becomes more and more important due to higher work flexibility. Flexible work designs (FWD) such as flexitime and telework can be beneficial for employees. However, they come with specific challenges such as organizing one's own working day including goal setting, self-monitoring and rewarding one's success. Hence, we developed an online training to help workers cope with these challenges.

Theoretical background: Self-regulation theory proposes that "self-regulation refers to self-generated thoughts, feelings, and actions that are planned and cyclically adapted to attainment of personal goals" (Zimmermann, 2000, p. 14). Thus, an online self-regulation training may increase self-regulated work behaviour, improve occupational self-efficacy and reduced negative affect.

Design & Intervention: To evaluate the training, we conducted a randomized controlled trial with four measurement points (pre-intervention, post-intervention, two-week follow-up and six-week follow-up). Participants who completed the baseline questionnaire were randomly assigned to an intervention group (N=32) that received the online training or to a waiting control group (N=55). The control group received the intervention after the six-week follow-up. The training provides participants with different self-regulation strategies.

Results: In line with the hypotheses, analyses revealed that self-regulation and occupational self-efficacy were increased and negative affect was reduced for the experimental group in comparison to the control group at post and follow-up measurement points.

Limitations: All data were self-reported.

Research/Practical Implications: Our study results show that an online self-regulation intervention is effective in promoting self-regulation, occupational self-efficacy and well-being.

Relevance to the Congress Theme : This study contributes to the congress topic "The Future is Now: the changing world of work" as the intervention was designed and conducted in the context of an increase of flexible work designs triggered by the COVID-19 pandemic. Thus, results are helpful in designing future interventions for a flexible workforce.

Relevant UN SDGs : This research contributes to the goal of achieving good health and well-being.

*Keywords: intervention, self-regulation, affect*

### Paper 3

#### Examining the impact of mindfulness on daily well-being and performance

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**Research goals:** Drawing on theories of mindfulness-to-meaning (Garland, Farb, Goldin, & Fredrickson, 2015b), we investigate the ways in which mindfulness (trait and induced) has its effects on daily outcomes. We propose the trait mindfulness operates via the mechanism of affect and is associated with higher daily positive affect which is in turn related to higher daily concentration and lower fatigue.

**Theoretical background:** Mindfulness has been defined as a state where one is “attentive and aware of what is taking place in the present” (Brown & Ryan, 2003; p. 822). Although typically defined as a state, research has also shown that individuals differ in their propensity to be mindful, and this individual difference is termed trait mindfulness, referring to the duration, frequency and intensity with which an individual tends to engage in mindfulness (Hülshager, Alberts, Feinholdt, & Lang, 2013; Jamieson & Tuckey, 2017). State mindfulness can be induced through mindfulness-based interventions, which if practiced regularly and over time will cultivate higher levels of trait mindfulness (Hülshager et al., 2013; Jamieson & Tuckey, 2017). In this research, we investigated the impact of both trait mindfulness and state mindfulness (induced via intervention).

**Intervention:** The mindfulness intervention drew on Garland and colleagues (2015a) mindfulness-to-meaning theory, and on the previous work of Michel, Bosch and Rexroth (2014) who demonstrated that mindfulness can be used as a cognitive-emotional segmentation strategy. In order to develop the necessary skills, our mindfulness intervention followed a self-regulation process where we first enabled participants to become aware of their emotions, then to recognize their emotions, and accept them. We contrasted this with a stringent active control condition.

**Design/Method:** 237 (28.2%) employees from an Irish organisation volunteered to take part in the research. The cluster randomization resulted in 173 participants in the mindfulness condition and 63 in the active control (AC) condition. Following drop-out, the final sample consisted of 1242 daily observations nested in 186 participants ( $n_{AC} = 54$ ;  $n_{Mind} = 132$ ). After completing the baseline survey, participants were provided with training on the intervention activities. Over four weeks, they were sent a link via e-mail on a daily basis which provided them with access to the intervention activities in an online platform.

**Results:** The intervention moderated the indirect effect from trait mindfulness to daily concentration and fatigue via daily positive affect. This study demonstrates that completing a daily mindful emotion regulation intervention provides the opportunity for trait mindfulness to positively influence daily concentration and fatigue via daily positive affect, which is boosted by engaging in daily mindfulness practice, when compared to an active control intervention that does not facilitate this process.

Research/Practical Implications: These findings provide some insights into the mechanisms through which mindfulness has its effects on daily well-being and performance. Furthermore, it highlights interesting findings with regard to the way in which interventions may facilitate personal strengths to unfold their beneficial impact. Our findings suggest that relatively low dose interventions work as self-regulatory prompts for those with already developed mindfulness skills. Thus, our research contributes to our current understanding of how and for whom mindfulness is beneficial in workplace settings.

Originality/Value : Our study contributes to the literature by examining the interplay of a daily mindfulness intervention and trait mindfulness in terms of how they impact daily outcomes. We extend past research demonstrating that mindfulness and mindful reappraisal are associated with growth in daily positive affect (Pogrebtsova, Craig, Chris, O'Shea, & Gonzalez-Morales, 2018), and by demonstrating that positive affect is a mediating mechanism through which mindfulness influences daily concentration and fatigue.

Relevance to the Congress Theme: This study contributes to the congress topic “The Future is Now: the changing world of work” as it demonstrates how trait mindfulness and a daily mindfulness intervention can help workers to improve their daily concentration and well-being. As the changing world of work, and the possibilities of digitalization and ICT use promote hybrid and flexible working opportunities, this research provides guidance on daily strategies to help workers focus and maintain their energy through the day.

Relevant UN SDGs: This research contributes to the goal of achieving good health and well-being.

*Keywords: mindfulness, intervention, daily*

## Paper 4

### **A step away from impaired well-being: An activity tracker intervention among low active employees of a logistics company**

Annekatriin Hoppe & Elisa Lopper | Humboldt-Universität zu Berlin, Germany; Dorota Reis, Department of Psychology, Saarland University, Germany; Thomas Lennefer, Humboldt-Universität zu Berlin, Germany

**Research goals and why the work was worth doing:** The aim of the present study was to evaluate the effectiveness of a workplace intervention combining activity trackers with an online coach in order to increase employees' number of steps (i.e. their physical activity) and decrease emotional strain and negative affect (i.e. their impaired well-being). Moreover, we investigated the moderating role of work-related and personal resources (i.e., job control and self-efficacy) on the intervention's effectiveness.

**Theoretical background:** Building on self-determination theory and (Ryan & Deci, 2002) and the Health Action Process Approach (Schwarzer, 2008) the study combines a behavioural (activity tracker) and cognitive (online coach) intervention approach.

**Design/Methodology:** 108 mainly low active employees of a large company participated in the intervention over the course of three weeks. Data were collected at six measurement points and analysed with latent growth curve modelling.

**Results:** The results revealed that employees increased their number of steps until the second intervention week. Moreover, the intervention was effective in decreasing emotional strain and negative affect over the course of the intervention. Job control and self-efficacy did not moderate intervention effectiveness.

**Limitations:** The study does not provide a control group. Furthermore, moderating effects of job characteristics that promote or hinder the intervention effectiveness need to be further explored.

**Research/Practical Implications:** The intervention provides a useful person-focused approach for organizations that wish to promote physical activity and employee well-being.

**Originality/Value:** By applying latent growth curve modelling, we could link the growth of one variable (e.g., employees' number of steps) to the growth of another variable (e.g., employees' impaired well-being) and, thus, provide information about the relationship between the variables. Accordingly, analyses revealed that increase in number of steps was related to the decrease in negative affect, whereas no such association was found for the increase in number of steps and the decrease in emotional strain.

**Relevance to the Congress Theme:** This study contributes to the congress topic "The Future is Now: the changing world of work" as it successfully integrates new technologies into health-promoting interventions at work. It furthermore addresses an underserved population of blue-collar workers who should receive more attention in I/O psychology research in the future so that the needs of all workers are addressed.

**Relevant UN SDGs:** This research contributes to the goal of achieving good health and well-being.

**Keywords:** *Physical activity, intervention, well-being*

## Symposium S017

### PSYCHOLOGICAL SAFETY AT WORK: CONTRIBUTIONS TO DECENT WORK, PERFORMANCE AND EMPLOYEE WELLBEING

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science\_practice

Psychological safety is a widely researched topic. Research repeatedly highlights the critical role of psychological safety in the workplace and its contribution to learning and improvement efforts (Carmeli et al., 2009; Carmeli & Gittell, 2009; Edmondson, 1999; Hirak et al., 2012; Liu et al., 2014; Nembhard & Edmondson, 2006; Wong et al., 2010), creativity (Carmeli et al., 2010; Kark & Carmeli, 2009), innovation (Andersson et al., 2020), performance (Andersson et al., 2020; Baer & Frese, 2003; Hirak et al., 2012; Schaubroeck et al., 2011), and voice behaviour (Erkutlu & Chafra, 2015a; Erkutlu & Chafra, 2015b; Detert & Burris, 2017; Lee et al., 2021; Sherf et al., 2021). The topic has similarly attracted significant media attention. Most notably, reports such as Google's Project Aristotle (Duhigg, 2016; Rozovsky, 2015) have stressed the need for psychological safety in order to develop effective, high-performing teams.

Psychological safety (PS) is defined as a belief that an employee is safe to take interpersonal risks, including a sense of confidence that the team will not reject, embarrass, or punish their colleagues for speaking up (Edmondson, 1999).

While PS is considered key to effective team work, employee engagement and wellbeing, many questions remain. This symposium includes five presentations on psychological safety, including the construct's measurement (Cottrell, Malinen), how to foster it (Clarke, Wong) and psychological safety's role in an occupational safety framework (Teperi). The presentations come from various contexts and industries (health, law, governance) and are likely of interest to both scholars and practitioners. Overall, the presentations hope to advance the decent work agenda, by promoting safe workplaces that support employee wellbeing, inclusion and reduce inequalities.

Cottrell et al. will discuss the importance of psychological safety in the context of team decision making. In addition to psychological safety, her study includes measures of belongingness, inclusion and independent thinking, and investigates how these factors enable effective team-level decision making.

Clarke's presentation focuses on speaking up at work and how leaders can improve employee experience and their wellbeing through psychological safety. Clarke focused specifically on ethical leadership behaviours in the context of law firms, and found compelling evidence for the role that psychological safety climate plays in key employee outcomes.

Malinen's presentation focuses on the measurement of psychological safety. She will discuss considerations for scholars wanting to advance psychological safety measurement, and provides recommendations for those wanting to measure psychological safety.

Wong's presentation is in the context of innovation in healthcare. Her study investigates how a climate of psychological safety can promote the uptake of medical technology by health providers, specifically a low-cost diabetes solution.

Finally, Teperi will present a theoretical framework and a practical model, Human Oriented Occupational Safety (HOS), for improving work and safety from the psychological viewpoint. The HOS

has been developed from an integrative perspective that combines lessons learnt from past safety paradigms and the current views on Human Factors and safety management.

#### Relevance to the Congress Theme

Psychological safety climate is an essential characteristic of effective and healthy teams and organisations. Amidst ongoing global challenges, being able to bring one's whole self to work is not only key for promoting equity and inclusion, it is crucial for organisational performance. Psychological safety at work also promotes the decent work agenda, economic growth, and contributes to employee wellbeing and reducing inequalities.

#### Research/Practical Implications

This symposium's presentations provide noteworthy implications for both scholars and practitioners. For practitioners, we show various ways through which psychological safety can be promoted and provide evidence for the psychological safety's importance for performance and employee wellbeing. With the chronic skill shortages and fierce competition, promoting psychological safety climate enhances both the employee experience and organisations' competitive advantage. For scholars, we provide a critical lens through which psychological safety measurement can be improved and provide potential avenues for advancing this field further.

#### Overall conclusions

This symposium presents cutting edge research on psychological safety, showing its power in promoting positive employee and organisational outcomes, while also highlighting areas in need of further research and scrutiny. We hope to provide stimulating presentations and discussion on psychological safety, and its implications for research and practice.

*Keywords: Psychological safety, inclusion, team work*

## **Paper 1**

### **Effective team decision-making: Exploring the role of psychological safety**

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University of Canterbury, NZ

Research goals and why the work was worth doing:

This exploratory study aims to understand factors that contribute to effective team decision-making by examining work teams that engage in complex decision-making. High-functioning teams with effective team work and decision-making are essential for organisational performance (Jones & Roelofma, 2000; Kim, Lee, Connerton, 2020). The essence of management and success in competitive environments depends on the quality of decisions made despite information overload and several alternatives in both solutions and outcomes (Albar & Jetter, 2009). Therefore, importance is placed on creating a climate that supports sharing thoughts openly in the team. By promoting psychological safety within a team, individuals can examine issues from various angles and see implications of their decisions from different perspectives. In addition to psychological safety, individual's perceptions of inclusion, belongingness, and independent thinking, are likely to contribute to effective group decision-making. This research investigates how psychological safety, inclusion, belongingness and independent thinking relate to each other and contribute to effective group decision-making.

Theoretical Background:

Teams are often employed in decision-making as they can bring increased knowledge and resources to a problem beyond that of an individual, thereby increasing the probability that a group decision is of higher quality than an individual decision (Brodbeck, Kerschreiter, Mojzish, Frey & Schulz-Hardt, 2002). Psychological safety, understood as feeling safe to take interpersonal risks in a team context, is critical for effective team performance (Edmondson, 1999). Group members within a psychologically safe environment, can look at a problem from diverse perspectives and employ their expertise allowing specific insights and increasing their collective capability. Therefore a climate that allows members to share thoughts and discuss options is imperative. Teams are essential; they create opportunities to make decisions, the conditions with which decisions are made are essential to their success, and psychological safety is a necessary condition.

Design/Methodology/Approach/Intervention:

This is a cross-sectional study design employing an online survey to identify relationships between the variables; psychological safety, inclusion, independent thinking, belongingness, and group decision-making. The requirement for each participating team was more than two people, and that team members actively engage in decision-making while at work. Team leaders distributed the survey link to team members for completion and took 10-15 minutes to complete.

Results Obtained or Expected:

Data is currently being analysed, predicted findings are likely to discover that heightened psychological safety, inclusion, and belongingness within a team will enhance sharing of independent thoughts and strengthen group decision-making. There are likely to be positive relationships between the variables, and they will be clear predictors of enhanced group decision-making.

Survey results will be assessed through regressions to understand relationships between the variables and how they impact effective group decision-making. The data will be analysed at the team level, accounting for within-team perceptions of predictors using multilevel modelling with individuals (level 1) in teams (level 2). Given that psychological safety, inclusion, belongingness, and independent thinking are similar constructs, the items will likely be highly correlated, relative weights will be used to unpack the highly correlated predictors, address multicollinearity issues and calculate the importance rank of variables.

#### Limitations:

The first limitation is the use of a cross-sectional design, which restricts the determination of causal relationships among the variables. The second limitation related to the survey instructions, although clarity was intended, some participants from the same team reported different team sizes which impacts the option to do analyses involving team size. The final limitation was that the research used only a survey approach. Future research may improve this study by utilising a mixed-method approach that includes both quantitative and qualitative data collection.

#### Conclusion - research or practical implications

It is important for employees and leaders to understand the impact of psychological safety, inclusion, independent thinking, and belongingness on outcomes such as team decision-making.

Feeling psychologically safe is important as it decreases barriers to engagement and the benefit of having an engaged workforce is enhanced employee performance, which is important for team functioning and decision-making (Wanless, 2016; Markos & Sridrevi, 2010). Teamwork and decision-making are important components of organisational performance. Therefore, it is vital for employees and organisations to understand how fostering psychological safety can improve team performance. This research could have implications for leaders by indicating what a team climate needs in order to be more effective in their decision-making processes.

#### Relevance to the Congress Theme: The future is now: the changing world of work

The research presents relevance to this theme given that teamwork is prominent in all workplaces and with the acceleration of remote working there is a need to create a safe place for teams to allow effective decision-making. When online, it is harder to gauge emotional stances from other team members. If the team climate and practices are positive for the team, there will be enhanced performance, teamwork and decision-making.

#### Relevant UD SDGs:

By understanding what team climates promote effective decision-making, this research contributes to the UD SDG's by enhancing wellbeing and equity in the workplace.

*Keywords: Teams, decision making, inclusion*

## Paper 2

### **Feeling safe to speak up: leaders improving employee wellbeing outcomes through psychologically safety**

Emma Clarke, Sanna Malinen & Katharina Näswall | University of Canterbury, NZ

Research goals and why the work was worth doing:

Wellbeing at work is an important area of research because of the impact it can have on people's professional and personal lives. Employees who experience high wellbeing perform better and are better organisational citizens (Diener & Seligman, 2004; Krieger & Sheldon, 2015). Further, employee wellbeing has a significant impact on organisational success by influencing the costs related to illness, absenteeism, job performance and turnover (Grant et al., 2007; Sears et al., 2013).

Wellbeing can be nurtured in organisations through developing psychological safety, and a key driver of psychological safety in organisations is the behaviour of leaders (Edmondson, 1999; Nembhard & Edmondson, 2006). Ethical leaders have been found to promote psychologically safe practices in the workplace (Bedi et al., 2016; Brown et al., 2005), however further research is needed across cultures and different professions, to provide more empirical evidence of this relationship.

While this research examined the broader wellbeing outcomes of ethical leadership, the primary focus of this study was to explore psychological safety as a mechanism through which ethical leadership influences employee wellbeing.

Theoretical background:

Social Learning Theory was used in this study to illuminate the relationship between leadership behaviour and psychological safety. Conservation of Resources (COR) Theory, was also chosen as a theoretical framework for the study as it helps to explain the relationship between ethical leadership and wellbeing as well as the role that psychological safety has in this relationship (Hobfoll, 2011).

Method:

For this study, the New Zealand (NZ) legal profession was chosen as a context to investigate the key constructs. Law firms are often hierarchical in nature, creating potentially inequitable power dynamics between employees. These power differences can prevent employees from speaking up.

Participants were sourced through Human Resources (HR) departments within large corporate law firms and Senior Management within small and mid-sized NZ law firms. In addition, members of NZ law societies and associations were also invited to participate.

Lawyers and partners completed two online surveys in 2021 via Qualtrics, four weeks apart. Of the 320 participants that registered their interest in participating, 234 completed the first survey and 132 completed the second survey. The participants were 75% female and 25% male with a mean age of 35.4 (SD = 11.27).

Results:

All hypotheses were tested using regression analysis in SPSS. Results showed that ethical leadership was positively related to psychological safety four weeks later, and that ethical leadership influenced six of the seven outcomes (general wellbeing, intrapersonal wellbeing, job satisfaction, performance, incivility, and burnout) through psychological safety. That is, when employees are working in an

environment with high psychological safety they experience higher levels of wellbeing, performance and job satisfaction. We also found that ethical leadership was directly related to lower levels of incivility in the workplace and an increase in interpersonal wellbeing and performance.

#### Limitations:

To test for mediation, the key constructs were measured with the same participants at two timepoints four weeks apart. The timeframe for when these constructs influence each other is unknown and this could provide different results based on the timeframe chosen between timepoints. Future research might consider measuring the key constructs across three timepoints using different periods of time between each timepoint.

#### Conclusions and Practical Implications:

These findings add to the accumulating evidence that psychological safety is critical to employee wellbeing as well as organisational success. By improving employee wellbeing, through the development of psychologically safe work environments, ethical leadership can make a significant impact on an organisation's bottom-line. High wellbeing not only leads to better performance, it also leads to higher retention (Bartels et al., 2019), which helps reduce costs associated with employee turnover.

This research advances the field of organisational psychology by progressing literature on psychological safety in the workplace and by illuminating ways in which workplaces can enhance employee wellbeing. In addition, this research will provide further understanding as to how leaders can shape a psychologically safe working environment in order to increase employee wellbeing, performance and job satisfaction while reducing burnout and turnover.

#### Relevance to the Congress theme:

As the workplace evolves and becomes more digitised, leaders and organisations need to ensure they are providing employees with an environment that allows them to bring their whole selves to work, to feel safe sharing new ideas and to flourish. By providing a supportive and psychologically safe working environment to minimise any negative impact on wellbeing, leaders can help employees adapt to the rapidly changing world of work.

#### Relevant UN SDG's:

Having greater understanding of the pathways that impact employee wellbeing will contribute to the United Nations SDG's of providing fair and decent work to employees and ensuring healthy lives for all.

*Keywords: Ethical leadership, law firms, wellbeing*

## Paper 3

### Review of Psychological Safety measurement scales: Recommendations and future directions

Sanna Malinen, Katharina Näswall & Lena Chernoglazova | University of Canterbury, NZ

#### Theoretical background

Psychological safety research is gaining in popularity, likely due to the phenomenon's significant impact on various individual, team, and organisational outcomes. Many definitions and operationalisations of psychological safety have emerged, resulting in an array of quantitative measures being developed and used across the literature. These measures differ in number of items, context, and level of analysis, and are often tailored to the research setting and population. Currently, Edmondson's (1999) scale dominates the psychological safety literature, with one review calling for researchers to use this in preference to other measures due to its high degree of reliability and predictive validity (Newman et al., 2017). However, researchers using Edmondson's (1999) scale have often adapted the measure (Newman et al., 2017), and Edmondson has also been involved in the development of multiple other psychological safety scales (Edmondson & Mogelof, 2005; Edmondson & Woolley, 2003; Garvin et al., 2008; Nembhard & Edmondson, 2006). These adaptations of Edmondson's (1999) scale suggest that improvements can and already have been made to the original measure. New and adapted scales therefore continue to emerge, indicating a lack of consensus on how best to measure psychological safety.

The proliferation of scales has the potential to impede future research into psychological safety. Such a large variety of measures can create difficulties for researchers striving to find the best scale to suit their purpose and lead to inconsistencies in research findings due to different operationalisations. The quality of psychological safety research will vary depending on the quality of the researchers' chosen measure. A review of psychological safety measure will improve understanding of the suitability of different measures to various research contexts, providing researchers with valuable information and aiding them in identifying the most suitable scale for their chosen setting. This will, in turn, improve the validity of future research into psychological safety.

This presentation will identify, compare, and provide a critical review of currently available measures of psychological safety. The goal of this presentation is to provide guidance for researchers in terms of the measures that they could choose to investigate psychological safety in organisations. A number of recommendations are put forth for both scale developers and researchers using existing measures.

#### New Perspectives/Contributions

This presentation will include several key recommendations for both scale development and measure selection purposes. These recommendations will focus on four key areas: 1. Referent and Level of Analysis (what is a team? What to do in case of multiple teams?); 2. Scale Length and Coverage (trade-off between validity and reliability); 3. Item Wording (removing jargon, ambiguous terms); and 4. Greater Transparency in reporting (validity evidence, item wording).

This presentation will conclude with discussing future directions for measurement of psychological safety, including a) change over time, b) defining a team, and c) considering the cultural context.

#### Conclusions – research and or practical implications

This presentation addresses a substantial gap in the research by providing a measurement-focused review and critique of psychological safety. There remains a lack of consensus surrounding best practice in psychological safety measurement, and while it may not be possible to establish a consensus, it is important to address these issues so that they may be resolved in future research. By reviewing and evaluating currently available psychological safety measures, we hope to advance the field of psychological safety measurement both for practical and scholarly purposes.

#### Relevance to the Congress Theme

Promoting psychological safety at work has multitude of benefits. Understanding psychological safety, how best to measure and research the construct, is key to advancing the agenda of workplaces that both promote better decision making, inclusion and employee wellbeing.

#### Relevant UN SDGs

Promoting decent work is a way through which various SDGs can be advanced, including providing safe working conditions and work, where people can bring their whole selves to work. Psychological safety is an important element in promoting inclusive workplaces, where processes, such as creativity and effective team work, can be promoted through employee wellbeing.

*Keywords: Measurement, review, scale development*

## Paper 4

### **Crossing the medtech chasm: A mix method study of psychological safety and innovation uptake in Aotearoa New Zealand healthcare workplaces**

Jennifer Wong, Sanna Malinen, Geoff Chase & Katharina Näswall | University of Canterbury, NZ;  
Grace Walker, Think Analytic

Research goal and why the work is worth doing:

Medical technological innovation is a nearly trillion-dollar per annual industry with tangible individual and societal impacts (Statistica, 2018; Factors, 2021). Continuous advancements in medical technologies are vital for improving the capacity of the health system to deliver health and wellbeing benefits. Despite these investments, patients are reported to benefit from only 30-60% of new healthcare technologies (Grol, 2001; Schuster, McGlynn, Brook, 2005). This disappointing rate suggests almost half of clinically validated innovations fail to be adopted successfully in healthcare workplaces. The goal of this research project is to explore the role a culture of psychological safety plays in fostering innovation uptake in healthcare workplaces.

Theoretical background:

While there is a clear priority for healthcare innovation, there is an imbalance of what is prioritised during its development and implementation—the technology itself, rather than the individuals using it (Chase et al., 2008). Research and best practice point to co-designing medical technology with end-users for it to be accepted and useful to both patients and healthcare staff (Chen et al., 2021; Greenhalgh et al., 2019). Co-designing technology with healthcare staff requires a distinct approach that acknowledges staff members as both users and providers of the technology (Papoutsis et al., 2021), and operate as professionals within organisational and regulatory systems. Within these systems, there are social, organisational, and societal barriers to the uptake of novel healthcare technologies that when removed can increase the likelihood that medical technologies can be successfully adopted in healthcare workplaces (Wong et al., 2022). What is currently unknown is how psychological safety relates to these barriers to technology uptake and the overall innovation climate in the context of healthcare workplaces.

Methodology:

In this presentation I will be sharing findings from a research project on the factors that impact the uptake and acceptance of a novel, low-cost, diabetes solution for health providers in Aotearoa New Zealand. Both surveys and interviews will be conducted with health providers to provide insights on the barriers of medical technology adoption. Enablers of adoption will also be explored, specifically the structures and practices that support a climate of innovation and psychological safety.

Results expected:

The findings shared in this presentation are from the first phase (Nov 2022-April 2023) of a larger multidisciplinary project that explores the impact of co-design on overcoming medical technology barriers for Māori, tangata whenua (indigenous people) of Aotearoa New Zealand, living with diabetes and their health providers. I expect the survey and interviews to reveal that a history of psychologically safe practices and structures in health providers would lead to more positive perspectives towards adopting the novel diabetes solution. My reflections, as the social science lead,

on the initial stages of co-designing with medical professionals and collaborating with the multidisciplinary team will also be shared during this presentation.

Limitations:

As a case study within the context of Aotearoa New Zealand, findings is unique to the studies context and may not be readily generalisable to healthcare workplaces in other countries. I will be discussing the boundaries of generalisability in the presentation.

Conclusions:

The social and economic costs of diabetes are projected to double over the next 10-20 years in Aotearoa New Zealand (PWC, 2021). These harms are multiplied by genetic, socio-cultural, and socio-economical differences for Māori (Perry, 2021), creating significant inequity in access to care and quality outcomes. The findings of this project can have significant cultural, social, and economical impact for Māori living with diabetes, their whānau (community of families) caregivers through supporting their health providers in adopting low-cost medical technologies. Maximising innovation uptake in healthcare organisations that provide services to Māori is crucial to providing equal opportunities at best care for individuals living with diabetes in Aotearoa New Zealand.

Relevance to Congress Theme and UN SDGs:

EAWOP 2023 Congress theme considers the changing nature of work to become an increasingly transdisciplinary effort that targets the world's current challenges. This presentation and greater research project support both the Congress theme and several UN Sustainable Development Goals: Through in-depth collaboration with engineers, cultural advisors, and end-users, the goals of good health and wellbeing can become more equitable. Told through the lens of an organisational psychology scientist, the importance of social sciences in solving the world's challenges will be emphasized throughout the presentation.

*Keywords: technology adoption, healthcare, innovation uptake*

## Paper 5

### Human-oriented occupational safety as an approach to psychological safety

Anna-Maria Teperi, Finnish Institute of Occupational Health

#### Aim

In this paper, we present our theoretical framework and practical model, Human Oriented Occupational Safety (HOS), for improving work and safety from the psychological viewpoint. We have developed HOS from an integrative perspective that combines lessons learnt from past safety paradigms and the current views on Human Factors (HF) and safety management.

#### Theoretical background

The traditional reason for the need to implement the HF approach has been that HF contribute to the majority of workplace events and incidents. However, there are also other reasons for taking human contribution into account. First, our functional environment is becoming increasingly complex, dynamic, uncertain, and fragmented, with contributing and interrelating megatrends of climate change, globalisation, and technological innovations. This turbulence affects the way in which work is performed, organised, and led. The more complicated our functional environment, the more mutual collaboration and distributed knowledge among organisations and teams is needed, to proactively tackle potential risks. We need broader, systemic models and networks to anticipate and cope with risks. Second, future safety threats may concern aspects of 'mental or psychological safety', although physical risks still emerge in traditional industrial fields. Today's increasingly overheating work life is challenging people through continuous change, new competence demands and the need to balance different areas of life. A resilient, 'mentally healthy organisation' more effectively mitigates safety risks. Third, in several safety-critical fields such as the transport sector and energy production, safety management systems are mandatory, including requirements for applying HF. These fields need continuous mastery of HF to maintain their operation licences. Fourth, workplaces and professional fields are constantly striving for safety improvements, for which they need practical solutions and concrete facilitation.

#### Approach

The HOS is conducted by a multiprofessional team consisting of seven members with specialised competences from cognitive ergonomics, group dynamics, work and organisational development, resilience, and pedagogics, to engineering and system design. The main theoretical framework and practical tool for HOS implementation has been the HF Tool, which describes the levels and details of human contribution as a four-leaf model. The model has been applied for the last 20 years in the transport sector, nuclear industry, and the public sector, to increase awareness of HF and to take HF into account as part of safety practices. The three elements of successfully applying HOS have been a systemic, holistic view to HF, a participative manner of applying HF at all organisational levels, and a solution-based, positive view of people.

#### Results

HOS research and development projects have shown several benefits. Increased awareness of the relevance of and competence in HOS has improved the capability of organisations to create a just, fair culture. Organisations have more deeply and openly learnt to analyse the contributing factors of operative events, also from a positive viewpoint, thus leading to more accurate corrective actions

and sharing lessons learnt. Workplaces have established new HF-focused procedures for improving recruitment and occupational health care processes and colleague-to-colleague mental first aid, fostering recovery from post-incident reactions. HF thinking and the toolkit have provided ways to have open discussions at the workplace. For example, managers are better able to have constructive discussions on safety with their employees. HF projects have made it easier to motivate and commit people to the development of safety by offering a positive starting point. However, clear boundaries can also increase the sense of safety: abuse or arrogant actions that undermine safety must result in appropriate sanctions. Bad practices can be identified and delimited.

#### Limitations

The HF Tool has been evaluated using Reason's (2008) six criteria on what a proper accident investigation tool should consist of. According to these criteria, the HF Tool fits the users' knowledge and understanding and helps make sense of situations. It is easy to communicate and share. However, it is not able to find all possible latent factors or anticipate future events or the functionality of processes. Moreover, the study conducted in the nuclear industry has shown that the strength of the HF Tool is its applicability, despite limitations in tackling the systemic nature of complex intertwined systems. Thus, it is best combined with other models or methods.

#### Relevance to Congress Theme

This study creates new theory and practice for industry and academia, to improve safety by considering human contribution. It utilises knowledge of individual, work and organisational psychology combined with engineering and pedagogics.

#### Relevant UN SDGs

Our SDGs are safety, health, and well-being. We believe that our study findings will facilitate workplaces' future climate actions.

*Keywords: Human factors, occupational safety, safety management*

## **Symposium S018**

### **Proactivity in the context of time**

Shereen Fatimah, Singapore Management University, Singapore; Anita Starzyk, NEOMA Business School, France

science

**Introduction.** Workplace proactivity is a process in which employees create a positive change by identifying and taking action on opportunities or problems in the work environment (Frese & Fay, 2001; Parker, Bindl, & Strauss, 2010); which in turn has far-reaching implications for the reputation and competitive advantage of the organization (Jacob, Frese, Krauss, & Friedrich, 2019). However, as these proactive behaviors also challenge the status quo at work, employees' attempts to be proactive may not be uniform across time. Specifically, the obstacles that employees encounter (e.g., managerial resistance to voice) or benefits that they accrue across time (e.g., authenticity) may amplify or curtail their efforts to be proactive. Importantly, these proactive trajectories (or silence) across time in turn has implications for organizations' ability to adapt to changes and opportunities in the work environment. Thus, in this symposium, we explore the temporal dynamics that underlie employees' proactive behaviors and how it unfolds across time.

**Research and Practical Implications.** This symposium which spans different proactive behaviors, time frames (short-term vs. long-term processes), and methodologies, offers new theoretical and practical insights:

Zhang et al integrate research on work design and career theory to develop strategies to improve employees' career progress. Through a multi-wave study, they find that employees' growth career mindset influences their job crafting strategies (strength vs. interest focused) which impact their career satisfaction and employability.

Fay & Strauss explore voice behaviors as an avenue for employees to express their authentic self in the workplace. Across two experience sampling studies, they find that daily promotive voice leads to daily authenticity which in turn has implications for employees' daily motivation and life satisfaction.

Anita Starzyk takes a qualitative and longitudinal approach to unpacking when and why employees persist to voice ideas despite initial pushback from managers. The preliminary findings indicate that employees' decision to persist in their voice efforts is contingent on the issue and past experiences of managerial neglect.

Weiss and Zacher apply social identity theory to explain the dark side of employee silence. In a longitudinal study, they find that over time, employees' silence lowers their organizational identification and heightens incivility towards others.

Michael Frese reviews the research on voice and personal initiative and puts forth future directions for the literature. In this review, he highlights the need to explore the recursive influences of personal initiative and voice and the contextual conditions that facilitate these reciprocal relationships across time.

**Relevance to Congress.** This symposium contributes new knowledge to ways in which employees, managers, and organizations may adapt to the 'changing world of work'. By paying close attention to how employees' proactive behaviors unfold across time, this research unpacks the intra-individual, inter-personal, and contextual mechanisms that enable employees and managers to facilitate

positive consequences for change-oriented behaviors and adapt to the changing demands in the workplace.

Overall Conclusions. Through a focus on temporal dynamics, this symposium sheds light on the nuances through which the trajectories of proactive behaviors and its consequences may take shape. By contributing new knowledge on when and why proactive behaviors may be strengthened or weakened across time and the dark side of these trajectories, the symposium also identifies practical strategies for employees and managers to adapt to the future of work.

Michael Frese

*Keywords: Proactive behaviors, Silence, Time*

## Paper 1

### **Job crafting in the career context: How growth career mindset relates to career satisfaction and employability via different job crafting strategies.**

Sharon Parker, Curtin University, Australia; Zhen Wang, Renmin University of China, China; Zijun Cai, Beijing Normal University, China; Fangfang Zhang, Curtin University, Australia

**Research Goals and Theoretical Background.** Due to the increased career mobility and flexibility, individuals are supposed to take more responsibility to manage their job and career. It has been indicated that employees can engage in proactive behaviours that promote self-management at both the job and the career level. An important form of proactive behaviour focused on the job level is job crafting, which has been shown positive effects on both individuals' jobs and career. However, existing job crafting research predominantly focused on the changes to one's job (e.g., changes to tasks and relations, or changes to job resources and demands) and omitted personal goals or motives in the job crafting process. Research has indicated that individuals could have different goals in job crafting: crafting to better utilize one's strengths (job crafting towards strengths, JC-strengths) or crafting to better match one's interests (job crafting towards interests, JC-interests). Research has shown that the two different job crafting strategies lead to different outcomes and has called for more investigation into their distinct effects. The purpose of this study is to bring together work design and career theory in the examination of how individuals' growth career mindset stimulates two job crafting strategies (i.e., JC-strengths and JC-interests), and the distinct effects of the two job crafting strategies on employee subjective career success reflected by career satisfaction, internal marketability, and external marketability.

**Design.** Two-wave data were collected from a company located in Eastern China. Demographics and growth career mindset were measured at the first wave. Job crafting and career outcomes were measured at each wave. 302 participants completed surveys at both waves. Path analysis was conducted using MPlus 8.3 to examine the proposed research model and hypotheses. We controlled for T1 career outcomes to improve the robustness of our results. We controlled for the demographic variables (i.e., gender, age, education, and job tenure) as these factors may affect career outcomes. These demographic control variables did not change our results; thus, for the purpose of parsimony, demographic variables were not included in our final model.

**Results.** T1 growth career mindset was positively related to T2 JC-strengths ( $\beta = .29, p < .001$ ) and T2 JC-interests ( $\beta = .23, p < .001$ ). Both T2 JC-strengths ( $\beta = .28, p < .001$ ) and T2 JC-interests ( $\beta = .15, p = .04$ ) were positively related to employee T2 career satisfaction. T2 JC-strengths was only positively related to T2 internal marketability ( $\beta = .33, p < .001$ ) while T2 JC-interests was only positively related to T2 external marketability ( $\beta = .30, p < .001$ ). JC-strengths mediated the positive relationship between growth career mindset and career satisfaction ( $\beta = .09, 95\% \text{ CI } [.04, .16]$ ), and the relationship between growth career mindset and internal marketability ( $\beta = .12, 95\% \text{ CI } [.05, .20]$ ). JC-interests mediated the positive relationship between growth career mindset and external marketability ( $\beta = .08, 95\% \text{ CI } [.03, .16]$ ). However, the indirect effect of growth career mindset and career satisfaction via JC-interests were nonsignificant ( $\beta = .04, 95\% \text{ CI } [.00, .09]$ ).

**Limitations.** The main limitation of this study is that we cannot draw causal conclusions of our findings due to the research design. Moreover, situational factors may interact with personal characteristics to affect individuals' job crafting behaviours, which we did not investigate in this study.

Research and Practical Implications. This study advances research on both work design theory and career theory by explaining how career mindset shapes individuals' job crafting behaviours, which in turn leads to distinct effects on their career satisfaction and employability. Moreover, this research provides significant insights and guides for individuals and organizations to improve employees' career satisfaction and employability via crafting one's job to better use one's strengths and match one's interests.

Relevance to Congress Theme. This study is relevant to the Congress Theme as it addressed one of the major challenges that employees are facing in today's changing world and in future work, that is how to proactively maintain their employment and achieve a successful career.

Relevant UN SDGs. This study is relevant to SDG 8 "Decent work and economic growth". It helps to address unemployment and boost productivity by enhancing employees' employability. It also helps to improve employees' job quality via job crafting.

*Keywords: Job crafting, Growth Mindset, Career Success*

## Paper 2

### **Letting my true self speak: How daily promotive voice fosters authenticity and satisfaction with life**

Doris Fay, University of Potsdam, Germany; Karoline Strauss, ESSEC Business School, France

**Research Goals.** Authenticity, defined as the “the sense or feeling that one is currently in alignment with one’s true or genuine self, that one is being his or her real self” (Sedikides et al., 2017, p. 521), is an important and positive experience for human beings. Studies show that employees’ experience of authenticity benefits both individuals and organizations. Accordingly, research has investigated how organizations can encourage authenticity, focusing on how leaders can promote the experience of authenticity in their followers, or how authenticity can be fostered through work design, organizational climate or culture. However, employees are not only passive respondents to the organizational context. Instead, they may find avenues to align their behavior with their true self and express their authentic values at work through their discretionary behavior. The aim of our paper is thus to explore the active role of individuals in their experience of authenticity.

**Theoretical Background.** We propose that voice behavior, employees’ discretionary communication of suggestions or concerns aimed at affecting change in the organization is an important avenue through which individuals express their “true self” at work. Voice may enhance the experience of authenticity because it entails the two key conditions necessary for authenticity to emerge. First, the experience of authenticity requires to have the sense that the behavior is self-authored (Ryan & Ryan, 2019, p. 99). Voice behavior involves employees going above and beyond the expectations of their job role, providing an opportunity to experience one’s behavior as self-authored. Second individuals need to have “the subjective experience of alignment between one’s internal experiences and external expressions” (Roberts et al., 2009, p. 151). Speaking out about work-related improvements and concerns provides an organizationally sanctioned avenue for employees to leave the path of prescribed work behaviors and instead align their behavior, i.e., their verbal expressions, with their thoughts, feelings, and values. We furthermore expect the effect of promotive voice on authenticity to be stronger than the effect of prohibitive voice, because the former (advancing suggestions for improvement) allows for more self-expression than the latter (flagging up work problems). We finally propose that the experience of authenticity entails beneficial consequences for individual well-being. Drawing on previous research on the well-being implications of authenticity (e.g., Kernis & Goldman, 2006; Wood et al., 2008) and a recent integration of the authenticity literature (Cha et al., 2019), we propose that authenticity results in higher satisfaction with life, and that effect of authenticity on life satisfaction is mediated by the satisfaction of psychological needs and personal resources. Thus, our model implies a serial mediation in which the expression of voice positively affects the experience of authenticity, which in turn enhances need satisfaction (autonomy, relatedness, competence) and contributes to personal resources (self-esteem), which finally contribute to satisfaction with life.

**Design.** We tested our model with two daily diary studies (each  $n > 100$ ,  $k > 400$ ). Study 1 was conducted with full-time employees whom we recruited via an online access panel. Participants completed one day-level survey at the end of each workday over four consecutive workdays. Study 2 participants (service sector employees) completed four surveys each day (morning, noon, afternoon, evening) over five consecutive workdays.

**Results.** We analyzed the data with multilevel structural equation modeling. Findings of Study 1 indicate that daily promotive, but not prohibitive voice, is positively associated with daily

authenticity. This effect reached through to daily satisfaction with life, mediated by autonomy need satisfaction and self-esteem. Study 2 replicates the findings. Daily morning promotive voice but not prohibitive voice is positively associated with afternoon authenticity. This effect reached through to end-of-day life satisfaction, mediated by afternoon autonomy need satisfaction and afternoon self-esteem.

Limitations. Even though in Study 2 the measures were obtained in the temporal order implied in our model, we must be careful with conclusions regarding causality. Future research may obtain ratings of voice from differences sources (e.g., supervisors, peers).

Conclusions. Our research highlights the active role that individuals have in their experience of authenticity at work.

Relevance to the Congress Theme. Organizations operating in the present and in the future will rely on organizational members' input in form of voice; therefore, we need to fully understand its consequences.

Relevant UN SDGs. Findings relevant to understand workers' well-being at work.

*Keywords: Voice, Authenticity, Life Satisfaction*

### Paper 3

#### **To speak out again or not? A qualitative exploration of how employees make decisions after unheeded voice attempts**

Anita Starzyk, NEOMA Business School, France

**Research goals.** Employee voice is not always welcome. Managers can resist or disregard when employees speak about work-related concerns or ideas for improvement (Burriss et al., 2017; Lam et al., 2019). The dominant perspective is that employees will turn silent when managers neglect their voices (Bashshur & Oc, 2015; Morrison, 2014). In contrast, some researchers have suggested that employees can endure managerial neglect and sustain their voice (King et al., 2019; Lam et al., 2018). However, the question remains when and why employees choose to speak out again, even after initial pushback. I aim to support employees in shaping their voice attempts to become more effective and sustainable in bringing about positive change at work.

**Theoretical background.** The research on employee voice, silence, and issue selling has focused on employees' initial decisions, general motivations, and the means of how they speak out or remain silent (e.g., Milliken et al., 2003; Morrison, 2011; Dutton et al., 2001). By weighing up the implications of voice versus silence for themselves and others, they decide whether speaking out or remaining silent is fruitful and advantageous. However, employees must question and re-evaluate their previous decisions when their initial attempt at voicing an issue has failed. Consequently, I focused on how employees re-engage with this decision-making process and which factors they emphasized when managers rebuffed employees' initial aspirations and expectations.

**Approach.** I interviewed 19 employees monthly over three months following a semi-structured qualitative protocol. I chose this approach because experiences of managerial neglect are common but not frequent, and the process of speaking out again unfolds over several weeks. In the first semi-structured interviews, I identified issues that had fallen on deaf ears or that employees had struggled to implement. In the two follow-up interviews, I enquired whether and why employees had opted to (not) speak out about those issues again. In total, I conducted 57 interviews, on average of 83 minutes at the first meeting, 45 minutes at the second, and 43 minutes at the third. The 19 interviewed employees worked in various positions and industries. They were 21 to 68 years old, and six had managerial responsibilities.

**Findings.** Managerial neglect often triggered a re-evaluation. Adapting to the given circumstances, employees re-evaluated the relevance of the issue and the implications of (not) voicing it again. The preliminary thematic analyses indicated that their re-evaluation was impacted by two significant aspects: (1) different time frames and (2) various stakeholders. Regarding time aspects, employees focused mainly on the present but also took into account short-term and longer-term perspectives. Depending on the issue, employees identified themselves, their relations, their managers, their colleagues and co-workers, and the organization as relevant stakeholders. Importantly, employees did not consider all aspects thoroughly. The salient aspects depended on the employee, the issue, and the manager. Finally, their decision-making could further generalize from this particular issue to impacting similarly themed issues or their future voice and silence more broadly.

**Limitations.** This approach captures accessible cognitive processes that employees can reflect on and verbalize. Future studies could complement this research with experimental approaches to investigate implicit and subconscious processes.

Conclusions. Employees do not immediately turn silent. Their decision to (not) speak out again depends on the time frames and stakeholders they consider in the decision-making process. Adopting a changed time frame and taking more or other stakeholders into account impacts how they re-evaluate the importance and the consequences of not following up on the rebuffed issue. These differences in decision-making may explain why some employees believe in getting heard and continue striving for change.

Relevance to the Congress Theme. Most employees reflect on how they can continue to have a voice, which issues they should address, and how they should broach them. I contribute to empowering employee voices further. This study proposes an extended decision basis for employees to consider after initial setbacks: Which time frames and stakeholders are relevant in the context of the particular issue? Is the managerial neglect relevant only for this issue or, more broadly, for similarly-themed issues and their overall voice? This extended decision basis can enable employees to be better heard and sustain their motivation to speak out again.

Relevant UN SDGs. This study fits within the goals of (1) enabling decent work and organizational growth and (2) promoting the good health and well-being of employees. The findings can support employees to continue pushing organizations to change continuously for the better while maintaining their engagement and well-being.

*Keywords: Voice, Managerial Reactions, Qualitative*

## Paper 4

### **Still waters run deep – and may be dangerous: How employee silence affects workplace incivility over time.**

Mona Weiss, Freie Universität Berlin, School of Business and Economics; Hannes Zacher, Leipzig University, School of Psychology

**Research Goals.** Employee silence—the conscious withholding of potentially important information, suggestions, or concerns by employees—is a widespread phenomenon in organizations and can have detrimental consequences for organizational functioning and employee well-being. Even though it has been shown that silent employees often psychologically withdraw from their workplace, scholars have so far neglected the possibility that this withdrawal, over time, could make employees more prone to engage in negative workplace behavior. Thus, we aimed to expand our theoretical understanding of silence by investigating whether silence, over time, could also lead employees to harm other people at work.

**Theoretical Background.** Drawing on social identity theory, we propose that silence that is motivated by fear and resignation (i.e., quiescent and acquiescent silence) relates to lower subsequent organizational identification, which, in turn, relates to higher instigated incivility over time. This is because employees who are silent are likely to feel that their own personal goals and identity cannot be aligned with their organization. This should lower their feeling of “oneness” and identification with their organization. Thus, we hypothesize:

H1a: Acquiescent silence is related to lower subsequent organizational identification.

H1b: Quiescent silence is related to lower subsequent organizational identification.

H2: Organizational identification is related to lower subsequent instigated incivility.

H3a: Acquiescent silence has a positive indirect effect on subsequent instigated incivility through lower organizational identification.

H3b: Quiescent silence has a positive indirect effect on subsequent instigated incivility through lower organizational identification.

**Design.** We tested our model using five waves of longitudinal data across four months from 609 employees working in different industries. We analyzed our longitudinal data using a RI-CLPM. In contrast to the traditional CLPM, which confounds between- and within-person effects, the RI-CLPM allows for decomposing between- and within-person variance. Moreover, the RI-CLPM provides an assessment of the stability of the variables over time (by including auto-regressive paths), as well as a simultaneous test both of the hypothesized effects of silence on organizational identification, and on instigated incivility respectively, and of the reverse causal effect of instigated incivility on organizational identification, and silence.

**Results.** Supporting H1a, results showed that acquiescent silence related to lower subsequent organizational identification ( $B = -.106$ ,  $SE = .035$   $p = .003$ ). Moreover, as predicted by H2, lower organizational identification was related to increased instigated incivility at the subsequent measurement point ( $B = -.042$ ,  $SE = .018$   $p = .023$ ). The predicted indirect effect (H3a) was significant at  $B = .004$ ; 95%CI = .001 to .011. Contrary to predictions (H1b & H3b), no significant effect of quiescent silence on organizational identification emerged ( $B = .001$ ,  $SE = .039$ ,  $p = .978$ ).

Limitations. Because our measures rely on self-report data future research should obtain data on silence and instigated incivility from other sources, such as co-workers (silence), or supervisors (incivility).

Research and Practical Implications. Overall, this study expands the literature on employee silence, organizational identification, and workplace incivility. Our study is the first to demonstrate that employees who do not speak up because they feel that their input is futile may subsequently dissociate from their organization and harm other people at work. We also extend previous research on workplace incivility that has focused on more apparent predictors such as trait anger or conflict management styles. Thus, organizations should identify and target chronic patterns of silence among employees.

Relevance to the Congress Theme. Workplace change is stimulated by employees who speak up and halted or even impaired when they remain silent. Our findings offer important insights into the motives of silence and their longer-term implications for employees and their organizations.

Relevance to UN SDGs. One important goal laid out by the UN SDGs is to promote socially sustainable and inclusive workplaces. This includes identifying patterns and sources of maladaptive workplace behaviors such as instigated incivility that could harm interpersonal relationships and individual well-being.

*Keywords: Silence, Organizational Identification, Incivility*

## Symposium S019

### The within- and between-person dynamics of proactive behavior

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science

What will be covered and why. In today's world of work, employees need to cope with increasing amounts of complexity and uncertainty. For doing this successfully, proactivity, defined as “making things happen” (p. 828; Parker et al., 2010), has been highlighted as a crucial competence. Individuals differ in their propensity for proactivity, but proactive behavior is also influenced by and shapes individuals' social context. By studying within- and between-person processes of proactivity, a fuller understanding can be gained of how supportive environments for proactivity can be created. The four studies in the symposium cover different kinds of proactive behavior (e.g., feedback seeking, job crafting, personal initiative) and investigate different avenues of how to conceptualize individual proactivity dynamics (e.g., emotional regulation, goal striving) both from within- and between person perspectives. Four contributions are being made by research teams from the Netherlands, Switzerland, Australia, New Zealand, and the United Kingdom. Yashan and colleagues study the reverse relationship from proactivity to emotions in a daily diary design by investigating the effects of personal initiative on intraindividual emotional exhaustion via a dual-pathway model that integrates a resource-gaining and resource-depleting mechanism and proactive personality. Gerlach and Grote develop a theoretical model of how within-person emotional responses to different degrees of uncertainty at work trigger feedback seeking and discuss implications for studying the dynamics of feedback seeking on a daily and weekly level. Keller and colleagues take a work design and goal theory perspective in a weekly survey on how feedback availability (from the job versus others) – which eases enacting proactive behavior - helps employees to adapt and regain clarity about their work tasks during change processes and show that it positively influences task proficiency. Klonek and colleagues highlight possible negative effects of proactivity, which individuals engaging in proactive behaviors should also be aware of: In an experimental study they find negative affective reactions and antagonistic reactions by coworkers (e.g., uncivil behavior, gossiping) towards job crafters. The symposium's discussant Uta Bindl, a distinguished proactivity scholar, accentuates the theoretical, methodological, and practical challenges and implications from the presented research.

Relevance to the congress theme. As today's workplaces shift constantly, organizations call their employees to be proactive and engage in self-managing their work experiences more than ever. Proactivity is a key requirement for employees to manage the challenges well as the changes coming with new models of work and emerging economic, societal, and technological changes. The symposium helps to integrate what we know about processes of self-regulation and of relevant social processes involved in effective proactive behavior.

Research and practical implications. This symposium suggests that within-person approaches are relevant to understand employees' internal mechanisms that spark or hinder the positive effects of proactive behavior on stress, well-being, and performance. The symposium also advances our theoretical understanding of how within- and between-person processes may interact. Practice can benefit from this understanding of when and why employees self-initiate proactivity and what outcomes stem from it to tailor organizational support to cultivating successful proactive behaviors.

Overall conclusions. This symposium sheds light on processes of proactivity that relate to within- (e.g., emotions and goal-related processes) and between-person dynamics (e.g., through other individuals at work), and highlights processes that can buffer uncertainty or emotional exhaustion and can endorse individual well-being, motivation, and performance.

discussant: Uta K. Bindl, King's Business School

*Keywords: proactivity, self-regulation, research design*

## Paper 1

### The effect of daily personal initiative on emotional exhaustion: Integrating resource-gaining and resource-depleting mechanisms

Daryna Yashan & Lixin Jiang | School of Psychology, University of Auckland, New Zealand; Zitong Sheng, Future of Work Institute, Faculty of Business and Law, Curtin University, Perth, Australia

Research goals and theoretical background. Proactive behaviour overall and personal initiative in particular have become desired characteristics of modern employees. Despite the amount of research on proactive behaviour, its effects on well-being outcomes vary. Scholars have discussed its benefits as well as adverse consequences. This study draws upon Cangiano and Parker's (2015) dual-pathway theoretical model and integrates the resource-gaining and resource-depleting mechanisms of daily proactive behaviour. Specifically, the resource-gaining path characterises the positive spiral of well-being benefits stimulated by proactive behaviour. In contrast, the resource-depleting path suggests that individuals' engagement in proactive behaviour consumes energy and as a result, they experience more adverse outcomes such as increased emotional strain and role overload. We further suggest that one's disposition to be proactive in nature (i.e., proactive personality) influences which mechanism is more dominant. To the best of our knowledge, this study is the first to integrate the two conflicting streams of research by investigating the distinct daily resource-gaining and resource-depleting mechanisms of proactive behaviour.

Design and methodology. This study focused on one specific type of proactive behaviour, personal initiative. Utilising a daily diary design, we analysed the effect of daily personal initiative behaviour at work on one's experienced emotional exhaustion at the end of the working day. We hypothesised that daily personal initiative activated a resource-gaining path through positively influencing one's daily work goals progress (H1), which in turn reduces end-of-day emotional exhaustion due to boosting employees' resources (H2). On the other hand, daily personal initiative was also proposed to activate a resource-depleting path, such that one's engagement in daily personal initiative behaviour directly drains resources and increases the end-of-day emotional exhaustion (H3). In addition, we also proposed the moderating role of proactive personality in enhancing the effects of the resource-gaining path (H4) and weakening the effect of the resource-depleting path (H5).

Results and conclusions. Using daily diary survey data of 156 New Zealand employees across five working days, this study found support for the resource-gaining path but not the resource-depleting one. Specifically, daily personal initiative behaviour was found to significantly and negatively affect the end-of-day emotional exhaustion both directly ( $\gamma = -.18, p < .001$ ) and via the mediator of daily work goals progress ( $\gamma = -.09, p < .001$ ; 95% CI =  $[-.13, -.05]$ ). Our findings therefore suggest that engaging in initiative behaviour in the morning reduces the level of emotional exhaustion at the end of the working day by helping one make more progress on one's work goals. In addition, engaging in personal initiative also directly reduces end-of-day emotional exhaustion. These findings together indicate that employees' engaging in proactive behaviour has immediate well-being benefits on a daily basis.

Additionally, proactive personality only significantly moderated the negative direct effect of daily personal initiative on the end-of-day emotional exhaustion ( $\gamma = -.14, p < .01$ ), but not the indirect effect via daily work goal progress ( $\gamma = .07, p > .05$ ). The higher one's proactive personality is, the more strongly that daily engagement in personal initiative behaviour lowers emotional exhaustion. This result suggests that proactive behaviour engenders more well-being benefits for people who are

proactive by nature. In comparison, proactive personality did not significantly moderate the effect of daily personal initiative on daily goals progress, indicating that personal initiative helps people make better progress on work goals irrespective of one's proactive personality. In other words, this result suggests that the benefits of daily engagement in proactive behaviour on work goals progress is more universal – showing personal initiative in the morning increases one's work goals progress at the end of the workday, whether the person is proactive by nature or not.

Relevance to the congress theme/UN SDGs. Theoretically, this study emphasises the immediate benefits of daily engagement in proactive behaviour by examining the dynamic relationship between morning personal initiative and end-of-day emotional exhaustion. Our study also makes a methodological contribution by utilising a daily diary design, which provides strong empirical evidence on the focal relationships. This study aligns with the congress theme of “The Future is Now: the changing world of work”. Proactive behaviour by nature is future-oriented and focuses strongly on “making things happen” (Parker et al., 2010; p. 828), findings of the current study further highlight the value of such behaviour—proactively striving to bring about change in the environment and oneself to achieve a different future has immediate well-being benefits for employees themselves. The positive effect of employee proactive behaviour is also closely connected to the UN Sustainable Development Goal of promoting good worker health and well-being.

*Keywords: daily initiative, emotional exhaustion, dual-pathway model*

## Paper 2

### The role of emotional states and perceptions of uncertainty in feedback seeking behavior

Alina Gerlach & Gudela Grote | Department of Management, Technology, and Economics, ETH Zurich, Zurich, Switzerland

**Theoretical background.** Due to its importance in navigating the high levels of uncertainty in current organizations, proactive behavior such as feedback seeking has attracted increasing attention. Individuals who seek feedback proactively aim to acquire more information about their goal attainment and work performance to align their efforts with the requirements of their surroundings. Feedback seeking is conceptually closely tied to uncertainty, but within-person approaches on how daily-level changes in uncertainty perceptions address changes in feedback seeking behavior remain scarce. This theoretical contribution intends to examine the connections between individual perceptions of uncertainty and different types of feedback by establishing the role that emotional states play in the feedback seeking process. We draw upon current frameworks of uncertainty self-regulation as well as proactivity and emotions to outline a contingent model of how these components interact. By discerning different types of uncertainty and the emotional responses they engender, we can observe that individuals could seek feedback in different ways to learn and develop themselves professionally at work.

**New perspectives/Contributions.** Research on feedback seeking behavior is moving away from the understanding that feedback seeking is mainly motivated by an uncertainty reduction motive, as uncertainty itself does not always lead to feedback seeking. The underlying idea is that individuals are averse to feeling uncertain at work, and when they do, they seek for feedback to reduce it. However, feedback does not always reduce uncertainty, and research has revealed numerous other motivational states that influence feedback seeking. Given that asking other workplace members (e.g., supervisors, peers) is a prerequisite for active feedback seeking, one major source of uncertainty is the social context of work. This social context is likely producing other perceptions of uncertainty than task-related uncertainty, which gives less room for perceptions of self-threat to one's identity. In this research we propose a novel lens on this context by investigating the intraindividual processes that drive these relationships. We further propose that one main mechanism that links feelings of uncertainty and feedback seeking on a micro-level are individuals' emotional states at work. Drawing from theory on proactivity and emotions, we propose that if individuals experience uncertainty about themselves that stems from the task versus the self, it will set off different emotional responses (positive, ambivalent, negative), which influences feedback seeking. We further give reason to the fact that not all individuals encounter uncertainty daily. Given that some extent of uncertainty is needed so that individuals can develop professionally and learn at work, we argue that, under conditions of certainty, individuals will engage in different types of proactive feedback seeking to arouse some extent of self-uncertainty with the goal of favoring professional development and learning. We discuss this proposition for states of task-related and social certainty.

**Conclusion.** With this research, we aim to establish the relevance of emotional states in feedback seeking and integrate the interactive effects of perceived uncertainty and emotional responses. Our research advances theory of within-person processes driving feedback seeking by conceptualizing the role of perceived uncertainty about the self as a driver of emotional states at work. Given that it is yet unclear whether intra-individual processes of feedback seeking are happening on a weekly- or daily-level we will discuss initial results from a pilot study in relation to the proposed theoretical contribution. We inform practice of intraindividual dynamics that should be accounted for when

designing workplaces and leadership processes by proposing different influences of uncertainty on emotional states and feedback seeking.

Relevance to congress theme. Given that the world of work is already changing, our study emphasizes the significance of different perceptions of uncertainty at work and their impact on behavior such as feedback seeking in today's workplace. We provide a theoretic solution to inconsistencies in feedback seeking research about its relation to uncertainty while contributing with a conceptional framework that aims to better understand individual emotional responses to uncertainty.

UN SDGs. This research is related to the UN Sustainable Development Goals of ensuring good health and well-being for individuals who experience uncertainty at work, along with decent working conditions.

*Keywords: feedback seeking, emotions, uncertainty self-regulation*

### Paper 3

#### **Am I on the right track? The role of feedback availability during change processes**

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**Research goals.** Many employees started working from home, without any preparation or prior experience, due to COVID-19 lockdown measures. Feedback availability supports employees to cope with new, challenging situations as it helps them to understand their tasks and roles within the company, which in turn allows them to set relevant goals. Typically, the literature distinguishes two sources of feedback availability, that is, feedback from the job and feedback from others. In this study, we investigate the different temporal patterns of feedback from the job versus others, and their dynamic relationship with motivational states and task proficiency, to understand how employees adapt and regain clarity about their work tasks during change processes.

We contribute to the literature in three ways. First, work design is dynamic and changes regularly. Accounting for such changes potentially offers insights into how employees manage to successfully adapt. Second, the work design literature typically does not compare the functioning of feedback from job versus others. Although feedback from others serves similar functions as feedback from job (i.e., goal setting), it can also contain a social message about one's current and future standing in the organization. Third, we focus on procrastination as a transmitting process between feedback and proficiency. Procrastination refers to delaying work despite knowing that the delay is costly and can signal a state of feeling overwhelmed and a lack of motivation. Feedback might be well suited to help employees overcome procrastination as it provides clarity what needs to be done at what quality and speed.

**Theoretical background.** Drawing from work design and goal theories, we propose that feedback has beneficial effects on proficiency via decreased procrastination. Feedback from the job gives employees cues if they are making progress in the right direction to achieve their work goals which decreases procrastination. Similarly, feedback from others is thought to have decreasing effects on procrastination as the feedback signals accountability and can include constructive help to solve arising challenges. However, once employees experience increases in proficiency, they will have learned which cues from the task to look for and have adapted to the changes in their environment. These experiences increase feedback from the job subsequently. In contrast, we assume continued feedback from others to take away attention from proficiently executing the tasks and once employees understand their role, they no longer require feedback from others, indicated by a subsequent decrease in feedback from others.

**Methods.** We collected data from 444 full-time employees working from home during the early stages of the pandemic. Participants were invited to complete a weekly questionnaire for four weeks. Participants were 41.6 years old ( $SD = 10.9$ ), 70% were female, worked 36.1 hours per week over the four weeks of observations (ranging from 25.1 to 36.9, average  $SD = 13.1$ ), worked for 6.1 years with their current organization, and held diverse occupations. We used validated scales to assess feedback from job, feedback from others, procrastination, and proficiency.

**Results.** After establishing measurement invariance, we estimated random intercept cross-lagged panel models to test the reciprocal assumptions over time. At the within-person level, increases in

feedback from both sources led to subsequent increases in proficiency directly (job:  $b = .10$ ,  $p < .05$ ; others:  $b = .08$ ,  $p < .05$ ) and via increases in procrastination (job:  $b = -.17$ ,  $p < .05$ ,  $b = -.13$ ,  $p < .05$ ; others:  $b = -.10$ ,  $p < .05$ ,  $b = -.11$ ,  $p < .05$ ). In addition, increases in proficiency led to subsequent increases in feedback from the job ( $b = .25$ ,  $p < .01$ ), but there was no lagged effect on procrastination or feedback from others.

**Conclusions.** By focusing on the temporal patterns of the two types of feedback, we illustrate the different functioning of feedback availability during change processes. Although both types of feedback increase proficiency directly and indirectly via procrastination, we only found reciprocal relationships for feedback from the job. Employees may have learned how to interpret cues from their tasks to understand if they make progress in the right direction. Presumably, feedback from others signals a clear discrepancy between expected and delivered proficiency. Our results indicate that employees need feedback from others to adapt to fundamental changes in their work environment as it may provide opportunities to discuss action plans.

Limitations of our study include lack of information on the quality of feedback (e.g., valence) and use of self-report for proficiency.

Relevance to congress theme/UN SDGs. Understanding how employees adapt to changes in their work not only fosters understanding of proficiency, but also contributes to the UN Sustainable Development Goal of promoting employee well-being.

*Keywords: feedback availability; change processes; procrastination*

## Paper 4

### The dark side of crafting: How does job crafting affect coworker reactions?

Florian Klonek & Sharon K. Parker | Centre for Transformative Work Design, Future of Work Institute, Faculty of Business and Law, Curtin University, Perth, Australia; Maria Tims, Department of Management and Organisation, School of Business and Economics, Vrije Universiteit Amsterdam, The Netherlands

**Research goals.** The research goal of this research project is to shed light on the consequences of individual crafting within interdependent contexts and its impact on coworkers. Job crafting is a form of proactive behaviour that entails employees' self-initiated alterations of job design and task features to match them with individual needs. Examples are taking on new tasks that suit their skills better or taking the lead in a project so that they are more in control of their work environment. Although much research has indicated benefits of job crafting regarding individual outcomes, more recent perspectives have highlighted that job crafting might also result in negative consequences since alterations of job boundaries can impact colleagues and coworkers.

**Theoretical background.** Job crafting refers to employees' self-initiated alterations of their job design and task features. While research has suggested that crafting has positive consequences for job incumbents, many tasks and roles are embedded within a collaborative or team environment. Hence, alterations of tasks, workload, and social relationships may elicit negative emotional reactions in proximal coworkers that work closely on interdependent tasks. Thus, we need a better understanding of the potential negative consequences of crafting with respect to affective and behavioural reactions. We hypothesized that certain job crafting behaviors (decreasing hindering job demands, increasing challenging job demands, and increasing structural resources) are associated with negative affective responses and antagonistic reactions in coworkers. With respect to antagonistic coworker behaviours, we focus on uncivil behaviors (low-intensity deviant behaviours with an ambiguous intent to harm) and gossiping (informal and negative evaluative talk about a person who is not present) about the job crafting coworker.

**Design and methodology.** We developed an experiment in which we manipulated job crafting behaviors from a fictional coworker. In the experimental simulation, participants are engaging in an immersive email collaboration task. In this task, participants are randomly assigned to a coworker who engages in four different types of job crafting (and a non-crafting control condition in which the fictional coworker did not craft and adhered to the requirements of the job descriptions). The job crafting manipulations were validated in a pilot study with  $N = 70$  participants. In the main experiment, we sampled  $N = 197$  participants. We present how the experiment allowed us to measure the extent to which participants engage in antagonistic coworker behaviors (i.e., uncivil communication towards the fictional coworker) and gossiping about the coworker. We measured affective reactions towards the job crafting coworker using self-report measures of affective resistance.

**Results.** Analysis of variance showed significant differences between crafting conditions on affective resistance towards the crafter, gossiping about the crafter, and uncivil behaviors towards the crafting coworkers. Contrasting crafting conditions with the control condition revealed that decreasing hindering demands crafting (and increasing structural demands) elicited affective resistance in comparison to coworkers from the control condition (who did not craft). Furthermore, decreasing hindering demands (and increasing structural demands) also elicited antagonistic coworker reactions

(i.e., gossiping) in comparison to the control condition. Crafting in the form of decreasing hindering demands and increasing challenge demands was significantly associated with uncivil behaviors from the participants. We discuss the initial results of this experiment and clarify a better understanding the affective and relational consequences of job crafting.

Limitations. One limitation is that the data were collected from a sample of undergraduate students, thus having limitations with respect to external validity.

Conclusions. We found that some job crafting forms can elicit antagonistic reactions and affective resistance towards the crafter. Thus, our study helps towards a better understanding of how crafting can harm coworker relationships. A practical implication is that employees should be carefully advised that only some forms of job crafting (e.g., increasing social resources) are helpful, while others could elicit negative coworkers' reactions. Future research could explore how context (e.g., high task interdependence) or attributions of the coworker (e.g., prosocial motives) might further worsen negative crafting effects.

Relevance to the congress theme. Research on job crafting is highly relevant to the congress theme "The Future is Now: the changing world of work." The changing nature of work means that workers are not only experiencing top-down changes with respect to when and how they work but also that jobs increasingly have more fuzzy boundaries that allow proactive behaviours like job crafting behaviours (i.e., employees make self-initiated changes to their jobs).

UN SDGs. The consequences of proactive employee behaviour (such as job crafting) are closely connected to the UN Sustainable Development Goal of promoting good worker health and well-being.

*Keywords: job crafting, coworker reactions, affective responses*

## Symposium S020

### Recent Developments on Mindsets and Cognitions at work

Federico Magni & Alina Gerlach | ETH Zürich

science

Content: This symposium will cover current research on mindsets in the work and organizational domains. Mindsets are defined as the beliefs people hold about specific characteristics—mostly about such characteristics being fixed or malleable—and have been studied in relation to several individual characteristics and other factors, including personality, intelligence, creativity, and stress. Since the groundbreaking work of Dweck and colleagues, mindset research has enjoyed high popularity because it combines theoretical contributions and tangible impact, often achieved through interventions. The research projects featured in this symposium extend the current literature on mindsets by looking at previously understudied mindsets, such as those related to uncertainty, socioemotional attributes, culture, and technological ability, and by linking mindsets to other fundamental cognitive processes. Specifically, Magni and colleagues develop and validate a measure of uncertainty mindset as a new and important construct with two dimensions (threat/opportunity and fixed/malleable) and relations to relevant work outcomes. Howe compares mindsets about cognitive and socioemotional attributes, finding in a multi-nation, large sample that people tend to have more fixed mindsets about the latter (e.g., empathy, emotional intelligence) than the former (e.g., intelligence). Chao and Lam look at how a growth cultural mindset can facilitate one's sense of competence in intercultural contexts by reducing intercultural rejection sensitivity, and test whether an environment supportive to intercultural learning amplifies this effect. Wong and colleagues study implicit beliefs about technological ability, and specifically how employees' growth digital mindset is impacted by their leaders' own digital mindset. Richner and colleagues take a neuroscientific perspective and not only study cognitive processes such as the ability to update one's knowledge and to inhibit automatized thinking as important predictors of ambidextrous behaviors, but also design an intervention aimed at improving these cognitive and meta-cognitive skills.

Relevance to the Congress Theme: The world is an increasingly complicated place and mindsets are not only a prevalent tool that we use to make sense of what is happening around us, but also a promising area of intervention for making people better able to cope with the challenges of the future of work. Specifically, uncertainty (in a post-Covid world), socioemotional skills (in a world where humans collaborate with AI and need to contribute what machines still cannot), and the ability to successfully manage intercultural exchanges and digitalization are critical factors for workers, managers, and organizations to thrive. Moreover, behaviors that allow people to cope with fast-changing and uncertain situations (e.g., ambidextrous behaviors) will be more and more necessary, and it is critical to understand how to foster the enactment of such behaviors via cognitive mechanisms, such as mindsets and cognitive flexibility.

Research and Practical Implications: This symposium highlights the relevance of mindsets and related cognitions in impacting relevant work outcomes in a rapidly changing social environment. It situates mindsets within a wide nomological network, looking at antecedents of mindsets (e.g., leaders' mindsets, cognitive skills), comparing mindsets with each other (e.g., cognitive vs. socio-emotional, threat/opportunity vs fixed/malleable), and evidencing relevant consequences of mindsets (e.g., cultural adaptation, wellbeing, feedback seeking, creativity, ambidexterity). It also establishes the relevance of previously understudied mindsets, for instance those related to uncertainty, socio-emotional attributes, culture, and digital technology, as well as of how cognitive

flexibility works with mindsets in leadership trainings. Through the recruitment of large samples and the development of interventions, the research featured in this symposium not only provides relevant theoretical advancements to the mindset literature, but also offers important practical implications.

Conclusions: Overall, this symposium shows that mindsets and cognitions are critical for thriving in the current, complex organizational context, and it highlights the broad implications of mindsets and related cognitions at work. This stream of research combines solid theoretical grounding with practical impact and relevance, highlighting its potential for not only advancing knowledge, but also improving people's life and work thanks to this knowledge, often through interventions and by better understanding mindsets and their consequences. In addition, mindsets can support a more human-centered approach in the current organizational context by putting beliefs and attitudes center-stage.

Relevant UN SDGs: #3 Good Health and Well-Being, #4 Quality Education, #8 Decent Work and Economic Growth, #16 Peace, Justice, and Strong Institutions

*Keywords: mindsets, cognitions, work outcomes*

## Paper 1

### Uncertainty mindset: scale development and nomological network of a new construct

Federico Magni, Laura Elaine Strittmatter & Gudela Grote | ETH Zürich; Sara Zaniboni, Università di Bologna; Julian Pfrombeck, Columbia University; Alina Gerlach, ETH Zürich

**Research goals:** Envisioning uncertainty mindset as a key predictor of people's attitudes and behaviors towards uncertainty, we conceptualize uncertainty mindset as a new construct, develop scales to measure its subdimensions, and test its convergent and divergent validity in comparison to other uncertainty-related constructs and other mindsets, as well as examine its nomological network. Our goal is to show that seeing uncertainty as malleable and as an opportunity positively relates to desirable work- and life-related outcomes.

**Theoretical background:** Research on uncertainty regulation is moving away from the conceptualization of uncertainty as something negative to avoid and minimize towards a more encompassing view of uncertainty as something that can be regulated in both directions—i.e., increasing and decreasing it. As people decide whether to reduce or increase uncertainty by comparing their uncertainty preferences with their perceived level of uncertainty around them, we advance uncertainty mindsets as a key predictor of uncertainty preferences. We build on existing mindset research (e.g., on growth mindset and stress mindset) and conceptualize two dimensions of uncertainty mindsets: uncertainty as threat vs opportunity, and uncertainty as fixed vs malleable. We expect people to generally hold relatively threat and fixed uncertainty mindsets and aim to link opportunity and malleable uncertainty mindsets to desirable states, attitudes, and behaviors, including wellbeing, reduced stress, creativity, feedback seeking, and proactivity.

**Design/methodology:** We developed scales to measure the four facets of uncertainty mindsets (threat, opportunity, fixed, malleable) through discussions within the research team as well as thanks to external expert feedback, including a scale development workshop. This resulted in 14 pairs of items (6 pairs for fixed/malleable and 8 for threat/opportunity). In a pilot study, we collected data on 141 employed participants to conduct EFA on this initial pool of items. Subsequently, we collected two-wave data from 679 employed participants to conduct CFA on the retained items, as well as test convergent and divergent validity, and the nomological network of the new scales in two domains (general life and work).

**Results obtained:** The results of the pilot study led us to exclude one pair of items from the fixed/malleable scale and two pairs from the threat/opportunity scale, leaving us with 5 and 6 pairs of items, respectively. The factor structure suggested that threat and opportunity mindsets were two separate constructs, whereas fixed and malleable mindsets were two ends of the same continuum. In addition, we found the fixed/malleable mindset to be different in the work domain and in the general life domain, whereas the threat and opportunity mindsets were both domain general.

**Study 1 results** confirmed the factor structure from the pilot study, with all items loading on the respective factor, and suggesting the following constructs as distinct: fixed/malleable mindset in life, fixed/malleable mindset at work, threat mindset, and opportunity mindset. Moreover, we found these mindsets to be distinct from both other mindsets (e.g., growth mindset, stress mindset, creativity mindset, ageing mindset) as well as from other uncertainty-related constructs both in life and at work specifically. Finally, threat and fixed mindsets were negatively linked, while opportunity

and malleable mindsets were positively linked to desirable outcomes, such as satisfaction, learning goal orientation, reduced stress, creativity, feedback seeking, career planning, and expansive agency.

Limitations: Our studies were conducted on convenience and online samples, so we need to collect data in real organizational contexts to enhance the generalizability of our findings. In addition, we need to complement our current work with experimental evidence to test the causality of the proposed relations.

Conclusions: We establish uncertainty mindset as a relevant and distinct construct, and we also evidence its dimensionality in terms of the threat-opportunity and fixed-malleable dimensions in life and at work. We create and validate item scales to measure these dimensions of the uncertainty mindset and showcase the links of these dimensions to relevant work and general life outcomes.

Relevance to the Congress Theme: In the recent years with pandemics, wars, globalization, and fast-paced technological advances, uncertainty is skyrocketing. This generates negative consequences for many people, threatening wellbeing and productivity. By proposing uncertainty mindset as a new construct, we not only want to show the relevance of such mindset on relevant work and life outcomes, but also set the basis for intervening on this mindset, with the goal of putting individuals in a position to benefit from uncertainty, for example by fostering lifelong learning, new career opportunities, and creativity.

Relevant UN SDGs: #3 Good Health and Well-Being, #4 Quality Education, #8 Decent Work and Economic Growth, #16 Peace, Justice, and Strong Institutions

*Keywords: mindset, uncertainty, construct development*

## Paper 2

### Fixed mindsets about socioemotional attributes versus cognitive attributes: A global study in 35 countries

Lauren Howe & Jochen Menges | University of Zürich; Laura M. Giurge, London School of Economics

**Research goals:** Empirical evidence demonstrates that empathy and emotional intelligence can be learned and developed. Meta-analyses find that both trainings on emotional intelligence and empathy induce increases. Yet we theorized that individuals may not broadly endorse the view empathy and emotional intelligence are trainable skills. Our research thus set out to examine whether working adults across the globe might hold more fixed mindsets about socioemotional attributes (i.e., believing they are static, difficult to develop) relative to cognitive attributes.

**Theoretical background:** Theories often describe empathy as innate and depict emotional intelligence as a disposition that is heritable to the same degree as personality traits. There is a general lack of measures that can be used at scale to reliably mark progress on the development of these attributes, which may give the impression that they are difficult to systematically develop. Reflecting this more fixed view of socioemotional skills, experts refer to such skills as “tough-to-teach intangibles.” Given a large body of evidence illustrating that holding a more fixed mindset about attributes prevents individuals from developing them further, more fixed mindsets about these attributes could present a barrier to embracing these skills at scale for the future of work.

**Design/methodology:** We embedded an experiment in an online survey fielded to 18,605 working adults across 35 countries. Each participant completed a scale assessing fixed mindsets about one of four attributes (e.g., “People have a certain amount of \_\_\_\_\_, and they can’t really do much to change it”). We randomly assigned each participant to complete the scale about either one of two socioemotional attributes (empathy, emotional intelligence) or one of two cognitive attributes (intelligence, programming aptitude). We also examined participants’ valuation of socioemotional skills in the future of work via participants’ ratings of the anticipated actual importance and desired importance of socioemotional versus technical skills in the future of work.

**Results obtained:** Across the globe, working adults viewed the socioemotional attributes (i.e., empathy and emotional intelligence) as more difficult to develop than the cognitive attributes (i.e., programming aptitude and intelligence). Fixed mindsets about empathy were particularly pronounced; it was seen as more fixed relative to emotional intelligence. Illustrating these differences, most working adults (55.5%) endorsed a fixed mindset about empathy and 50.8% of working adults endorsed a fixed mindset about emotional intelligence. In contrast, a minority of working adults endorsed a fixed mindset about intelligence (44.7%) and programming aptitude (43.4%). Participants with more fixed mindsets about socioemotional attributes predicted that these skills would be less valuable in the future of work relative to technical skills and also said that these skills should be less valued in the future of work.

**Limitations:** We found an association between mindsets about socioemotional attributes and future prioritization of these skills; further evidence is needed to determine causality. We assessed fixed rather than growth mindsets, but did so because this can minimize socially desirable responding.

**Conclusions:** To create a more human-centered future of work that complements technical expertise with fundamentally human skills like empathy and emotional intelligence, people may first need to be encouraged that these skills can be learned. Promoting empathy for the future of work may

present a challenge, given that this attribute was seen as the most fixed of those examined. Institutions may need to take steps to promote growth mindsets about socioemotional skills in education and work experiences, such as presenting evidence that these skills can indeed be increased through trainings. As socioemotional learning programs proliferate in education, they could address such beliefs. Societal dialogues about socioemotional skills may need to be shifted to dispel the myth that such skills are set in stone.

Relevance to the Congress Theme: Socioemotional skills, and in particular empathy and emotional intelligence, are increasingly cited as key for the future of work. The World Economic Forum placed emotional intelligence on its list of the top ten skills employees need to remain employable and labeled empathy as a “must-have” for future leaders and organizations. Academic research also illustrates the importance of socioemotional skills in the future of work, suggesting that automation will result in increased jobs where these skills are valued. Yet our results suggest that to encourage individuals to train socioemotional skills to prepare for the future of work, society may need to address widespread fundamental misbeliefs about the nature of these attributes.

Relevant UN SDGs: #3 Good Health and Well-Being, #4 Quality Education, #5 Gender Equality, #8 Decent Work and Economic Growth, #10 Reduced Inequalities, #16 Peace, Justice, and Strong Institutions

*Keywords: mindsets, socioemotional attributes, cognitive attributes*

### Paper 3

#### **From mindset to cultural competence: Understanding the effects of intervention and its boundary conditions**

Melody Manchi Chao, Hong Kong University of Science and Technology; Elia Q.Y. Lam, University of Toronto

**Research goals:** The increasingly multicultural society presents challenges to organizations, from serving culturally diverse clients, building effective multicultural teams, to enhancing employee adjustment. Cultural competence, also known as cultural intelligence, refers to the ability of individuals to work effectively in culturally diverse settings. Although it is suggested to be a learnable attribute, little is known about whether and how cultural competence can be enhanced, and, more importantly, when it would flourish. This research draws on the literature on mindset to address these issues.

**Theoretical background:** Cultural mindset refers to the beliefs that attributes and knowledge about cultural groups are malleable or fixed. In intercultural interaction contexts, there are often uncertainties involved that might result in misunderstanding and setback. Having a malleable cultural mindset has been shown to be important in enabling sojourners to adjust to foreign cultures and promoting more positive intercultural negotiation outcomes. In short, becoming culturally competent often involves trial-and-error in learning how to deal with unfamiliar others in new environments. Therefore, a malleable cultural mindset can play an important role in developing cultural competence. Past studies have shown that anxious anticipation over potential rejection due to cultural group membership can be particularly salient in intercultural contexts. In order to enhance cultural competence, we argue that it is important to impart individuals with malleable mindsets to reduce their discomforts and concerns toward intercultural interactions, enabling individuals to see potentially challenging intercultural situations as important learning experiences. Specifically, a malleable mindset reduces intercultural rejection sensitivity, which then increases their sense of competence in intercultural contexts (Hypothesis 1). Furthermore, the effect of mindsets would be contingent on the intercultural context. The literature on cultural intelligence is typically quiet about the impact of the cultural environment, as the environment is often assumed to be open to intercultural learning. We argue that, however, the positive effects of mindsets would only materialized in an environment that would support intercultural learning (Hypothesis 2). We examined these two hypotheses through two field experiments (Studies 1 and 2) and an online experiment (Study 3).

**Design/methodology:** Study 1 recruited 232 international exchange students to participate in a 2-part study. Before their departure (Time 1), participants completed baseline measures of their mindsets, intercultural rejection sensitivity, and cultural intelligence. During their overseas exchange (Time 2), the participants either received a malleable mindset intervention or no intervention. They then completed the same measures as in Time 1. Study 2 recruited 148 international exchange students. Before their departure (Time 1), participants either received a malleable mindset intervention or no intervention. They then completed measures of their mindsets, intercultural rejection sensitivity, and cultural intelligence. During their exchange overseas (Time 2), they completed measures that assessed their general, social, and academic adjustment experiences. Study 3 is an ongoing project in which we aim to recruit at least 950 participants online to complete a scenario study, which involves either a friendly or a hostile foreign cultural environment. Participants are randomly assigned to either the mindset intervention or no intervention. The study involves a 2

(Environment: Friendly vs. Hostile) X 2 (Intervention: Yes vs. No) design. After the manipulations, their intercultural rejection sensitivity, and their perceptions and reactions toward the other culture would be assessed.

Results obtained: Structural equation modeling showed that across Studies 1 and 2, the mindset intervention was related higher sense of cultural competence through reducing rejection sensitivity. Study 2 further showed that the pre-departure intervention effect carried over to enhance cultural adjustment experiences when the students were overseas. As note, Study 3 is an ongoing project. We expect to find that the effect of the mindset intervention would only be effective when there is environmental affordance.

Limitations: This project represents an initial step toward enhancing intercultural effectiveness through mindset interventions. It mainly examines self-perceptions and attitude toward the other culture. Future studies could examine whether mindset interventions would influence interpersonal interactions in the long run.

Conclusions: This research suggests that intercultural competence can be learned through shaping mindsets.

Relevance to the Congress Theme:

In this rapidly changing world of work, it is important to impart our future workforce with the mindset to learn and adjust now to prepare them for the every changing future.

Relevant UN SDGs: #4 Quality Education, #8 Decent Work and Economic Growth, #16 Peace, Justice, and Strong Institutions

*Keywords: mindset, culture, intervention*

## Paper 4

### **Spillover Effects of Leaders' Mindset About Technological Ability on Employees' Mindset in Contexts of Technology Induced Change**

Katarzyna Adamska, BI Norwegian Business School; Laura Traavik, Kristiania University College; Elizabeth Solberg, Institute for Energy Technology; Sut I Wong, BI Norwegian Business School

Research goals: Digitalization, whether to increase workplace efficiency or to drive innovation, often requires implementing changes within the organization at various levels. Managing the changes needed to realize the potential benefits of digitalization can be challenging. The success of these changes could depend on the extent to which leaders and their employees believe in their own and other's ability to learn and adapt to new technology. In particular, people's implicit beliefs about the nature of technological ability and the extent to which it can be developed through dedicated effort, are held to constitute an important part of their "digital mindset." Like mindsets held about human ability in general, beliefs about the nature of technological ability frame people's way of seeing and interpreting digitalization initiatives, and shape their responses to the changes that digitalization requires.

Theoretical background: Extensive research shows that having a growth mindset—the belief that human ability is malleable and can be improved through effort—is advantageous across a range of achievement contexts. On the other, a fixed mindset—the belief that human ability is fixed and cannot be improved—is disadvantageous across a range of achievement contexts. However, little is known regarding the influence that having a growth or a fixed mindset about technological ability has on outcomes important for the success of digitalization initiatives. Notably, research has not addressed if leaders' mindset about technological ability (growth or fixed) can have a spillover effect on their employees' own mindsets about technological ability. Answering this research question is important, because a leader's ability to promote a growth mindset about technological ability among their employees is likely relevant for the success of digitalization initiatives.

Design/methodology: To address this research question, we conducted a vignette-based experimental study with 372 participants. The vignette in our study described an organization that was undergoing large digital changes, where the employees were expected to use some new technological tools in their daily work. Thus, the vignette refers to a situation that is both highly realistic and relevant for today's organizations and their employees, as the majority of them are experiencing or will experience considerable digitalization. Study participants were asked to place themselves in the position of an employee working in the organization described. We manipulated the digital mindset of the leader that study participants worked for in this organization. Specifically, participants were randomly assigned to work under (condition 1) a leader with fixed mindset about technological ability; (condition 2) a leader with growth mindset about technological ability; or (condition 3) a control condition with no indication of leader's mindset about technological ability. After reading the respective vignette, they were asked to complete measures of their fixed and growth mindset about technological ability and their demographics.

Results obtained: The results showed statistically significant differences in study participant's growth mindsets about technological ability across the three conditions. The mean score of participant's growth mindset about technological ability in the condition with the growth mindset leader ( $M = 3.95$ ,  $SD = .60$ ) was significantly higher ( $p < .01$ ) than that of those in the condition with the fixed mindset leader ( $M = 3.29$ ,  $SD = 1.05$ ). Further, the mean score of participant's growth mindset about

technological ability in the control condition with no indication of leader's mindset ( $M = 3.91$ ,  $SD = .67$ ) was significantly higher ( $p < .01$ ) than that of those in the condition with the fixed mindset leader. However, growth mindset scores between the control condition and the growth mindset leader condition were not significantly different.

**Conclusions:** The results of this study extend research on the digital mindset concept, and on the influence that implicit beliefs about the nature of technological ability have in workplace digitalization contexts, by contributing support for the notion that a leader's mindset about technological ability can influence the mindsets held by their employees. In exploring whether a spillover effect exists between leaders' and employees' mindset about technological ability, we bring forth an increased understanding of variation in leaders' success with implementing digital changes. Just as having a growth mindset about general ability is shown to be beneficial in several achievement settings, our research indicates that having a growth mindset about technological ability is beneficial in the context of digital changes in organizations, because it promotes a mindset in the organization that is better oriented to support digitalization efforts and the changes they require.

Relevant UN SDGs: #8 Decent work and economic growth

*Keywords: mindset, technological ability, spillover effect*

## Paper 5

### Cognitive Foundations of Ambidexterity - An Experimental Training Intervention

Jan Richner & Daniella Laureiro-Martinez | ETH Zürich

**Research Goals:** The last couple of years have made more evident the worlds' constant change. Events such as the COVID-19 pandemic, the war in eastern Europe, mass migration, resources shortage, and inflation have shown that societies and leaders' adaptability are and probably will continue to be tested. As adaptability is so important, we want to better understand, how cognitive flexibility predicts a leader's ability to be adaptive—i.e., to switch between exploration and exploitation at the right moment ("ambidexterity"). Cognitive flexibility has already been linked to organizational ambidexterity and we know from extensive empirical evidence that ambidextrous leaders favor the success and survival of their organizations. However, we do not yet know how to train ambidexterity in organizational leaders. With this research we intend to change this.

**Theoretical Background:** At its core, cognitive flexibility is defined as the "mental ability to switch between thinking about two different concepts according to the context of a situation". Cognitive flexibility is based on five antecedents, or executive functions. These are salience detection, sustained attention, updating, inhibition and switching. Salience detection is our ability to identify changing stimuli in the environment; sustained attention is the ability to maintain focus on a task at hand; updating is the ability to process and manipulate information; inhibition is the ability to stop automatized thinking or behavior; switching is the ability to disengage from an irrelevant task set and engage a relevant task set.

**Methodology:** To achieve the first of the two research goals, we conducted a survey study using behavioral task and self-report questionnaires with 198 officer cadets of the Swiss Armed Forces. We included leadership performance evaluations, being conducted by military instructors across several months in officer school and practical service. As a next step, in Spring 2023 we will implement a training intervention with a pre-test–training–post-test experimental design allowing to differentiate training effects between (study/control group) and within (before/after training) participants. This training intervention will be based on cognitive enhancement therapy (CET), defined as "a behavioural training-based intervention that aims to improve cognitive processes ... with the goal of durability and generalization". Core elements of the CET are the use of cognitive exercises and teaching of meta-cognitive strategies.

**Results:** The antecedents of cognitive flexibility predict 9.5 % of variance in ambidextrous decision-making in the lab, while sustained attention and updating are the strongest predictors. In the field, inhibition is most predictive for leadership performance. Cognitive flexibility itself predicts 14 % of variance in the cadets' leadership ability. Equally exploitation, and especially exploration, are highly predictive for leadership performance in the field. We expect that our training intervention will improve ambidextrous decision-making in the treatment group.

**Limitations :** The main limitation of our current results lies in the fact that our survey design does not allow to establish causality. The planned training intervention shall allow to do this. Moreover, our research context marked by strong routines and regulations might have influenced the answer behavior of our participants and might also affect the results of the training intervention.

**Conclusions:** Our empirical evidence shows that the antecedents of cognitive flexibility and cognitive flexibility itself are promising for the training of ambidexterity and leadership performance. This

foundation allows the development of an ambidexterity training intervention. During the EAWOP symposium, we will be able to present the here outlined results as well as initial findings from the training intervention starting in Spring 2023.

Relevance to the Congress Theme: This work will contribute by investigating a better way of training organizational leaders. The experimental training intervention answers the call for urgency by being taught to military leaders who have important roles in addressing our societies challenges—whether regarding pandemics, mass migration or war itself. We address delivery by developing an intervention that trains organizational leaders to balance stability (exploitation) and change (exploration). Our research project improves the way in which the Swiss Armed Forces select and train their leaders.

Relevant UN SGD's: Most directly, our training intervention addresses the UN SGD "Quality Education". Still, considerable empirical evidence shows that ambidextrous leaders are particularly well equipped to manage organizations, which are the most central entity in the achievement of all UN SGD's.

*Keywords: cognitive flexibility, ambidexterity, intervention*

## Symposium S021

### Recent developments in employability research among working and non-working populations

Alessandro Lo Presti, Università degli studi della Campania "Luigi Vanvitelli"

science

As the growing turbulence and unpredictability of the labour market pose additional challenges to individuals, scholars are increasingly interested in those characteristics, skills, attitudes, resources, and behaviours that may support individuals in better coping with occupational transitions. These, in turn, have the potential to enhance individuals' employability, foster their career success, and even promote their well-being. The augmented emphasis on individuals' proactivity in the labour market is a priority to both employees and those who have not entered the labour market yet but are close to this transition, namely students, and in particular university students. While employees need to continuously maintain their employability in uncertain organizational career contexts, university students require employability resources for a successful university-to-work transition. Hence, employability as a research and practical topic attracts the attention of both vocational and organizational psychologists (as well human resource specialists, higher education experts, and others) depending on the examined population (i.e., students vs employees), and consequently on the context under scrutiny (e.g., university-to-work transition vs inter-organizational mobility).

Based on this scenario, the four studies that will be presented during this symposium aim to provide an articulated and diversified picture of the recent developments in employability research: the first two studies examine university students samples, and the remaining two examine employee samples. The contributions examine vital aspects of employability and its antecedents and outcomes, including the relation of employability to well-being from a Conservation of Resources Theory perspective, the role of traits and adaptability resources for employability from a Career Adaptation Model perspective, and the relation of career self-management behaviours to facets of employability from the perspective of content-models of career self-management.

The study by Petruzzello, Chiesa, Guglielmi, van der Heijden, de Jong, and Mariani examined the reciprocal association between self-perceived employability and psychological well-being on a sample of 376 Italian university students and recent graduates by means of a three-wave cross-lagged panel research design. Consistently with the Conservation of Resources Theory, and in particular with the gain spiral idea, they found that self-perceived employability and psychological well-being influenced each other over time.

The study by Gamboa and Lo Presti examined the associations of career decision-making tolerance to ambiguity on one side, and job search behaviours and perceived employability on the other side, also considering the mediating effect of career adaptability on a sample of 235 Portuguese undergraduate students via a cross-sectional research design. The hypothesized direct and indirect effects were confirmed, providing further support to the Career Adaptation model.

The study by Wilhelm, Hirschi, and Schläpfer examined the associations between different facets of career self-management behaviours and employability operationalized in terms of movement capital dimensions through a two-wave time-lagged research design on a sample of 536 German employees. They found that career self-management behaviours (as well as a unitary higher-level construct) were uniquely related to the four dimensions of movement capital, providing additional evidence about the differential predictive role of career self-management behaviours.

The study by Lo Presti and De Rosa examined the reciprocal associations between resource-based employability and psychological well-being indicators (i.e., vigour, emotional exhaustion), also taking into account the mediating roles of objective and subjective career success by means of a three-wave cross-lagged panel research design on a sample of 381 Italian employees. They found that employability positively predicted vigour as well as subjective and objective career success. Moreover, in line with the resource caravan idea, they found that subjective career success mediated its effect on emotional exhaustion, and that vigour mediated the relationship between employability and vigour over time.

Overall, apart from the significant empirical contributions and the theoretical and practical implications drawn from these four studies in terms of antecedents and outcomes of employability, the evidence provided is consistent with some relevant UN Sustainable Development Goals. Indeed, the results suggest ways to reach the goals of Decent Work and Economic Growth, Quality Education, Good Health and Wellbeing, Reduced inequalities, and Partnerships for the Goals.

discussant: Anneleen Forrier, KU Leuven

*Keywords: employability, career self-management, movement capital*

## Paper 1

### **Reciprocal Association Between Self-Perceived Employability and Psychological Well-Being: Evidence for Gain Spirals Among Italian Students**

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#### Research goal

This study aimed to test the reciprocal associations between Self-perceived Employability (SPE) and Psychological Well-being (PWB) among Italian students and graduates. Testing such relationships can add valuably to SPE literature. Indeed, using a longitudinal cross-lagged design advances and deepens the understanding of the nature and direction of the SPE-PWB relationship, offering more robust results compared to previous studies. Moreover, findings may expand the theorising of SPE in early careers, including PWB as an antecedent. This, in turn, generates valuable suggestions for practice.

#### Theoretical background

Research incorporates SPE within the Conservation of Resources (COR) theory framework as a personal resource that labour market entrants may invest not only in effective career behaviours and towards valuable transition outcomes. It also functions as a coping resource against the threats of career entry, thus allowing people to deactivate the resource-consuming loss spiral and invest in gain spirals to foster their mental health and increase PWB. We hypothesised a cross-lagged positive effect of SPE on PWB over time (Hypothesis 1). PWB can also be seen as a resource, in the form of energy to invest in coping with challenging circumstances and incurring positive resource acquisition spirals. Feeling well predisposes people to use broader thinking and action patterns. This could drive them to perform more effectively in life domains, interact with their environment to identify opportunities, and accumulate resources to overcome challenging transition events, herewith promoting more positive appraisals of SPE. We hypothesised a cross-lagged positive effect of PWB on SPE over time (Hypothesis 2). COR theory suggests that both the normal and reversed relationship between SPE and PWB are simultaneously plausible through a process of resource gain where initial resource acquisition stimulates an upward movement. That creates pools of correlated resources following a spiralling trend, meaning that resources create a dynamic synergy, influencing each other over time. SPE can increase PWB over time and, in turn, PWB can exert a positive effect on SPE. PWB can also be the initiator of this process. We hypothesised that SPE and PWB have a positive and reciprocal effect over time (Hypothesis 3).

#### Methodology

We adopted a three-wave cross-lagged research design in which PWB and SPE were measured at each time, starting from November 2019. We invited last-year university students and graduates to complete an online questionnaire three times, with a three-month time lag. They were assured confidentiality and acknowledged the right to participate upon informed consent and withdraw at any time. The final sample comprised 376 participants with a mean age of 25.79 years (SD = 4.21), mostly Women (89.4%).

## Results

Using the AMOS software, the structural equation modelling approach allowed us to test the hypotheses. We achieved a good fit of the measurement models at each time and measurement invariance across time. Results confirmed our hypotheses. SPE and PWB affect each other reciprocally over time, meaning they can be both initiators of an upward positive gain spiral.

## Limitations

Longer time lags and a more representative sample may generate more robust results. Moreover, our study did not account for the perceptions of the labour market conditions, which may affect the hypothesised relationships, especially given the impact of the pandemic.

## Research and practical implications

Our study advances the empirical understanding of the SPE concept. It corroborates the beneficial effect of SPE on PWB among entrants with a more robust design. The reverse effect of PWB on SPE offers an empirical basis to inform an extension of the SPE theory, expanding its nomological network and suggesting future research to account for the predicting role of PWB. The three-wave cross-lagged design represents a more reliable solution to support the existence of a gain spiral. In a practical sense, results suggest that SPE and PWB are both building blocks of the path towards sustainability and that they should be fostered with integrated and systemic interventions.

## Relevance to the Congress Theme

Our study remarks on the need for personal resources to achieve sustainability throughout the transition-to-work stage. We argue that a multidisciplinary, integrated, and targeted approach involving policy-makers and stakeholders of youth employment fosters different personal resources and facilitates a sustainable transition to work.

## Relevant UN SDGs

Good health and wellbeing; Decent work and economic growth; Partnerships for the goals.

*Keywords: perceived employability, transition to work, career development*

## Paper 2

### **How Do Employees Stay Employable? Career Self-Management Behaviours and Their Relation to Movement Capital**

Francisco Wilhelm, Dawa Schläpfer & Andreas Hirschi | University of Bern

#### Research goals and why the work was worth doing

Career self-management (CSM) is a multidimensional construct involving various behaviours that individuals use to achieve their career goals, such as staying employable in a rapidly changing career environment. Although CSM has been linked to employability and theories acknowledge the role of CSM in enhancing and maintaining employability, it remains unclear how different CSM behaviours are uniquely related to various facets of employability. This is a significant omission that obstructs our understanding of the specific ways in which individuals shape their employability through various CSM behaviours. Therefore, in the present study, we sought to clarify how CSM behaviour is related to various facets of employability.

#### Theoretical background

We conceptualize employability through the movement capital framework, which defines the various personal resources that facilitate career mobility. Movement capital has four dimensions: human capital, social capital, self-awareness, and adaptability. We propose that CSM behavior must be understood as a hierarchical construct with a general level, referring to the extent to which one generally engages in CSM, and multiple specific behaviors. Drawing on career development theories such as the intelligent career framework, we hypothesize that (a) human capital development is uniquely related to human capital operationalized as occupational expertise, (b) building social contacts is uniquely related to social capital operationalized as the breadth of internal and external networks, (c) career goal setting and planning is uniquely related to self-awareness operationalized as career goal clarity, (d) mobility-oriented behavior is uniquely linked to adaptability operationalized as job market knowledge. Furthermore, we hypothesize that (e) the general level of CSM is positively related to all dimensions of movement capital.

#### Design/Methodology/Approach/Intervention

Self-report data were collected from a sample of N = 536 German employees. CSM behaviours were measured at Time 1. To reduce common method variance, movement capital variables were measured two weeks later at Time 2. CSM behaviours were modelled using bifactor confirmatory factor analysis to distinguish between the general and specific CSM behaviour dimensions. Hypotheses were tested using a series of structural equation models.

#### Results

We found that the hypothesized specific CSM behaviours are uniquely related to the four dimensions of movement capital, while the general level of CSM was also related to all four dimensions of movement capital. Furthermore, we found that mobility-oriented behaviour was negatively related to career goal clarity, while building social contacts was positively related to job market knowledge.

#### Limitations

Our findings are based on a single sample of German employees and should be replicated in other populations. Furthermore, longitudinal studies are needed to investigate the extent to which CSM behaviours maintain and enhance movement capital and the extent to which movement capital facilitates engaging in these CSM behaviours.

#### Conclusions

We contribute to the employability literature by clarifying how CSM behaviors are linked to central facets of employability. Specifically, this extends the movement capital framework, which has acknowledged the role that CSM may play in maintaining and enhancing employability but does not specify the specific relations among CSM behaviors and different dimensions of movement capital. Hence, our examination of the role of CSM behaviors in predicting movement capital enables a better understanding of how persons develop and enact their employability through behavioral processes.

#### Relevance to the congress theme

In a changing world of work, individuals today increasingly need to become proactive and manage their employability through CSM. As such, the present study advances our understanding of how individuals become agents of their careers in a changing world of work.

#### Relevant UN SDGs

The issues addressed in this study may ultimately enable practitioners in fields such as career counselling and HRM to better support their client's careers and working lives, thereby contributing to the UN SDGs 'decent work and economic growth' and 'quality education'.

*Keywords: employability, career behaviour, proactivity*

### Paper 3

#### **Employable, successful, and healthy, or vice versa? A three-wave cross-lagged analysis**

Alessandro Lo Presti & Assunta De Rosa | Università degli studi della Campania "Luigi Vanvitelli"

#### Research goals and why the work was worth doing

This study aimed to examine the positive associations between employability and psychological well-being as mediated by objective and subjective career success through a three-wave cross-lagged research design. Previous studies showed that the association between employability and work-related well-being relies largely on cross-sectional studies (Kinnunen et al., 2011), with the most recent longitudinal studies encompassing two-time lags (Vanhercke et al., 2015) or more time lags with a limited array of well-being indicators and/or without the examination of potential mediators (De Cuyper et al., 2010; Kirves et al., 2014). Furthermore, the mediating roles of subjective and objective career success (hereafter, SCS and OCS) with respect to the association between employability and work-related well-being have been largely overlooked. Consequently, this study aims to go beyond these gaps present in the employability framework.

#### Theoretical background

The study is grounded on the CoR theory (Hobfoll, 1989) and on the resource-based model of Lo Presti and Pluviano (2016), which defined employability as a personal resource that can protect individuals from stressful events (e.g., inadequate working conditions, underemployment) and promote their well-being (Vanhercke et al., 2016) through the intervening role of career success. Based on this theoretical background, we argue that employability, career success, and work-related well-being are personal resources, pertaining to the work domain, that individuals try to develop and accumulate, as they can be conceived as desirable states that people strive to attain.

#### Design/Methodology

We sampled 381 Italian employees (response rate = 38.52%; initial N = 989) on all the study variables across three time points over a period of eight months. Associations between variables (considering one outcome at a time) were examined through structural equation modelling testing for direct causation, reversed causation, and reciprocal causation.

#### Results

We found that employability positively predicted vigour, subjective and objective career success, showing that the availability of resources may spark individuals' energy and lead to favorable outcomes providing additional evidence about the novel resource-based conceptualization of employability (Lo Presti & Pluviano, 2016) and its association with work-related well-being variables. SCS mediated the negative association between employability and emotional exhaustion; in other words, a resource caravan exists linking employability, SCS and emotional exhaustion so that employable individuals will perceive their career as more satisfactory and consequently will feel less exhausted. Lastly, vigour mediated the relationship between employability and vigour over time which showed that, consistently with the resource caravan idea, highly employable individuals will also show higher vigour at work because they could count on resources that will increase their energy at work.

#### Limitations

This study has some limitations. First, the drop-out analysis showed that employees who were older, had a longer general tenure and worked less hours a week were more likely to fill the three study questionnaires. Nevertheless, our analysis highlighted no evidence regarding significant differences in the study variables. Second, our data were collected through self-report measures which may rise biases due to common method variance. However, to cope with it, based on Podsakoff et al., (2003), we applied different scale endpoints and formats for the variables to reduce biases caused by commonalities in scale endpoints and anchoring effects; moreover, we randomly inserted items into the questionnaire and scales were graphically separated from each other. Third, our study used CLPM (cross-lagged panel model) analysis focusing on the prospective effect of individual differences in a construct on change in individual differences in another construct.

#### Conclusions and Practical Implications

This study brings evidence for the differentiated impact of employability on subjective and objective career success and indicators of work-related well-being. In particular, resource caravans were found in regards to emotional exhaustion and vigour, providing the literature with a more exhaustive and empirically solid examination of the longitudinal effects of employability, as a personal resource. From a practical standpoint, organizations may encourage a stronger employability culture (Nauta et al., 2009), invest in opportunities for competency development (De Vos et al., 2011), or broaden the set of developmental human resources practices (van Harten et al., 2020), while, career success may be also fostered by providing clearer career paths (Lo Presti & Elia, 2020) or through career counseling and training interventions (Glerum & Judge, 2021).

#### Relevance to the Congress Theme

As employability is increasingly recognized as a personal resource that can facilitate the entering and permanence into the labour market, our study contributed to shedding light on its longitudinal associations with career success and psychological well-being, consistently with the sustainable career idea.

#### Relevant UN SDGs

Good health and well-being – decent work and economic growth.

*Keywords: employability, career success, psychological well-being*

## Symposium S023

### What Happens When You Say Something: Individual-, Dyad-, and Team-level Outcomes of Employee Voice

Mona Weiss, Freie Universität Berlin; Tina Davidson, Erasmus University

science

What will be covered and why

Employee voice behavior refers to employees' discretionary communication of ideas, opinions, and work-related concerns to improve team and organizational functioning. Whereas employee voice behavior is intended to bring about positive change in the organization, there remains much to be learned about the type of outcomes voice may affect (incl. those at different levels), and by what mechanism(s) and under which circumstances such change is likely to take effect. With this symposium, our aim is to contribute to the emerging conversation in this area by exploring novel perspectives on the nature and level of impact voice can affect (e.g., future voice behavior, leader empowering behavior, team performance), as well as by providing a systematic understanding of the processes and conditions under which such impact can occur.

This symposium comprises five papers explaining when (i.e., moderators) and why (i.e., mediators) voice impacts a range of novel outcomes at the team-, dyad-, and individual level. Isaakyan et al. investigate how voice can affect team coordination and performance and find differentiated effects of private voice (i.e., directed at few team members) and public voice (i.e., directed at all team members). Androulidaki et al. ask when and why employee voice can develop leaders in terms of the extent to which they empower their employees and whether leader self-reflection can strengthen such developmental value of employee voice. Herrmann et al. look at how supervisor's perceptions of employee warmth and competence determine whether they recognize and give credit to employees' taking charge behavior (i.e., conceptually related to voice). At the individual level, Weiss & Zacher explore whether voice can result in an "initiative penalty" (i.e., being tasked with taking care of voiced suggestions and concerns) and how this affects subsequent voice episodes by drawing on longitudinal data from a diverse sample of employees. Finally, Davidson et al. examine how voice can be a lever for leader identity development for women (vs. men) and further investigate perceived leadership effectiveness as a downstream consequence of such leader identity development.

Collectively, this symposium advances research on voice by introducing new voice outcomes at different levels within the organization (i.e., team, interpersonal, and individual level) and delineates processes by and circumstances under which voice can be helpful (vs. harmful) in these areas.

Relevance to the Congress Theme

Understanding more about the consequences of employee voice is crucial in the changing world of work as voice is a main driver of change and innovativeness. Only when employees engage in voice, and are heard by their supervisors, co-workers, and teams, change is likely to occur and sustain. Voice is also critical in how we deal with change. Because our work context is now subject to various profound changes (e.g., digitalization, gig economy, demographic change, climate change), it is not only imperative that people critically respond to these transformations and speak up with their concerns but that others respond to their input in most effective ways.

Research/Practical Implications

This symposium presents a new research agenda on consequences of voice and expands theoretical knowledge on important moderating conditions at different levels of analysis. Moreover, we provide important practical implications for leaders, teams, and HR practitioners to help reap the benefits of employee voice in organizations.

#### Overall conclusions

Against the backdrop of today's ever-changing world and workplaces, this symposium presents new theoretical developments regarding when and how employee voice can initiate and facilitate change in individuals' work experiences (e.g., well-being), their self-views (e.g., leader identity), as well as affect leader behavior (e.g., leader empowering behavior) and team functioning (e.g., team coordination and performance).

*Keywords: employee voice; proactivity; outcomes*

## Paper 1

### **Distinguishing Public and Private Voice in Teams Diverse in Regulatory Mode: Its Effects on Team Coordination and Performance**

Sofya Isaakyan, Erasmus University; Subra Tangirala, University of Maryland; Elad Sherf, University of North Carolina

#### Research Goals and Why the Work Was Worth Doing

One of the key functions of voice, or the expression of work-related ideas, opinions, or concerns by team members (LePine & Van Dyne, 1998), is to help members effectively coordinate—integrate and align ideas, actions, and efforts to accomplish tasks. Yet, we know relatively little about when voice is more or less likely to benefit team coordination processes which are essential for effective team performance (Marks et al., 2001).

#### Theoretical Background

We make a distinction between public team voice (i.e., instances in which members voice in the presence of all other members) and private team voice (instances in which members voice only to some of their peers) and drawing from the regulatory mode theory (Higgins et al., 2003), argue that public team voice contributes to coordination processes in teams composed of members who are diverse in how they analyze the task (i.e., assessment mode) and act on the task (i.e., locomotion mode). Importantly, we do not expect similar benefits for private team voice. We then argue that team coordination positively affects team performance and that the relationship is stronger when team diversity in assessment and locomotion mode is higher.

#### Design & Methodology

To test our conceptual model, we collected data over two years using a sample of 171 student teams (13 teams had 3 members, 158 teams had 4 members) with 671 participants (M age = 18.62, 54% female) as part of the Organizational Behavior course in a business school in the Netherlands. At the start of the team project (Time 1), we measured members assessment and locomotion modes (Higgins et al., 2003). Halfway through the project (Time 2), members reported how often other members engaged in public and private voice using 1-item round robin measures. At the end of the project (Time 3), they rated their team coordination (Mathieu et al., 2020). Finally, we collected objective data on performance (i.e., grades on team projects) (Time 4).

#### Results

Results showed that public team voice was positively related to team coordination and interacted with diversity in assessment mode such that the relationship was positive when diversity in assessment was higher and not significant when diversity in assessment was lower. Similarly, public team voice interacted with diversity in locomotion mode such that the relationship was positive when diversity in locomotion was higher but not significant when diversity in locomotion was lower. Private team voice was not related to team coordination and interaction effects between private team voice and team diversity in assessment mode as well as between private team voice and team diversity in locomotion mode were not significant either. Results also showed that team coordination interacted with diversity in assessment mode such that coordination was positively related to team performance when diversity in assessment mode was higher but not when diversity in assessment mode was lower. The indirect effect of public voice on team performance via team coordination was

positive when diversity in assessment mode was higher but not significant when it was lower. The interaction between coordination and diversity in locomotion mode was not significant.

#### Limitations

While we employed a lagged field study design to establish causality, we still encourage scholars to replicate our research using a controlled experimental set-up to provide better evidence for causality.

#### Conclusions

Our research contributes to the voice literature by underscoring how voice might lead to different team outcomes depending on (a) whether it is enacted in the presence of all other team members or only in the presence of some of the peers and (b) whether team members are diverse in how they analyze and act on the task. Moreover, we challenge the predominant negative view on public voice (Detert & Edmondson, 2011; Isaakyan et al., 2021) by demonstrating that when teams high in regulatory mode diversity do not utilize public forums, and, instead, keep voice in private one-on-one settings, they encounter unique coordination pitfalls that can hamper effective team functioning.

#### Relevance to the Congress Theme

This research highlights how teams can best utilize their members voice to effectively address rising opportunities and potential threats in today's complex and changing world of work.

#### Relevant UN SDGs

Voice behavior contributes to a more inclusive environment and thus is indirectly relevant to the United Nations sustainable development goal on reducing inequalities (SDG 10).

*Keywords: voice; teams; coordination*

## Paper 2

### **Investigating the effects of supervisors' social judgements of employees on recognising employee proactivity**

Schaefer, S., Bindl, U.K., & Reich, T.

#### Research Goals and Why the Work Was Worth Doing

Proactive behaviour, that is employees' self-initiated and future-oriented action to bring about change (Parker et al., 2006), is increasingly expected by organisations. However, outcomes of proactivity are mixed; for example, findings on how supervisors respond to proactive behaviour of their direct reports is somewhat inconsistent (Grant et al., 2009). One potential explanation lies in employee proactive behaviour not always being recognised by the organisation. It is therefore important to develop our understanding of factors that influence supervisors' recognition of employee proactive behaviour, to ensure this important behaviour will be rewarded in organisations.

#### Theoretical Background

We draw on the Stereotype Content Model (SCM; Fiske et al., 2002) to argue how supervisors' social judgement influence their perception of their direct report's engagement in proactive behaviour. According to SCM, social judgement of others' behaviour depends on a combination of two fundamental dimensions: warmth and competence. Warmth refers to social judgments that another person has a concern for others, whereas competence refers to perceptions another person has high ability, intelligence, agency, and skills. We argue that warmth and competence judgements will influence whether supervisors recognise employees' proactive behaviour (taking charge) in comparison to a more affiliative type of extra-role behaviour (helping). Taking charge at work is understood as a display of dominance and assertiveness. In contrast, helping others is more likely to be prompted by close relationships, directed toward benefiting others (Van Dyne & LePine, 1998). Because interpretations of an employee's behaviour may depend on social evaluations by others, we argue that general perceptions of the direct report as warm vs competent will influence supervisors' perceptions of employee proactivity (vs. helping) such that behaviour that aligns with a supervisor's overall expectation of the direct report will make that behaviour more salient and will lead to greater recognition of the behaviour in the form of higher performance ratings for proactivity (vs. helping).

#### Design & Methodology

We tested our hypotheses in a sample of matched supervisor-direct report dyads (N = 214) across a wide range of occupations and organisations in the USA via an online survey panel provider ([www.studyresponse.net](http://www.studyresponse.net)). We used established and validated scales to assess supervisors' perceptions of direct report's overall warmth and competence, as well as of employees' engagement in, vs. supervisors' performance ratings of, taking charge and helping at work.

#### Results

We used multiple hierarchical regression analysis in SPSS, using Hayes' Process Macro Model. In support of our theorising, the relationship between employees' self-reported engagement in taking charge behaviour and supervisor ratings of taking charge performance was stronger for employees who were perceived to be high (vs. low) in competence as well as low (vs. high) in warmth. However, we did not find support for the expected interaction between supervisor warmth or competence perceptions for helping behaviour.

## Limitations

Although our findings account for a wide range of occupations and organisations and therefore allow for overarching insights into how employee proactivity is perceived by supervisors' contingent on their social perceptions of their direct reports, future research would benefit from considering the importance of warmth vs. competence perceptions in specific organisational settings, such as those with a distinct organisational culture and norms/expectations on proactivity at work.

## Conclusions

The presented study expands the discussion on the conditions necessary for employees to receive credit from supervisors for their proactive behaviour. Our findings suggest employees will receive better proactive performance ratings if they are perceived by their supervisor to be 'the type of person' who fits with the values associated with proactivity at work. Supervisors may need to be encouraged to be more aware of and to recognise performance that may not fit with their overall perceptions of their direct reports. In addition, organisations aiming to promote proactivity in staff may benefit from providing training or additional feedback to these employees already motivated to engage in proactivity on how to enact it in ways that will be seen and recognised by their supervisor.

## Relevance to the Congress Theme

This study contributes to addressing the 21 st EAWOP Congress call-to-action focusing on employee proactivity. In particular, we advance understanding of a largely overlooked but valuable topic of the consequences of supervisors' social judgement for direct reports' behaviour. Thus, we develop insights into the conditions necessary for employees to be recognised for their proactive behaviour.

## Relevant UN SDGs

This study has relevance for SDG8, that is inclusion and equality at work, by contributing to our understanding of the consequences of supervisors' social judgement. With this, we highlight training potentials (SDG4) to promote proactivity.

*Keywords: voice; supervisor judgments; warmth and competence*

### Paper 3

#### **Why Don't YOU Just Take Care of This? Longitudinal Relationships between Voice and Perceived Voice Penalty**

Mona Weiss, Freie Universität Berlin; Hannes Zacher, Leipzig University

##### Research Goals and Why the Work Was Worth Doing

Previous research has shown that when employees engage in voice, that is, the discretionary communication of suggestions, ideas, and work-related problems, they can contribute to organizational and team effectiveness and increase their own occupational well-being. However, past research on voice has rarely considered the fact that voice is often a process that necessitates several voice episodes over time. Within this voice process, it is likely that superiors and colleagues may react in a defensive manner as they feel bothered or threatened by the voiced input. In this project, we propose that voice might not only lead to positive or negative reactions from others, but also to a "voice penalty." This perceived penalty for voice might result in additional task load for the voicing employee, which can then affect subsequent voice episodes.

##### Theoretical Background

On the basis of the literature on upward communication, we propose that voice leads to a higher propensity to receive additional task load because voicers challenge the status quo in an organization. As voice may entail proposing an alternative course of action or raising a work-related issue, co-workers and superiors may view such input as threatening and, consequently, react defensively and re-direct the issue to the individual speaking up. Thus, engaging in voice may cause employees to be tasked with solving and managing the issue on their own (i.e., perceived voice penalty), which may affect their willingness to engage in future voice episodes as well as their occupational well-being. Drawing from conservation of resources theory, we propose that voicers who experience a voice penalty will be less likely to engage in subsequent voice behavior in order to protect their resources.

##### Design & Methodology

Using three waves of monthly longitudinal data from a highly diverse sample of working adults (  $N = 368$ ), we assessed voice and positive and negative voice reactions over time. To assess the extent to which individuals perceive negative reactions to their voiced input in the form of additional task load and individual responsibility, we developed an 8-item measure of perceived voice penalty (e.g., "When I spoke up with work-related issues, I was often tasked with taking care of the problem on my own"). We applied Random-Intercept Cross Lagged Panel Modeling (RI-CLPM) to investigate within-person relationships between voice and voice reactions over time.

##### Results

Preliminary results suggest that, at the between-person level, a perceived voice penalty results in more subsequent voice behavior. Within-person relationships suggest differential relationships with promotive (i.e., suggestion-focused) and prohibitive (problem-focused) voice.

##### Limitations

Even though this research is based on longitudinal data and we are able to separate within- from between-person relationships over time, self-presentation issues as well as common method variance remain a concern that should be addressed in future research.

#### Conclusions

Our research fits with emerging conceptualizations of voice as a process that may entail positive and negative reactions and consequently affect future voice episodes.

#### Relevance to the Congress Theme

Initiating positive change and improvement to one's workplace has been considered as a central motive within the voice literature. As such, our research is highly relevant with regard to the question of when individuals are likely to sustain their efforts to induce change at work and how such change is managed.

#### Relevant UN SDGs

One essential UN SDG is the promotion of well-being. We contend that a better understanding of voice and the consequences of inducing positive change at work has implications for both of these overarching goals. Individuals thrive at work when they can exert control over important aspects of their job. Voice is means by which individuals can enact control but we have yet to understand the role of others' reactions in the voice process.

*Keywords: voice; perceived voice penalty; longitudinal relationships*

## Paper 4

### **Enact It till You Become It: How Voice Behavior Affects Leader Identity Development for Women**

Tina Davidson & Hannes Leroy | Erasmus University; Ronit Kark, Bar-Ilan University; Sofya Isaakyan, Erasmus University

#### Research goals and why the work was worth doing

Implicit societal biases and expectations still suggest an incompatibility between a leader role and the female gender role. As a result, women often experience conflicted thoughts and attitudes when contemplating their leadership potential, which renders embracing a leader identity particularly challenging for women. Because leader identity is an important antecedent to leadership emergence, effectiveness, and development, this research explores how women can develop their leader identity despite prevailing societal biases assuming a misfit between their gender role and aspired leader role.

#### Theoretical background

We draw on the behavioral theory of identity construction (Ashforth & Schinoff, 2016) which posits that behaviors which are self-initiated, public, and prototypical for a particular identity are most likely to lead to internalization of this identity. Applying this theoretical premise, we argue that voice behavior—the voluntary expression of constructive change-oriented ideas, suggestions, and opinions with an intent to improve organizational functioning (Morrison, 2011)—represents such self-initiated public behavior prototypical for leader identity which can support leader identity development. Moreover, drawing on the behavioral theory of identity construction, we propose that women will benefit more from engaging in voice behavior than men as they are more likely to be attentive to cues regarding whether they fit the leader prototype. We further propose that individuals who internalize a leader identity are also more likely to be perceived by others as effective in their leadership. Specifically, conceiving of oneself as a leader (i.e., strong leader identity) urges individuals to more frequently practice and display leadership across domains and situations. Hence, we expect that individuals with a strong leader identity are more likely to be viewed as effective leaders. Taken together, we propose that gender moderates the indirect effect of voice behavior on perceived leadership effectiveness via leader identity, such that the indirect effect is stronger (vs. weaker) for women (vs. men). In other words, by behaving leader-like—in the form of voice behavior—women can effectively undo some of the biases they encounter when taking up a leader role, and the process by which this happens is through strengthening their leader identity.

#### Design & Methodology

We tested our conceptual model across two studies. Study 1 employs a between-person time-lagged design ( $n = 247$ ) and Study 2 employs a within-person repeated-measures design ( $n$  between = 134,  $n$  within = 450). Voice and perceived leadership effectiveness were peer-rated using a round-robin design. Leader identity was self-rated.

#### Results obtained

Across two studies, we found support for our conceptual model. In particular, engagement in voice behavior interacted with gender such that voice was positively related to leader identity for women but not for men. Furthermore, leader identity was positively related to perceived leadership effectiveness. Finally, the indirect effect of voice on perceived leadership effectiveness via leader

identity was moderated by gender, such that engagement in voice behavior was positively related to perceived leadership effectiveness via leader identity development for women, but not for men.

#### Limitations

While this research finds general support for our conceptual model across multiple samples, using multiple sources, and research set-ups, future research should still do well to replicate and extend this work by using a controlled experimental set-up to provide more conclusive evidence for causality.

#### Conclusions

This research expands emerging work in the realms of gender, leadership, and voice. Specifically, it underscores how leadership development is experienced and carried out differently by men and women and how—for women—engaging in voice behavior can debias perceived leadership effectiveness via the intrapersonal route of leader identity development.

#### Relevance to the Congress Theme

This presentation urges us to exchange ideas and forge future work on gender and leadership vis-à-vis our changing world of work. As more gender-diverse (vs. homogenous) leadership teams do better in turbulent and complex environments, how then can we create more of a level-playing field in leadership? Our presentation puts forward one strategy to address this challenge, as well as stimulates future research in this area.

#### Relevant UN SDGs

With its focus on building women (internal) resources for leading (i.e., leader identity) as well as interpersonal recognition of their effectiveness (i.e., perceived leadership effectiveness), this presentation is of relevance to UN SDG 5 on Gender Equality.

*Keywords: voice; leader identity development; women leaders*

## Symposium S024

### Asynchronous Video Interviews: Applicant reactions, performance and validity

Ottillie Tilston, Department of Organisational Behaviour, University of Lausanne, Switzerland

science\_practice

In today's hiring landscape, interviews are increasingly conducted online in the form of Asynchronous Video Interviews (AVIs). In AVIs the applicant logs onto a platform to record video responses to questions, and the recorded responses are evaluated later. AVIs offer numerous benefits to the hiring process and are already in widespread use. Despite this, research suggests that applicants do not react well to them. Relatively little is known regarding the mechanisms that lie behind these negative interview experiences, and how and why they are related to applicant perceptions, behaviour and performance. This symposium brings together five papers from controlled laboratory and high-stakes settings to shed light on several issues specific to the AVI context.

One defining aspect of AVIs is the lack of synchronous communication between applicant and recruiter. This makes AVIs fundamentally different from other types of interviews, so research is required to understand how it impacts interview outcomes. In the first paper, Germanier et al. compare applicants' responses to past-behaviour questions in the AVI vs. face-to-face context. They also investigate how interview performance is related to job performance, providing one of the first investigations into the criterion-validity of AVI evaluations.

Another defining aspect of AVIs is that they vary widely in the way they are designed. Specific design features are likely to have an important impact on applicant reactions. Research suggests that organisations using AVIs often retain the default settings for many design features, but in doing so they may be missing out on opportunities to improve applicant reactions. Two papers in this symposium investigate this. Using a basic psychological needs theoretical lens, Dunlop et al. experimentally investigate whether allowing applicants to choose the order they answer questions improves reactions. They found no effect of choosing question order on perceptions of need support, fairness or overall candidate experience. Tilston et al. analyse a large dataset to investigate how applicants react to certain design features, in one of the first such investigations with real applicants, and how this relationship is moderated by applicants' demographic characteristics. They found that certain design features improved applicant reactions to AVIs and that this was moderated by age, with younger and older applicants preferring different AVI options, but not gender.

A final defining aspect of AVIs investigated in this symposium is the possibility to integrate artificially intelligent (AI) algorithms for evaluation. Langer et al. investigate whether applicant suitability affects the preference for human versus automated evaluators. While no effect was found for applicant suitability, they found that automated systems were perceived as more consistent and less biased. Nonetheless, participants rated the human decision-maker to be fairer and perceived more possibility to influence the human decision-maker. Finally, Lukacik and Bourdage investigate AI in the context of faking. Participants completed AVIs to examine the effects of type of evaluator (AI or human) and consequences for faking (identification vs. disqualification warnings) on applicant behaviour, reactions and outcomes. Results indicated more honest self-promotion and ingratiation were directed towards A.I. compared to human evaluators. Interview performance was not significantly influenced by evaluator type or warnings.

Overall, these five studies have numerous implications for research and practice. Obtaining a better understanding of the differences between face-to-face interviews and AVIs can contribute to

reducing the potential for bias and unfairness associated with digital technologies (Germanier et al.). Investigating whether all applicants react uniformly negatively to AVIs (Tilston et al.), and whether certain design features can potentially improve applicant reactions (Dunlop et al.) can help organisations design AVIs in a more candidate-friendly way. Organisations using automated evaluation as part of their AVIs need to be aware that applicants prefer human decision-makers (Langer et al.). Taking into consideration how applicants faking behaviour changes when they believe they are being evaluated by AI has clear implications for validity (Lukacik et al.).

This symposium is closely tied to all three facets of this year's congress theme: "The Future is Now". Firstly, AVIs are a novel technology that are transforming the hiring landscape, and the incorporation of AI pushes this even further. As organisational psychologists we must contribute our expertise to effectively implement these selection processes in real-world contexts. Secondly, the use of AVIs has already accelerated as a result of the pandemic, so it is urgent that we understand them better. Thirdly, our papers deliver evidence-based conclusions that can be applied to improve hiring technology in the future.

*Keywords: Asynchronous video interviews, Applicant reactions, AI evaluation*

## Paper 1

### **Effect of face-to-face and asynchronous video interviews on applicant responses to past-behaviour questions, interview performance and job performance**

Elisabeth Germanier, Institute of Work and Organisational Psychology, University of Neuchâtel, Switzerland; Marianne Schmid Mast & Laetitia A. Renier | Department of Organisational Behaviour, University of Lausanne, Switzerland; Mutian He & Philip N. Garner | Idiap Research Institute, Switzerland; Adrian Bangerter & Koralie Tchang Orji | Institute of Work and Organisational Psychology, University of Neuchâtel, Switzerland

Research goals: Past-behaviour questions (e.g., Can you tell me about an occasion where you had to deal with an angry client? ) require applicants to respond by telling a story about their actions in a past work situation. They are valid predictors of job performance. But it is unclear what is measured (poor construct validity). The first goal of this study is to investigate how (1) storytelling responses to past-behaviour questions and (2) interview performance are related to job performance.

Selection interviews are increasingly conducted online. In AVIs, applicants record themselves answering questions through their computer and webcam. Little is known about how the medium and lack of a human interviewer affects their responses to past-behaviour questions. The second goal of this study is thus to compare storytelling responses to past-behaviour questions and interview performance in face-to-face interviews and AVIs.

Theoretical background: Past-behaviour questions require applicants to tell a story about a past job-related situation ( I was working as a client relations manager. One day I got a call... ). Recruiters score them using behaviourally-anchored rating scales (BARS) to measure applicants' mastery of a competency. Although recruiters rate applicants who produce stories better, applicants struggle with storytelling (Bangerter et al., 2014). In addition, despite the high criterion validity of past-behaviour questions (Huffcutt & Arthur, 1994), little is known about whether they actually measure the competency they are supposed to measure (construct validity).

In technology-mediated interviews, applicants often perform poorly (Blacksmith et al., 2014) and give shorter responses (Langer et al., 2017). AVIs in particular are not well accepted by applicants (Basch & Melchers, 2020). Nonetheless, the processes behind these differences are unknown. AVIs typically feature an impoverished communication situation where participants must manage technological affordances, including videorecording themselves and where rapport with an interviewer is absent. Moreover, the criterion validity of AVI is unknown.

This experiment compared mock job interviews in two conditions (face-to-face interview vs AVI, between-subjects) organized in two sessions. In the first session, participants completed a work sample to measure communication skills (job performance measure). In the second session, they participated in either a face-to-face interview or an AVI where they responded to a past-behaviour question asking them about their actions in the work sample. We correlate different facets of the work sample performance and the interview performance to investigate criterion and construct validity, and we also compare face-to-face interviews and AVIs in terms of storytelling and interview performance.

Methodology: 254 undergraduates participated. In the first session, participants completed a work sample. This consisted of two successive role-plays in which participants played the role of a manager whose task was to lay off two different employees. Each role-play was videotaped and

participants' performance was scored using a standardized checklist (our measure of job performance). One week later, in the second session, participants completed a mock selection interview in either the face-to-face or AVI condition. They answered three past-behaviour questions, including one where they were asked to describe what happened in one of the role-plays. Interview performance is determined by rating responses to the past-behaviour questions using BARS. The presence or absence of storytelling and thematic elements of stories (describing situations, tasks, actions or results) were coded.

Results obtained: Coding of job performance, interview performance and storytelling is currently under way. At the conference, we will present results on (1) the effect of face-to-face interviews vs AVIs on storytelling and interview performance and (2) the relation between different facets of job performance and interview performance (construct and criterion validity).

Limitations: One limitation is the experimental nature of the study: the interviews and work samples are not real-life situations. Furthermore, the layoff task is not a recurrent situation in undergraduates' life. Their performance might differ from the work performance of real managers.

Conclusions – research and or practical implications: Results contribute to our understanding of participants' responses to past-behaviour questions in face-to-face and virtual interview settings. They also enable a more detailed understanding of how job performance is related to responses to past-behaviour questions.

Relevance to the Congress Theme: The study's focus on a technological innovation (AVIs) is relevant to the congress theme.

Relevant UN SDGs: Digital technologies carry the potential for bias and unfairness. Our study contributes to a better understanding of potential differences between face-to-face interviews and AVIs, which may contribute to reducing bias.

*Keywords: Asynchronous video interviews, storytelling, interview performance*

## Paper 2

### **Improving Asynchronous Video Interview experiences through autonomy-supportive design: Choose your question sequence**

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Research goals and theoretical background: Although asynchronous video interviews (AVIs) are growing in use (Dunlop et al., 2022; Lukacik et al., 2022), some research has suggested that the assessment format is not well-liked by candidates (Langer et al., 2017). In this experimental study, we adopted Basic Psychological Needs Theory (BPTN) as a lens through which to design an improved AVI experience. Briefly, BPTN proposes that the satisfaction of three psychological needs, autonomy, relatedness, and competence is essential for individuals' adjustment, flourishing, and wellbeing (Deci et al., 2017; Vansteenkiste et al., 2020). The need for autonomy describes the need to experience volition and control over one's behaviours, as opposed to coercion or pressure (Deci & Ryan, 2000). In the context of completing an assessment for a job application, this need may be supported by features that grant flexibility, offer meaningful choice, and have a clear rationale. The need for competence describes the need to experience effectiveness and mastery and can be satisfied by engaging in activities that allow the use and development of skills. Assessments that afford maximal opportunities to demonstrate competence may better support this need than those that do not (Deci et al., 1994; Gilliland, 1993) AVIs typically present interview questions in a pre-determined order, meaning candidates have no opportunity to craft their own AVI experience, and that some may encounter more challenging (competence-threatening) questions early on during the interview. Here, we invited participants in the experimental condition to specify the order in which they would receive the interview questions. We expected these participants to perceive greater support for the autonomy need (attributable to the affordance of meaningful choice; H1), and competence (attributed to the opportunity to start the interview with easier questions; H2), perceive the interview as fairer (H3), and report a more positive candidate experience (H4) compared to those who could not choose the order of questions.

Methodology: Using Prolific, we invited anyone aged 18-30 years and were willing to be recorded on video and received useable responses from 278 participants (65% Female, 33% male, 2% other, Mage = 24.9 years, SD = 3.5 years). Participants were presented with a job advertisement and asked to imagine that they had applied for the role and were subsequently invited to complete a "one-way digital interview". Those in the control condition were informed that they would next be asked to respond to three interview questions on the topics "conflict management", "time management", and "integrity", presented in a randomly determined order. Those in the experimental condition were shown the same three topics, but were then invited to organize the questions in the order they would like to respond to them. Participants then responded to three interview questions in AVI format, in the order determined during the previous session. Finally, participants were redirected to the post-interview questionnaire. Participants responded to 12 items developed in another similar project that measured perceptions of support for autonomy, relatedness, and competence, 4 items apiece (alpha = .79, .90, and .89 respectively). General fairness was assessed via three items from Langer et al 2017 (alpha = .86), and a single item "How would you describe your experience of the selection process at CSA?" with a 7-point extremely negative to extremely positive response scale captured a global candidate experience indicator.

Results: To test all Hypotheses, we performed two-tailed independent samples t-tests. Overall, the differences between the need-support and control conditions were close to zero, with the largest effect size point estimate being Cohen's  $d = 0.15$ . All t-tests were non-significant, with p-values generally well above 0.05.

Limitations and conclusions: Although we expected that providing participants with the opportunity to pre-determine the order in which AVI questions could be answered would improve perceptions of need support and of the fairness and candidate experience, the results did not support these expectations. We suggest that alternative approaches be considered if seeking to design AVIs that are more candidate-friendly. A limitation of this research is that participants were asked to imagine a job application, however a review of the responses to the questions suggested many participants took the exercise very seriously.

Relevance to the Congress Theme: This research is focused on a relatively new piece of technology that is increasingly being used for selection purposes.

Relevant UN SDGs: This research seeks to improve the experiences of individuals in the work context, specifically during job applications (SDGs 8 and 10).

*Keywords: Asynchronous video interviews, Applicant reactions, Autonomy*

### Paper 3

#### **Improving applicant reactions to AVIs: The role of AVI design features and applicant demographics**

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**Research goals:** Despite the numerous benefits that Asynchronous Video Interviews (AVIs) provide to the hiring process, research suggests that applicants do not react well to them (Langer et al., 2017). These negative reactions are likely related to certain design features, as AVIs differ widely in how they are designed (Lukacik et al., 2022). Research is only starting to document how design features are used in practice (Dunlop et al., 2022), and how applicants react to them. In the current hiring landscape, it is important for organisations to establish recruitment procedures that applicants experience positively in order to avoid driving away potential candidates (Carpentier & Van Hove, 2021).

**Theoretical background:** Lukacik et al.'s (2022) model proposes that increased preparation time, response time and opportunity to re-record a response may benefit applicant reactions by reducing interview anxiety and improving fairness perceptions. It also proposes that including video questions in an AVI may improve applicant reactions by enhancing social presence and media richness (Lukacik et al., 2022). The current study tests this model on a large field dataset and extends it by further investigating the effect of number and type of questions (with a focus on past behavioural questions). We also propose that applicants' age and gender may moderate the relationships between design features and applicant reactions. In terms of age, older applicants perceive AVIs to be less fair and useful compared to synchronous interviews (Basch & Melchers, 2019), whereas younger applicants who have grown up with computer-mediated communication may be more at ease with the asynchronous video format. Gender may also moderate applicant reactions to AVI design features due to gender-related differences in appearance anxiety (Fauville et al., 2021).

**Methodology:** Data are fitted with linear mixed-effects models. We examine data provided to us by an AVI vendor comprised of 27,809 candidates, 32% female, mean age 25.9, SD = 7.3, ranging from 16 - 66 years. Data were collected in eleven different countries, 69.3% of them in the anglophone countries of UK, Ireland, USA, and Australia, from 33 clients and relating to 72 unique job positions. Country, client, and job position are included as random effects to account for the nested nature of the data. The data was primarily collected post-March 2020, so can be considered representative of attitudes towards technology-mediated interviewing since the onset of the pandemic.

**Results obtained:** A first model focused on design elements showed that preparation time and opportunity to re-record were positively related to applicant reactions, and number of questions was negatively related to applicant reactions. The remaining design features (response time, video questions, proportion of past behavioural questions) were not. A second model showed that age moderated the positive relationship between preparation time and applicant reactions, and the negative relationship between number of questions and applicant reactions, meaning older applicants preferred more preparation time and fewer questions. Age also moderated the relationship between response time and applicant reactions (older applicants prefer shorter, not longer, response times). A third model showed that gender did not have any moderating effect.

Limitations: Our data are limited by the use of a single item response variable, and future studies should include a broader range of reaction measures.

Conclusions – research and or practical implications: Our results show that certain design features can potentially improve applicant reactions to AVIs. In addition, not all applicants react uniformly (negatively) to AVIs, but younger and older applicants prefer different AVI options. This could enable AVI vendors and organisations to design these interviews in a more inclusive way.

Relevance to the Congress Theme: AVIs are relevant to the congress theme “The future is now” as they are a new selection technology that is transforming the hiring landscape.

Relevant UN SDGs: This paper is relevant to the UN SDG’s of “Gender Equality” and “Reduced Inequalities”. By establishing how AVIs may be experienced differently by diverse groups of applicants, AVI design can be improved in order to prevent additional obstacles in the recruitment process for certain applicants. This also relates to “Decent work and economic growth” for all.

*Keywords: Asynchronous video interviews, Applicant reactions, Diversity and inclusion*

## Paper 4

### **Does applicant suitability affect applicant reactions to automated systems in personnel selection?**

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**Research goals:** As automated systems become increasingly prevalent to support decision-making in management, assessing individuals' reactions to automated systems as decision-makers becomes increasingly important. Whereas there is mounting evidence that applicants react negatively to highly-automated decisions in personnel selection, research unveiling the reasons for the preference for human decision-making still remains scarce. With this study, we contribute to understanding possible reasons why decision-recipients prefer the involvement of humans in consequential decision-making (i.e. decision-making contexts that may influence the decision-recipients' future).

**Theoretical background:** Research showed that applicants prefer human decision-makers over automated systems in interview-based personnel selection (Langer & Landers, 2021). We hypothesise that applicant suitability may affect the preference for human versus automated decision-making. Specifically, especially unsuitable applicants may prefer human decision-makers because they may believe that for human decision-makers they can hope for luck or biased decisions to their own favor. This hypothesis is informed by research showing that people expect humans to have more variance in their decision-making than automated systems (Dietvorst et al., 2020), and by research indicating that people believe systems to be less biased and more consistent in their decision-making processes than human decision-makers (Bigman et al., 2020; Bonezzi et al., 2022).

**Methodology:** In a randomized 2 (recruiting agent: human vs. automated system) x 2 (suitability: suitable, applicant characteristics match the job requirements vs. unsuitable, applicant characteristics do not match job requirements) between-subjects design, participants (N = 172; 72% students, median age = 24) had to imagine being a suitable (unsuitable) applicant for a job opening, and they were informed that they were invited to conduct an asynchronous video interview as selection tool. They were further informed that a human (an automated system) will assess their interview performance. Participants responded to applicant reaction measures (e.g., perceived fairness, opportunity to perform) and to items assessing how strongly participants believe that different applicant characteristics (e.g. qualifications, gender, attractiveness) affect the selection decision.

**Results:** Participants perceived automated systems as more consistent, less biased, and assumed that they are less influenced by immutable, and partly protected, applicant characteristics (e.g., gender, age, ethnicity). For job-relevant characteristics (e.g., job experience, grades, education), we found no difference between the human and the system condition, and even tendencies that participants expect that this information will more strongly influence system outputs than it influences human decision-makers' decisions. However, the preference for human decision-makers prevailed: participants rated the human decision-maker to be fairer and perceived more possibility to influence the human decision-maker. In contrast to our hypotheses, we found no interaction effect between applicant suitability and the nature of the recruiting agent regarding applicant reactions.

**Limitations:** Most participants were students. Also, participants had to imagine being a suitable or unsuitable applicant, so results may differ if participants would actually have to imagine being in a selection situation where their individual characteristics will be assessed.

Conclusions – research and or practical implications: Our results imply that the preference for human decision-makers in comparison to fully-automated decisions prevails despite the fact that our participants assumed human decision-making to be influenced by potentially irrelevant, immutable, and protected applicant characteristics. Additionally, our study contributes to emerging evidence showing that people seem to expect automated systems to be more consistent, less biased, and less influenced by sociodemographic attributes when producing decisions about individuals. From a practical perspective, companies using automated selection tools need to be aware that applicants may believe that systems are less biased than human decision-makers but those applicants might still prefer human decision-makers, possibly because they believe they can more likely exert a positive influence over their outcomes with human decision-makers.

Relevance to the Congress Theme: Fuelled by advances in machine learning, automated systems in personnel selection spread across the globe. This is consequently a topic where “The future is now”, where we as IO psychologists need to contribute our expertise to shape the human-centered implementation of these systems into real-world selection processes.

Relevant UN SDGs: This study has relevance regarding the UN SDGs “Gender Equality” and “Reduced Inequalities” because it examines bias-related reactions to automated selection tools. Expectations regarding less bias and more consistency when using automated systems in selection may be warranted in case providers of such tools invest to optimize their tools in this regard. However, it can also be dangerous to assume that automated tools produce less biased decisions than human decision-makers (e.g., because biased decisions will less likely be revealed).

*Keywords: AI evaluation, Applicant reactions, Fairness*

## Paper 5

### **We're/It's Watching – You've Been Warned! The Effects of Evaluator Type and Warnings on Asynchronous Video Interview Outcomes**

Joshua S. Bourdage & Eden-Ray Lukacik | Department of Psychology, University of Calgary, Canada

**Research Goals:** The proliferation of asynchronous video interviews (AVIs) (Dunlop et al., 2022; Hirevue, 2022) necessitates the investigation of behaviour and reactions to this novel modality. AVI design (the features used when creating and formatting the AVI) can affect applicants' impression management (IM) behaviour and perceptions, such as justice (Lukacik et al., 2022).

**Theoretical Background:** Drawing on faking likelihood theory (Levashina & Campion, 2006), AVI designs that increase applicants' willingness to use deceptive IM (i.e., faking), may negatively impact interview validity (Barrick et al., 2009; Ingold et al., 2015).

**Design:** This experiment (N = 297) had undergraduates complete an AVI to examine the effects of two design features on interview behaviour (i.e., honest and deceptive IM), reactions (i.e., perceptions of justice, technology, difficulty, organizational attraction), and outcomes (performance, subjective perceptions of fit, competence, hireability, likeability, professionalism, seriousness). Top performers could get a bonus. First, we manipulated the type of interview evaluator who would be engaging in deception detection. Mock-applicants were told either an A.I. trained algorithm, or a human evaluator would review their performance. Second, we manipulated the consequences for being caught deceiving (i.e., a faking warning was used) by telling applicants that they could be identified (deception detection was used, but no punishment) or that deception detection meant disqualification (disqualification from bonus).

**Results:** Willingness to engage in deceptive behavior did not significantly differ between the conditions, however, there was some evidence from ANOVA that those presented with a disqualification warning engaged in less extensive image creation (fabricating experience and lying), engaged in more honest ingratiation (truthful expressions of how their values and opinions aligned with the organization), and were overall more honest in their responses. More honest self-promotion and ingratiation were directed towards A.I. evaluators compared to human evaluators. Counter to expectations, evaluator type did not affect technology acceptance, privacy concerns, or perceptions of social justice. Faking warnings were associated with lower privacy, however structural justice perceptions (beliefs about job relevance, information provided, chance to perform, reconsideration and feedback opportunity) were higher for those who were told that deception would be punished (i.e., no chance for a reward). Interview performance was not significantly influenced by the evaluator type or warnings, except for the overall subjective rating of applicant (higher on average for those in the disqualification conditions). These findings should be interpreted with caution, as controlling for number of tests reduced the significance of effects.

**Limitations:** The sample was completing an interview for a position they may not have chosen to apply for but were incentivized to perform their best regardless.

**Conclusions:** This research contributes to our understanding of applicant behaviour in AVIs where there is no dynamic human interaction, and specifically how applicants use honest and deceptive IM in this context. This research also speaks to how deceptive behaviour can be mitigated in AVIs and how applicants react to faking-related AVI design decisions. The findings suggest that faking warnings

may function for AVIs as they have for other assessments (Burns et al., 2015; Dwight & Donovan, 2003; Law et al., 2016; McFarland, 2003).

Relevance to congress theme: AVIs themselves are a novel technology that is changing the hiring landscape, and the incorporation of other technology into AVIs, such as artificially intelligent algorithms, pushes this boundary even further. As such, this work is well-aligned with the theme of the changing world of work. Our contribution to the future is examining the direct effect AVIs have on organizations and work through selection. Our competencies will have to expand to implement AVIs reliably and effectively. It is urgent that new selection modalities follow best practices even in times of economic crisis, and we want to deliver evidence-based conclusions to improve hiring technology in the future.

Relevance to UN SDGs: This work is relevant to the UN SDGs of having decent work and economic growth for all, and to promote industry innovation and infrastructure. The UN notes that two impediments to global economic recovery are labour market challenges and COVID-19. Under the right design conditions, AVIs could be a valuable tool for addressing these issues. AVIs allow for remote and safe selection and can tap international labour markets to screen applicants worldwide. Further, the UN notes that higher technology industries are more resilient in a crisis than lower technology industries. Further investigation is needed to determine best practices, but AVIs are one technological innovation that may help organizations meet recruitment and selection demands.

*Keywords: Asynchronous video interviews, AI evaluation, Faking*

## Symposium S025

### **Demographic Change is Now: Four Approaches to Bolster the Ability, Motivation, and Well-being of an Aging Workforce**

Julian Pfrombeck, Columbia University; Sara Zaniboni, University of Bologna

science

What will be covered and why (including the contribution of any discussant)

Many European countries experience demographic shifts toward an aging population due to higher life expectancies and lower birth rates over the past decades. Because of these developments, traditional views of careers and retirement systems have become increasingly outdated. In the present and even more so in the future, individuals will be expected to engage in extended working lives and change their careers in alignment with their motivation, ability, and needs. This symposium consists of four contributions from research teams across Australia, Italy, Ireland, Germany, Switzerland, and the United States presenting a variety of approaches to bolster the ability, motivation, and well-being of an aging workforce. McCarthy, Brady, Truxillo, and O'Shea present the results of their meta-analysis on work ability interventions. Work ability captures a person's ability, or perception of their ability, to meet the demands of their current role interventions. Gioaba and Andrei take a self-regulatory perspective to examine the consequences of subtle age discrimination on older workers' well-being in a longitudinal field study. The last two presentations focus on how people's mindsets (i.e., their subjective sense-making of aging and uncertainty) shape their occupational future time perspective and motivation to continue working. Weiss, Weiss, and Zacher explore the role of essentialist beliefs about aging on older workers' motivation to continue working beyond retirement age in a field study and an experiment. Pfrombeck, Zaniboni, Magni, Gerlach, Strittmatter, and Grote develop the concept of uncertainty mindsets and demonstrate how uncertainty mindsets shape employees' occupational future time perspective through engagement in opening behaviors. Together, these contributions highlight an array of innovative approaches to promoting the ability, motivation, and well-being of an aging workforce. Our discussant, Mo Wang, emphasizes the theoretical and practical implications of the symposium contributions and provides constructive suggestions to enhance these and future research efforts.

Relevance to the Congress Theme

The Congress theme – the future is now: the changing world of work – highlights the urgency to act now to address ongoing changes and to deliver solutions to current problems. The age composition of the workforce is one way in which the world of work is already changing right now. Due to different developments, populations and workforces are aging in many developed countries requiring organizations and policy makers to act. The ability, motivation, and well-being of older employees represent key aspects for successful aging at work.

Research/Practical Implications

The symposium advances our understanding of important psychological experiences and structural interventions relevant to an aging workforce. A better understanding of older individuals' experience of subtle age discrimination and the effectiveness of work ability interventions informs organizations about potential structural steps to curtail organizational measures to an aging workforce. Mindset interventions that address essentialist beliefs about aging or uncertainty regulation enable older individuals to maintain and enhance motivation, ability, and well-being in their late career stage.

## Overall conclusions

This symposium highlights how different psychological and structural approaches can help bolster the ability, motivation, and well-being of an aging workforce.

*Keywords: Aging workforce; demographic change; intervention*

## Paper 1

### The Effectiveness of Workplace Interventions on Employee' Work Ability: A Meta-Analysis

Deirdre O'Shea & Donald Truxillo | University of Limerick; Grant Brady, California State University, East Bay; Gemma McCarthy, University of Limerick

#### Background

Over the past few decades, there has been an increase in life expectancy around the world (Woolf & Schoemaker, 2019). Moreover, the demographic shifts of an aging population and declining birth rates are leading to a new reality in which relatively fewer younger workers are available to support the aging population (Osterman et al., 2021; Ritchie & Roser, 2019), which is putting increased pressures on retirement systems. To understand how we might extend working lives, there has been a growth in research on work ability, which is defined as a person's ability, or perception of their ability, to meet the demands of their current role (Ilmarinen et al., 1991). Given that work ability has been found to predict important work outcomes, including retirement (Von Bonsdorff et al., 2009), turnover intentions (Derycke et al., 2012), and job satisfaction (Wagenaar et al., 2015), there has been an increase in the number of intervention studies aimed at improving employee work ability. However, it is not yet known what type of interventions, if any, lead to improvements in work ability? The present study will systematically evaluate the efficacy of work ability intervention studies conducted to date.

#### Research goals and why the work was worth doing

This research aims to investigate the efficacy of work ability interventions, specifically by meta-analysing the findings from past intervention research on work ability. There has been a significant increase in workplace interventions aiming to improve work ability in recent years. Some studies have shown a positive effect of workplace interventions on increasing work ability, while other interventions did not impact work ability.

#### Design/Methodology/Approach/Intervention

Building on previous research conducted by Brady et al. (2018), we searched PsychInfo and PubMed for additional work ability intervention studies published between 2015 and 2021. We also included additional articles in scoping reviews that were not found in our search.

#### Results expected

A total of 111 empirical studies are included in our analysis. To date, we have coded a portion ( $k=48$ ) of the total studies. Preliminary analysis of the coded sample suggests that work ability interventions are effective ( $d = .25$ , 95% CI [.17, .32]); however, we have yet to determine which types of interventions work best. The intervention types include, but are not limited to, ergonomic interventions, physical exercise, job design, and educational training. We are also coding for factors such as intervention length and whether the intervention is online or in-person. The final results will be presented at the EAWOP conference.

#### Limitations

Many of the interventions are multimodal which will make it difficult to draw conclusions about what specific components of the interventions are effective at increasing work ability.

## Conclusions – research and or practical implications

Identifying which types of interventions are most effective at improving work ability will allow researchers and practitioners to develop more focused interventions to promote work ability.

## Relevance to the Congress Theme

As the workforce continues to age, future efforts to encourage longer working lives will be crucial. Given the ever-changing nature of work, it is vital to be able to monitor the alignment between a worker's abilities and the demands of their job. Furthermore, when work ability is low, it is important to identify ways to improve one's ability to meet their work demands.

## Relevant UN SDGs

This research is closely related to goal 3 (to ensure healthy lives and promote well-being for all at all ages) as it aims to identify ways of supporting employee work ability, which has been found to decline with age (Brady et al., 2020). Furthermore, given that work ability has been shown to be a good predictor of labour force outcomes, our research project aligns with UN SDG 8, which aims to promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.

*Keywords: work ability; intervention*

## Paper 2

### The Role of Uncertainty Mindsets in Extending Occupational Future Time Perspective

Pfrombeck Julian, Columbia University; Zaniboni Sara, University of Bologna; Magni Federico, Gerlach Alina, Strittmatter Laura Elaine & Grote Gudela, ETH Zurich

#### Research goals

Demographic trends in many European countries require a longer active engagement of older individuals in the labor market. Occupational future time perspective is a key variable in predicting older employees' work engagement and motivation to continue working. With increasing chronological age, employees' occupational future time perspective becomes more limited. The aim of this research is to examine whether changing employees' uncertainty mindsets is one way to enhance their occupational future time perspective. An uncertainty mindset can be conceptualized as the extent to which people hold the belief that uncertainty entails threats versus opportunities and is fixed versus malleable.

#### Theoretical background

Managing uncertainty is an important part of our lives. This has become particularly salient during the Covid-19 pandemic. But also under less severe circumstances, managing uncertainty is an inextricable part of people's future career and work life planning by the mere fact that the future is not entirely predictable. Uncertainty to date has not been explicitly included in theories of aging and lifespan research. Drawing on theories of uncertainty regulation, we argue that by proactively regulating the amount of uncertainty one is exposed to, individuals' future time perspective can be altered. Specifically, we predict that a positive uncertainty mindset (i.e., people experience uncertainty as malleable and a source of opportunities) is positively related to employees' engagement in opening behaviors (i.e., exploration strategies and career planning). By engaging in these opening behaviors, employees unfold new opportunities and perspectives, which positively affect their occupational future time perspective.

#### Design and Methodology

First, we established the concept of uncertainty mindsets, and we developed a scale to measure multiple dimensions of uncertainty mindsets (i.e., threat, opportunity, fixed, malleable). A pilot study with 141 employees has been conducted to establish the validity and reliability of the new measure. Then, a time-lagged study among 679 employees from different industries has been conducted to test our hypotheses. We measured employees' uncertainty mindset at T1, and opening behaviors (i.e., exploration strategies and career planning) and occupational future time perspective at T2.

#### Results

The results of the pilot study confirmed convergent and divergent validity of uncertainty mindsets. The developed uncertainty mindset measure also demonstrated high internal consistency. In Study 2, we found that individuals with an opportunity and malleability uncertainty mindset engaged in more exploratory strategies and career planning, which in turn, had positive effects on occupational future time perspective. Uncertainty mindsets could explain unique variance in opening behaviors and in occupational future time perspective above and beyond established predictors, such as age, aging mindsets (whether aging is fixed or malleable), work experience, proactive personality, and other personality traits.

## Limitations

The design of Study 2 focuses on between-person differences in uncertainty mindsets. It precludes us from examining the effect of within-person change over time and the causal effect of uncertainty mindsets on opening behaviors and a more extended occupational future time perspective.

## Conclusions

With this research, we established the concept of uncertainty mindsets and demonstrated its practical relevance in shaping employees' occupational future time perspective. Our research advances motivational theories in aging and lifespan research by theorizing and empirically testing the role of uncertainty regulation in extending occupational future time perspective.

## Relevance to congress theme

Our research embraces the congress theme of the changing world of work in several ways. First, our research is relevant to addressing the challenges of a changing demographic landscape in the labor market with an increasing share of older individuals. Second, our research is relevant to addressing the many uncertainties that come with changes in the world of work. Our research offers a more balanced view of uncertainty, one that acknowledges its threats and also its opportunities. We demonstrate that the experience of uncertainties can be successfully managed by adopting a mindset that allows for volitional uncertainty regulation.

## Relevance to UN SDGs

This research contributes to two UN Sustainable Development Goals. First, our research identified uncertainty mindsets as a critical factor to enhance occupational future time perspective, which contributes to creating inclusive and sustainable economic growth by addressing demographic changes and an aging population. Second, our research addresses the goal to promote good health and well-being because occupational future time perspective is not only related to engagement and motivation to continue working but also well-being and healthy aging at work.

*Keywords: Uncertainty mindset; opening behaviors; exploration*

### Paper 3

#### Subtle Discrimination Experiences of Mature Workers and Their Effect on Workplace Wellbeing

Daniela Andrei, Curtin University; Irina Gioaba, Kean University

##### Research goals

The last few decades have witnessed a tremendous increase in workforce participation among the older segment of the population (Toossi & Torpey, 2017). Despite these recent trends, bias and discrimination against mature workers is a common phenomenon, documented by both field and experimental evidence (Gioaba & Krings, 2017; Krings et al., 2021; Lahey, 2008; Neumark et al., 2015). However, most of this evidence focuses on formal and overt forms of discrimination, leaving the subdomain of subtle, interpersonal discrimination largely understudied (Jones et al., 2016). The goal of this research is to investigate the effects of subtle age discrimination on older workers on workplace wellbeing, with an additional emphasis on understanding which mature workers are more affected.

##### Theoretical background

Subtle discrimination refers to negative and ambivalent demeanor and/or treatment enacted toward social minorities that is not necessarily conscious and is likely to convey ambiguous intent (Jones et al., 2016). Unlike overt forms of discrimination, subtle discrimination is less likely to be unlawful and readily apparent, being often regarded “everyday discrimination” due to its seemingly natural, normal, and harmless nature (Deitch et al., 2003). It can take various shapes from harassment, incivility, malicious remarks, jokes, to nonverbal behaviors such as avoiding gaze, reduced smiling, or larger interpersonal distance (Cortina, 2008; Hebl et al., 2002; Van Laer & Janssens, 2011). While less harmful in appearance, this form of discrimination has been shown to be just as (if not more) detrimental, relative to overt discrimination (Dhanani et al., 2018; Jones et al., 2016). Given that the intent is less clear, targets are more likely to expand cognitive resources to understand if discrimination has actually occurred. To better understand the effects of subtle discrimination on mature workers, we draw upon self-regulation theory (Baumeister et al., 1998; Muraven & Baumeister, 2000) to investigate how daily incivility exposure can affect two important indicators of workplace wellbeing: job satisfaction and work engagement. According to this theory, individuals have a limited pool of self-regulatory resources at any given time, and the regulation of one’s thoughts, actions, and emotions exerts self-control, therefore reducing the reserve of available resources needed for subsequent tasks. Empirical evidence supports these assumptions, showing that individuals who experienced subtle discrimination performed worse on subsequent tasks due to depletion of their cognitive resources and reported reduced self-control strength which led to poorer emotional outcomes the next day (Park et al., 2021; Walker et al., 2021).

##### Methodology

Using a 4-wave longitudinal study of mature employees (N =673, 51.6% male) in Australia, we measure incivility experiences, self-regulatory resource depletion, job satisfaction and work engagement.

##### Results

Preliminary results from the first wave support our predictions that incivility has a negative impact on job satisfaction (  $B = -.39$ ,  $SE = .05$ ,  $p < .001$ ) and work engagement (  $B = -.30$ ,  $SE = .04$ ,  $p < .001$ ). The

rest of the data will be collected by December 2022 and we expect to present final results in May 2023.

#### Limitations

Although our four-wave longitudinal study has distinct advantages, especially compared to typical cross-sectional research designs, we are concerned that the longer time intervals between measurements might be insufficient for capturing subtle discrimination experiences. Therefore, we plan on conducting a second study using an experience-sampling methodology which will allow us to examine within-person fluctuations in emotions and behaviors as they occur naturally, in their spontaneous context (Bolger et al., 2003). This design is commonly used in studying short- and long-term effects of subtle forms of discrimination (e.g., Jones et al., 2020).

#### Conclusions

This research expands our understanding of the contexts and consequences of subtle bias against mature workers. It is important that organizations understand the ramifications of age discrimination and are aware of the negative impact of such displays and take steps to curtail the occurrence of subtle discrimination.

#### Relevance to the Congress Theme

This research is highly relevant to the theme of the congress as it examines an underrepresented yet growing proportion of the workforce. It is estimated that by 2030 the number of individuals aged 55+ will increase by more than 15% (Van der Heijden et al., 2008). Therefore, accommodating and managing the increasingly age-diverse workforce is of utmost priority for the future of work.

#### Relevant UN SDGs

This research contributes to a better understanding of the workplace experiences of mature employees and responds to the United Nations Sustainable Goal of reducing inequalities.

*Keywords: age discrimination; age diversity; wellbeing*

## Paper 4

### **All Set in Stone? How Essentialist Beliefs about Aging Affect Older Workers' Motivation to Continue Working Beyond Retirement Age**

Hannes Zacher, Leipzig University; David Weiss, Martin-Luther University of Halle-Wittenberg; Mona Weiss, Freie Universität Berlin

#### Research goals

Although population aging requires that employees increasingly work beyond traditional retirement ages, negative age stereotypes often portray older workers as unwilling or unable to work longer. However, recent lifespan developmental research suggests that there are significant individual differences in how fixed versus malleable individuals perceive the aging process, which may possibly affect how they envision their occupational future.

#### Theoretical background

In this paper, we develop and test a new theoretical model on the role of essentialist beliefs about aging (EBA) in affecting retirement decisions. EBA refer to the extent to which people believe that aging is an immutable, genetically determined vs. a flexible and malleable process. EBA as recently developed construct have been shown to affect how people deal with aging-related changes and master cognitive tasks. We hypothesized that older workers (40–65 years) who more strongly endorse essentialist beliefs about aging will be less motivated to continue working beyond retirement age, because they have a more constrained occupational future time perspective (OFTP).

#### Design and Methodology

To test our hypotheses, we conducted two studies that encompassed a three-wave longitudinal study (Study 1; N = 631) and an experiment (Study 2; N = 358) using two heterogeneous samples of working adults aged 40 to 77 years. In Study 1, we tested an autoregressive panel model assessing EBA at T1, OFTP at T2 and motivation to continue working using at T3 while controlling for the autoregressions. In Study 2, we manipulated EBA and assessed its subsequent effects on OFTP and motivation to continue working.

#### Results

Across both studies, we find evidence for our proposed indirect effect model, above and beyond previously established control variables (e.g., age, income, health, and age stereotypes). In Study 1, we find that EBA are negatively related to motivation to continue working and that this relationship is mediated by a more constrained OFTP. In Study 2, we largely replicate the results of Study 1 and demonstrate a significant indirect effect of EBA on motivation to continue working through OFTP.

#### Limitations

In Study 1, we focused on between-person differences rather than on within-person change over time. Thus, future research is needed to investigate how EBA, OFTP, and motivation to continue working might change and affect each other (possibly also reciprocally) over time. Another limitation pertaining to both studies is that we did not include potential contextual moderators (e.g. organizational support) that may also impact individuals' motivation to continue working.

#### Conclusions

Our findings advance theorizing on work motivation and retirement in later adulthood by pointing to the important but so far neglected role of EBA. On this basis, our findings also offer important practical implications by showing that EBA can be targeted through interventions in order to motivate older individuals to work longer.

#### Relevance to congress theme

Our research speaks to the profound workplace changes due to population aging. The share of older individuals is steadily increasing, which also means that there are fewer younger individuals available who could replace older workers. Thus, policymakers and organizations need to gain more insight into the psychological preconditions that enable older workers to work longer. One possibility is to increase options for partial retirement schemes that enable extended work lives while also supporting those who wish to retire due to health-related reasons.

#### Relevance to UN SDGs

Our work contributes most to UN Sustainable Development goal to create sustained and inclusive economic growth. Such growth is only possible if we understand how population aging and age diversity can be best managed in the upcoming years and decades. At the broader societal level, we need to also critically reflect on our images of aging that may often lead to age discrimination. Negative representations and beliefs about aging may suggest that older workers are not as capable and competent as younger workers, which, in turn, may undermine older workers' beliefs in their ability to work longer. Thus, to promote age-friendly workplaces, we need to promote and be inclusive to all age groups.

*Keywords: beliefs about aging; experiment*

## **symposium S026**

### **Leadership and Aging I: Impact of Leadership style and Organisational Practices**

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science\_practice

What will be covered and why: Demographic change is altering the age-composition of the workforce, resulting in more older workers and increasingly age diverse teams (e.g., Boehm & Dwertmann, 2015; Czaja, 2020; Truxillo et al, 2015). The demographic change signals the need for leaders and organisations to create a work environment that aligns with age-related needs and preferences, fosters wellbeing, as well as creating decent work opportunities regardless of age. For example, to mitigate against age biases and discrimination, and leverage the distinct knowledge and perspectives that workers of different ages offer, organisations need to have effective organisational practices in place. However, organisations have been slow to implement policies and practices to support an older and more age diverse workforce (Perron, 2020; Truxillo et al, 2015).

Leaders are well positioned to shape the experience of aging and age diverse employees because they have the opportunity to influence important team processes and most aspects of followers' experience, wellbeing, and performance at work (Kunze & Bruch, 2010; Kearney & Gebert, 2009). Studies show that leader attitudes and behaviours can have an important influence on employees' performance and well-being (e.g., Ilmarinen & Tempel, 2002).

Yet, it is unclear which particular types or styles of leadership are most effective to achieve positive outcomes for age diverse employees. Are established leadership styles such as LMX or supportive leadership sufficient? Is there a need for specific age-oriented or age-inclusive leadership? What are the impacts of HR practices and an age-friendly workplace climate? What other factors enable leaders to consider age and effectively manage age diversity?

In this two-part symposium we aim to find answers to these questions by incorporating a range of empirical and conceptual contributions including intervention studies focusing on how to close the research-to-practice gap.

This first part of the proposed two-part symposium, Aging and Leadership I: Impact of leadership style and organisational practices, explores the interaction between followers' age and leadership in the workplace, and will examine the impact of different leadership styles on aging and age diverse workers. It is followed by a second symposium, Aging and Leadership II: Impact of leader characteristics and training, that builds upon the first symposium by investigating the effects of leaders' attributes and characteristics, and presents practical organisational interventions to improve the work environment of age diverse workers.

The first study sets the stage by providing a systemic review on the impact of different leadership styles on team processes and employee outcomes. The authors review the relevant literature and discuss whether certain leadership styles are more beneficial for different age groups and outcomes. The second study looks how workers' employability can be enhanced across the work lifespan by examining leader-member-exchange as a crucial leadership style. The third study tackles age stereotypes and technology usage. The authors propose two processes in which age and technology usage and acceptance are related, and furthermore test digital leadership as a potential moderator. The objective of the fourth study is to analyse how supportive leadership can counteract the possible negative age biases in the field of STEM and thus reduce turnover and career withdrawal. The fifth

study complements the previous studies in considering the congruence of leaders' and employees' perceptions of age-friendly HR practices. The authors analyse the impact of an (mis)aligned perspective on employee's well-being.

Relevance to the Congress Theme: An aging and more age diverse workforce is an accelerating trend in in the European Union as well as in most other developed countries (Boehm & Dwertmann, 2015). Hence, this is something organisations and leaders need to manage now, and not push towards the future. Identifying the effectiveness and impact of different leader behaviours and organisational practices will not only provide benefits in terms of wellbeing and decent employment for workers of all ages, but also more resilient and successful organisations.

Overall conclusions and research/practical implications: The proposed two-part symposium addresses leadership as an important mechanism to overcome ageing and age diversity challenges. The studies reveal the beneficial effects of several leadership styles on follower outcomes and highlight the potential value of an age-oriented leadership style. Moreover, the studies demonstrate the importance of leader characteristics and provide guidelines on evidence based organizational interventions. Despite the diverse contributions to this symposium, more research is needed to explain, for example how age-oriented leadership exerts its effect on employees of different age groups and across industries.

*Keywords: Age diversity, Leadership, HR interventions*

## Paper 1

### **Leading an Age Diverse Workforce: A Systematic Review of Leadership Styles and Their Impact on Ageing and Age Diverse Employees**

Eva Zellman, Sharon Parker & Daniela Andrei, Curtin University, Perth, Australia

Research goals and why the work was worth doing: Due to changes in population demographics, the workforce is aging and becoming more age diverse (Truxillo et al., 2015). This trend requires organisations to effectively mitigate against age biases, ensure the workplace enables sustained employability of older workers, and leverage the potential performance and innovation advantages associated with age diversity (Gürbüz et al., 2022; van Knippenberg et al., 2004). Leaders are well positioned to help achieve such goals as they are responsible for managing each worker individually, as well as leading the team as a whole, and can substantially influence most aspects of subordinates' experience, wellbeing and performance (Kunze & Bruch, 2010).

Against this background, our goal is to conduct a systematic review to understand how different styles of leadership influence individuals of different ages, and affect individual and team level processes relevant to an age-diverse workforce. The impact of many different leadership styles, such as supportive, transformational and inclusive leadership, on employees of different ages have been discussed in the literature the last 30-40 years (e.g. Gürbüz et al., 2022; Kunze & Bruch, 2010; Profili et al., 2016). However, it is not clear for what age groups, and in what way, different styles of leadership have positive impact. For example, we don't know if a particular style of leadership is more beneficial for older or younger workers, or the distinct types of impact the different styles may have (e.g. enhancing engagement or reducing bias). Integrating the literature to understand this gap in the literature will help progress research, as well as provide insights from a practitioner perspective.

Research methodology: In this systematic review we identified and screened 8599 abstracts from peer reviewed publications since 1980 by searching 4 different databases using keywords associated with "leader", "age" and "workplace". Three hundred and twenty-nine full text articles were reviewed, with 158 meeting the inclusion criteria. These were coded based on leadership styles, variables measured and methodological characteristics. The data is yet to be summarised, itemised and analysed.

Results expected: While the full data analysis is yet to be conducted, our initial analysis indicates that the vast majority of studies use quantitative methods with a cross sectional research design. With regards to representation of age of followers, about a third of the studies use 'generations', with the remainder using age groups or age as a continuum. In terms of leadership styles researched, supportive, transformational and leader-member exchange are the most studied leadership styles. Preliminary results suggest that older workers may benefit more from a supportive style of leadership, while leader-member exchange seems somewhat more important for younger workers.

Limitations: Publication and language bias are two key limitations in this study as we only included peer reviewed publications written in the English language in our search.

Conclusions: Conclusions will be drawn once the full data analysis has been completed.

Relevance to the congress theme: The demographic changes with an aging and more age diverse workforce are experienced in most developed countries, and is expected to accelerate further

(Boehm & Dwertmann, 2015; Temple & Wilcon, 2021). It is therefore important to have leaders who are well equipped to deal with the challenges and opportunities a more age diverse workforce presents now and in the future.

Relevant UN SDGs: This research is relevant to the UN SDGs “Decent work and economic growth” as well as “Reduced inequalities”. Understanding how leaders best can manage ageing and age diverse employees partly involve leaders reducing inequalities driven by ageism, as well as enhancing inclusion that makes employees thrive and enables sustainable employment.

*Keywords: Leadership styles, Age, Systematic review*

## Paper 2

### **How supervisor's life-span related HRM practices relate to work-related flow and employability: The role of leader-member exchange**

Beatrice Van der Heijden, Radboud University Nijmegen, Netherlands; Adeliën Decramer, Vincent Goossens, Elias Janssen & Mieke Audenaert | Ghent University, Ghent, Belgium

Many organizations are challenged by demographic changes that require attention in order to safeguard all workers' sustainable employability. Supervisor's Life-Span related HRM (SL-HRM) practices may be a way to cope with issues related to these demographic changes. This study aims to increase our understanding of how SL-HRM practices are linked to workers' employability via work-related flow, and to examine whether LMX quality moderates this relationship. SEM analyses among 698 respondents in 51 educational institutions across the Netherlands reveal that SL-HRM practices are positively related to several dimensions of employability, through work-related flow, and that LMX quality serves as a lens through which these HRM practices are interpreted. Our findings suggest that such practices can indeed make a difference in workers' employability, but that its effectiveness depends on the LMX quality.

Relevance to the congress theme: By focusing on the role of the employee's supervisor, and the exchange relationship between the two parties can play with regard to protecting workers' well-being and prosperity at work, we add to the scholarly knowledge. In particular, our research contributes to a better understanding of which measures may enhance opportunities to cope with the changing world of work.

Relevant UN SDGs: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

*Keywords: SL-HRM practices, Employability, LMX*

### Paper 3

#### **A Dual Pathway Model of Age and Technology Acceptance: Highlighting the Impact of Digital Leadership**

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Research goals and why the work was worth doing: Rapid technological advancements and global workforce aging shape the future of work. To date, we know very little about how employees' age is shaping technology acceptance at work. A meta-analysis revealed that age is negatively related to employees' perceived ease of use, perceived usefulness, and intention to use a technology (Hauk et al., 2018). While these findings seem to support stereotypical views that technology is less popular with increasing age, the processes behind these findings remain unknown. Against this background, our study aims to connect the literature on aging with the research on technology acceptance in organizations.

Moreover, while employees' technology acceptance is certainly determined by different person factors, including their aging experience and technology motivation, we argue that employees' work environment also matters. Specifically, we focus on digital leadership, which refers to favorable supervisor behavior and attitudes toward digitalization, including up-to-date digital knowledge and enthusiasm about the digital transformation at work (Zeike et al., 2019). Relying on the notion that supervisors high in digital leadership motivate and develop technology-related capabilities in their employees (Larson & DeChurch, 2020), we explore digital leadership as a potential moderator in this study.

Theoretical background: Our conceptual model is based on the technology acceptance model (Davis, 1985, 1989) and states that the two components perceived usefulness (i.e., the expectation that using a technology improves one's productivity) and perceived ease of use (i.e., the perception that using a technology is simple) determine employees' attitude toward new technology (i.e., the positive or negative evaluation of a technology that has been newly introduced to an employee; Davis et al., 1989). To untangle the complex relation between employee age and attitude toward new technology, we develop a dual pathway model consisting of a motivational and a capability pathway. In a nutshell, the motivational pathway captures perceived usefulness as the motivational force, while the capability pathway captures perceived ease of use as the capability-related force driving the attitude toward a new technology. We further derive aging-related mechanisms that match the motivational and the capability-related forces. On the motivational side, we consider the two dimensions of future time perspective, namely future opportunities and remaining time that inform perceived usefulness. On the capability side, we consider two cognitive constraints, namely processing speed difficulties and organization difficulties that inform perceived ease of use. Furthermore, we extend the model by considering digital leadership as a potential moderator of the effects of employee age on future time perspective and cognitive constraints, and its subsequent indirect effects on attitude toward new technology.

Research methodology: We pre-registered our hypotheses at the Open Science Framework ([https://osf.io/z2vjd/?view\\_only=b70b7d4240cc435cae0a4994bb1363f8](https://osf.io/z2vjd/?view_only=b70b7d4240cc435cae0a4994bb1363f8)). We tested our hypotheses using three-wave data of 643 employees. We applied structural equation modelling in Mplus 8.4. We used the XWITH command to test the interaction effects between age and digital leadership. Since bootstrapping is not available when using the XWITH command in conjunction with MLR estimation

in Mplus, we applied Monte Carlo-simulation of confidence intervals for the indirect and conditional indirect paths in R.

Results obtained: Our findings support our hypotheses for the motivational pathway showing that age is negatively linked to attitude toward new technology via future time perspective, and subsequent perceived usefulness and perceived ease of use. Digital leadership buffered the negative indirect effects of age on attitude toward new technology. For the capability pathway, the results were opposite to what we expected. Specifically, age was negatively related to organization difficulties, which in turn were negatively linked to attitude toward technology via perceived ease of use and perceived usefulness.

Limitations: First, we used a self-report survey approach to collect the data, potentially raising concerns of common-method-bias or that participants may be subject to positive illusions when asked to report on undesirable developments such as cognitive constraints. Second, although we utilized a time-lagged design, more fine-grained and long-term temporal relations of employee age and attitude toward new technology remain unclear.

Conclusions: Together, our findings put the link between age and technology acceptance into a more positive light than previous research and suggest that motivational and capability-related forces are interwoven in predicting attitude toward new technology.

Relevance to the congress theme: Workforce aging and digitalization are two mega trends in business and society that we address with our research. Moreover, by pointing to the moderating role of digital leadership we provide some concrete solutions (that can be applied right now!) to the problems of the changing world of work.

Relevant UN SDGs: Decent work and economic growth

*Keywords: Digital leadership, Age, Attitude towards technology*

## Paper 4

### **A multi-sample study of the role of age, supportive leadership, and perceived age bias on withdrawal in STEM**

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Theoretical background and research goals: The importance of a strong science, technology, engineering, and mathematics (STEM) industry has never been clearer than in recent years. However, organizations that employ STEM professionals are facing serious workforce shortages as modelling predicts approximately one million unfilled jobs in the coming decade (Iammartino et al., 2016). Given the additional challenges presented by population aging, it is important that STEM organizations retain and engage employees across the lifespan. Therefore, this study aims to explore the relationship between age and two indicators of withdrawal, turnover intentions and career disengagement in STEM workers.

We situate our study within Zacher and Froidevaux's (2021) framework which integrates ageing theories with career outcomes and argues that personal and contextual age-related factors can interact to influence career behavior. We identify age bias as an important mediating factor in the relationship between age and withdrawal, which is likely to be a particular risk in the STEM context. Highly prevalent STEM job-related stereotypes related to modernity, innovation, and technology make older workers particularly vulnerable to bias because they contrast with common older worker stereotypes (Perry et al., 1996; Posthuma & Campion, 2009). Leadership behavior has been recognized as a factor that may help reduce the experience of age bias and may counteract the negative effects of the STEM context (Homan et al., 2020). We hypothesize that supportive leadership, defined as "when leaders express concern for, and take account of, followers' needs and preferences" (Rafferty & Griffin, 2006, p. 39) should be especially important for older workers, who tend to show a greater preference for meaningful social interactions (Rudolph & Zacher, 2017).

Design and methodology: We used three samples to test our hypotheses. Study 1 tested the effect of age on turnover intentions and career disengagement via perceived age bias, moderated by supportive leadership in a cross-sectional sample of 256 employees from an Australian engineering firm. In Study 2, we focused on the role of supportive leadership by testing the indirect effect of leadership on withdrawal via age bias across a 6-month period in 2020 for 102 older STEM workers (aged 45 and over). Finally, we tested our assumption that these processes were especially important for STEM workers. Using large panel survey design (N=1970), we tested a three-way interaction between age, supportive leadership, and STEM work on age bias, as well as the indirect effect on withdrawal.

Results: Study 1 found that supportive leadership moderated the effect of age on bias, with a significant negative relationship when leadership was high. Also, the indirect effect of age on both turnover intentions and career disengagement was positive and significant when leadership was low.

Study 2 tested the indirect effect of supportive leadership on withdrawal outcomes over time. We found a significant negative indirect effect of leadership at time one on career disengagement at time 2 (controlling for values at time 1). We did not find evidence of this longitudinal effect on turnover intentions however we note that the coronavirus pandemic may have played a role in this.

In study 3 we found support for our hypothesized three-way interaction. The association between age and age bias was negative and strongest for STEM workers with highly supportive leaders. Consistent with Study 1, the indirect effects of age on turnover intentions and career disengagement were positive when supportive leadership was low and negative when leadership was high. As expected, these effects were stronger for STEM workers.

Limitations: Our research relies on three separate self-report datasets, with participation restricted to Australian workers only. Study 2 focuses solely on older workers, limiting our ability to compare with younger workers. Studies 1 and 3 are each limited in their reliance on cross-sectional data, limiting the ability to make causal claims.

Conclusions and relevance to congress theme: Our study highlights the importance of supportive leadership for older workers, particularly those in STEM and contributes to a growing body of evidence on the potential value of an age differentiated approach to leadership (Wegge et al., 2012). The research contributes to the conference theme through the examination of the aging workforce, a phenomenon that will continue to change the demographics of our organizations. The research's focus on reducing turnover and career disengagement contributes to the UN SDG theme "Decent Work and Economic Growth" and "Reduced Inequality" as it identifies supportive leadership as a means through which STEM organizations can retain the wisdom of older workers by reducing the experience of age bias.

*Keywords: Supportive leadership, Age bias, Work withdrawal*

## Paper 5

### **The Role of Perceptual Congruence of Age-Friendly Organizational Practices Between Leaders and Older Employees and Impact on Wellbeing**

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**Research goals:** In times of demographic change and aging workforces, organizational strategies on how to retain and improve older employees' well-being become increasingly important. Research so far has tended to focus on older employees' perceptions of age-friendly organizational practices. We extend this research by also considering other organizational stakeholders' perceptions. Prior research suggests that leaders' perceptions, in particular the similarity of perceptions held by employees and leaders (i.e., perceptual congruence), are related to employee work outcomes like their job satisfaction and performance. In our study, we applied the concept of leader-employee perceptual (in)congruence to the context of aging workforces and assessed whether leader-employee perceptual (in)congruence on age-friendly organizational practices regarding organizational climate, management, and work design plays a role for older employees' well-being.

**Theoretical background:** Drawing on perceptual (in)congruence and psychological contract theory, we hypothesize that older employees' well-being will be higher when older employees and leaders align at high levels of perceived age-friendly organizational practices compared to when they align at low levels. Moreover, we hypothesize that older employees' well-being will be lower when leaders evaluate the perceived age-friendly organizational practices higher than older employees (i.e., leaders' overestimation) compared to when they evaluate them lower (i.e., leaders' underestimation).

**Method:** We collected dyadic data from 484 older employees and their direct leaders from 100 organizations. We applied polynomial regression and response surface analyses to test our hypotheses. Because of the nested data, we applied a multilevel random-slope random-intercept model using the organization as a grouping variable.

**Results:** Older employees' perceptions of all three age-friendly organizational practices were positively related to their well-being. There was no direct relationship between leaders' perceptions and older employees' well-being. Our results widely support the proposed role of leader-employee perceptual (in)congruence, though. Older employees' well-being was highest when both older employees and leaders rated their organization's work design to be very age-friendly (i.e., congruence at high levels). For age-friendly organizational climate and management, congruence did not play a role. For the case of perceptual incongruence, results indicated a directional incongruence effect for all three age-friendly organizational practices: Older employees' well-being was lowest when leaders overestimated the age-friendliness compared to their older employees.

**Limitations:** Since we applied a cross-sectional design, causal relations cannot be analyzed in this study. Additionally, we recruited a convenience sample. The research might have mainly appealed to organizations that have an interest in the topic of aging workforces and age-friendly organizational practices, which might have caused a selection bias. However, descriptive results indicate considerable variance regarding the perception of the age-friendly practices between organizations.

Conclusions: Our study revealed significant discrepancies between older employees' and leaders' perceptions of age-friendly organizational practices. Further, this leader-employee perceptual (in)congruence matters for older employees' well-being beyond older employees' individual perceptions alone. The findings emphasize the need to consider the perceptions of different organizational stakeholders. Moreover, theoretical advancements and longitudinal studies are needed to shed light on the underlying processes that transfer the effects of perceptual (in)congruence on employee outcomes. Human resource managers and leaders should aim to close potential gaps in the perception of organizational practices to generate better employee outcomes. Furthermore, both leaders and older employees should be included in the implementation process of new organizational practices to prevent the emergence of perceptual incongruence.

Relevance to the Congress Theme: Demographic change is happening in most Western countries. Challenges emerging from this trend (e.g., increasing pressure on social security systems or a shortage of skilled workers) will intensify for both societies and organizations, highlighting the need to take action. With our study, we demonstrate how researchers and practitioners can contribute to creating and implementing an age-friendly work environment.

Relevant UN SDGs: Related to the SDGs "Good health and wellbeing" as well as "Decent work and economic growth", we highlight how older employees' well-being can be retained through different age-friendly organizational practices and strategies in order to foster employees' continued and healthy employment in later life.

*Keywords: Aging workforce, Leadership, Organizational climate*

## Symposium S027

### Leadership and Aging II: Impact of Leader Characteristics and Training

Eva Zellman, Curtin University, Perth, Australia; Franziska Jungmann, International School of Management, Berlin, Germany

science\_practice

What will be covered and why: Demographic change is altering the age-composition of the workforce, resulting in more older workers and increasingly age diverse teams (e.g., Boehm & Dwertmann, 2015; Czaja, 2020; Truxillo et al, 2015). The demographic change signals the need for leaders and organisations to create a work environment that aligns with age-related needs and preferences, fosters wellbeing, as well as creating decent work opportunities regardless of age. For example, to mitigate against age biases and discrimination, and leverage the distinct knowledge and perspectives that workers of different ages offer, organisations need to have effective organisational practices in place. However, organisations have been slow to implement policies and practices to support an older and more age diverse workforce (Perron, 2020; Truxillo et al, 2015).

Leaders are well positioned to shape the experience of aging and age diverse employees because they have the opportunity to influence important team processes and most aspects of followers' experience, wellbeing, and performance at work (Kunze & Bruch, 2010; Kearney & Gebert, 2009). Studies show that leader attitudes and behaviours can have an important influence on employees' performance and well-being (e.g., Ilmarinen & Tempel, 2002).

Yet, it is unclear which particular types or styles of leadership are most effective to achieve positive outcomes for age diverse employees. Are established leadership styles such as LMX or supportive leadership sufficient? Is there a need for specific age-oriented or age-inclusive leadership? What are the impacts of HR practices and an age-friendly workplace climate? What other factors enable leaders to consider age and effectively manage age diversity?

In this two-part symposium we aim to find answers to these questions by incorporating a range of empirical and conceptual contributions including intervention studies focusing on how to close the research-to-practice gap.

Following the first symposium, Aging and Leadership I: Impact of leadership style and organisational practices, which explored the effects of leadership styles on ageing and age diverse employees, this subsequent second symposium, Aging and Leadership II: Impact of leader characteristics and training, addresses the impact of leader attributes on the leader-employee relationship and leadership behaviors, with leaders' age and attitudes being the main focus. To overcome the research-to-practice gap, this symposium also provides practical interventions to support leaders of aging and age diverse workers.

The first two studies focus on how leaders' age impacts the leader-subordinate relationship. The authors of the first study look at leaders' age and the related warmth and competence, and how this relates to perceptions of leaders' conflict involvement. The second study presents and tests a newly developed scale to measure age-related negative attitudes towards younger leaders with older followers. The objective of the third study is to determine what individual and contextual factors contribute to leaders adopting an age-oriented leadership style. The fourth and fifth studies put research into practice and present results from intervention studies addressing aging and leadership in the workplace. The fourth study evaluates the effect of a age-related leadership training, while the

author of study five gives insights into four projects designed to protect older employees' health and safety as well as cultivate age-inclusive workplaces.

Relevance to the Congress Theme: An aging and more age diverse workforce is an accelerating trend in in the European Union as well as in most other developed countries (Boehm & Dwertmann, 2015). Hence, this is something organisations and leaders need to manage now, and not push towards the future. Identifying the effectiveness and impact of different leader characteristics and practical workplace interventions will not only provide benefits in terms of wellbeing and decent employment for workers of all ages, but also more resilient and successful organisations.

Overall conclusions and research/practical implications: The proposed two-part symposium address leadership as an important mechanism to overcome ageing and age diversity challenges. The studies in this symposium reveal the beneficial effects of several leadership styles on follower outcomes and highlight the potential value of an age-oriented leadership style. Moreover, the studies demonstrate the importance of leader characteristics and provide guidelines on evidence based organizational interventions. Despite the diverse contributions to this symposium, more research is needed to explain, for example how age-oriented leadership exerts its effect on employees of different age groups and across industries

*Keywords: Age diversity, Leadership, HR interventions*

## Paper 1

### Less conflict with my older leader: Evidence of a competence-warmth halo effect

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**Research goals and theoretical background:** In recent decades, one of the most profound macro-level changes in the workplace has been the increase in age diversity. As the average age of employees increases, so, too, does the age of leaders (Korunka et al., 2003). Yet, there is limited empirical research on the role of leader age in the organizational literature (Zacher, Rosing, Henning, et al., 2011; see also Walter & Scheibe, 2013 for a review). This is a significant gap, given that older, middle-aged and younger leaders form different kinds of relationships with their employees, which then influence employees' attitudes and behaviors toward their leaders (Truxillo & Burlacu, 2015).

In this study, we propose that leader age influences the relationship between leader qualities (i.e., competence) and follower involvement in conflict with leaders. Based on the halo effect theory (Abele & Bruckmüller, 2011), we hypothesized that more competent leaders are more likely to be perceived as warm by their followers, especially when they are older. Warmth, in turn, was expected to predict lower conflict involvement of followers with their leaders.

**Method:** We conducted three studies to investigate our hypotheses. Study 1 was a dyadic field study where leaders reported on their followers' conflict involvement and followers reported on their leaders' competence. Study 2 was a two-week time-lagged study among organizational employees. Study 3 was a scenario experiment with employee participants.

**Results:** Study 1 showed that leader age strengthens the negative effect of leader competence on conflict involvement. Studies 2 and 3 showed that perceived warmth of the leader mediates the effect of leader competence on conflict involvement. Study 2 further showed that age moderates the indirect effect of leader competence on conflict involvement. Further exploratory analyses showed that leader generativity (Studies 2 and 3) and leader construal of power as responsibility (Study 2) might be more relevant mediators than warmth perceptions in the hypothesized relationships given their closer theoretical relevance with leadership phenomena.

**Limitations:** Notably, all of the studies relied on global self-reports of follower conflict involvement. Future studies should strive to replicate our findings with more objective and/or immediate measures of conflict engagement. Moreover, it would be insightful to match followers' perceptions of leaders with said leaders' perceptions of their own positive qualities. This would illuminate whether the identified halo effects are grounded in reality or merely exist in the eye of the beholder.

**Conclusions:** Competent leaders are more likely to be seen as warm, responsible, and generative by their followers when they are older rather than younger, which may help explain why older leaders elicit less conflict from their followers. These insights add to a growing body of literature documenting the emotional benefits of age in the workplace in particular contexts, such as leader-follower interactions. By way of halo effects, older leaders who are equipped with certain positive qualities (competence) are also ascribed other positive qualities (warmth, generativity), which trickles down to followers' conflict behavior. These insights enhance our understanding of both the role of age in leadership and the antecedents of interpersonal conflict in organizations. Overall, we suggest that older competent leaders may be particularly suited to intervene in internal organizational conflicts.

Relevance to the Congress Theme: Ageing is a universal phenomenon. The proportion of the global population aged 60 years or above rose from 8.5% in 1980 to 12.7% in 2017 and it is expected to accelerate in the coming decades reaching 21.3% in 2050 (United Nations, 2017). The demographic change towards an aging workforce signals the need to change how leaders and employees are viewed in the workplace for a more sustainable work environment in the future.

Relevant UN SDGs: Among other values, the UN SDGs point out the importance of employment and decent work for all and at all ages. This research is in line with the UN SDGs as it forwards the idea that older persons are a valuable resource, making significant contributions to the economy.

*Keywords: Older leaders, Conflict involvement, Halo effect*

## Paper 2

### Measuring attitudes within young-leads-old relationships: The scale development of three attitude measures

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Research goals and why the work was worth doing: Leadership constellations in which a leader is younger than his or her followers are broadly considered to be norm-violating because for many decades leadership was reserved for workers with high tenure and extensive work- and life-experience. The consequences of norm-violating age differences between leaders and subordinates have been widely considered to be negative – whether for the younger leader (Collins, Harris, & Rocco, 2009) or the older subordinate (Rocco & O’Hair, 2009). However, related research findings are mixed. We further argue that the theoretical assumptions underlying these statements have never been tested rigorously because adequate measurement instruments for critical attitudes involved in these constellations are missing. Moreover, negative consequences are also commonly anticipated within HR practice and various “emerging leadership” programs on the training and coaching market focus on norm-violating leadership constellations. Taken together, the topic gains increasing interest in both the scientific and the business community and this motivates our goal of a better construct definition and measurement of central attitudes involved in such constellations.

Theoretical background: Two theories have been widely used in this context: 1) Relational demography, referring to the extent in which coworkers of one work unit differ from each other in regard to various demographic (visible and non-visible) attributes, investigating their influence on work related individual and higher level outcomes (Tsui & O’Reilly, 1989), and 2) Career Timetable Theory (Lawrence, 1984, 1988) suggesting that humans evaluate their professional success by comparing themselves to significant and salient others in the workplace in order to find out if they are on or behind schedule, based on age norms for the attainment of certain positions within an organization.

Design/Methodology/Approach/Intervention: In this study, we introduce three new attitude/stereotype concepts within the “young(er) leads old(er)” constellation and their measurement: 1. Negative attitudes towards younger leaders (NAYL) from the perspective of the follower, 2. Negative attitudes towards older followers (NAOF) from the perspective of the leader, and 3. leadership age stereotypes (LAS), measuring the degree to which desirable attributes are associated with older or younger leaders. Because in leadership dyads always two levels are involved, we conceptualize negative attitudes held by leaders and followers separately (i.e., NAYL and NAOF). Moreover, we examine which characteristics and behaviors are associated with older and younger leaders by using most cited stereotypes towards older, younger, and leaders in general (i.e., LAS). With a total of four studies (N = 1.075), we developed these three new scales to measure the constructs, investigate their psychometric properties, as well as establishing discriminant and convergent validity by examining its linkages with existing measures. Finally, we also examine the association with leadership and follower outcomes considering individual-level as well as team-level effects.

Results obtained or expected: All new measures were found to be reliable (>.8 for Cronbach’s alpha), valid (discriminant and convergent validity) and useful (e.g., explaining variance for important outcomes beyond existing measures).

Limitations: There are several limitations of our study: First, we mainly relied on data from questionnaires and have no objective outcome measures . Second, although data from various industries has been collected, the findings show that scale means in the nursing population are much lower. Future research should account for the role of type of industry and sector-related cultures and consider collecting data from more traditional and hierarchical industries (e.g., automobile, production, banking etc.)

Conclusions – research and or practical implications: Our findings lead to the following central implication: Leadership evaluations in age norm violating constellations are biased by several age stereotypes (NAYL; NAOF; LAS) and our new scales can be used both in research and practice to manage potential negative consequences of such constellations: ,

Relevance to the Congress Theme: One highly relevant and salient aspect of changing work environments is the demographical change on the management floors all over the world. The rise of younger workers (age cohort 25-34) in management positions over the past ten years has increased from 2.57 million in 2011 to 3.28 million in 2020. (U.S. Bureau of Labor Statistics). Already today, one third of U.S. workers have a younger boss, 15% of workers have a boss at least 10 years younger than them (Lorenz, 2012).

Relevant UN SDGs: Our research supports goal number 3 ( Ensure healthy lives and promote well-being for all at all ages) as it sheds light on the widely neglected phenomenon of age discrimination towards younger persons in the workplace (Bratt, Abrams, Swift, Vauclair, & Marques, 2018 found that the highest levels of age discrimination was reported by younger respondents).

*Keywords: Scale development, Young-leads-old, Attitudes*

### Paper 3

#### **Effects of a training promoting age-differentiated leadership on employee`s health: A multi-level analysis**

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**Research goals:** The main goal of this research project was the improvement of health, innovation and effectiveness in age-diverse teams by promoting age-differentiated leadership. This form of leadership is conceptualized as an important team resource for improving health and team climate for all age groups. The first training program for age-diverse teams was developed by Jungmann et al. (2020) and evaluated in the administration sector.

It imparts knowledge about demographic change, the negative consequences of salience of age-differences, stereotypes, age-differentiated leadership, work design and communication techniques in two modules within two days. Several methods (e.g., presentations, behavior modeling) are used to attain the planned affective, cognitive and behavioral change. To promote learning transfer a half-day booster training took place four months later (Jungmann & Wegge, 2015; Jungmann et al., 2020). Here, we present a new evaluation of the training in production.

**Theoretical background:** Age-diversity is faced by organizations worldwide (Farndale et al., 2015). Research results on the effects of team-diversity differ. While several empirical studies have reported a negative effect of age-diversity on performance (Bell et al., 2011; Joshi & Roh, 2009; van Dijk et al., 2012), others results indicate a positive relationship (Wegge et al., 2008). The inconsistency in these findings can be explained by two different social processes. On one hand, social categorization theory suggests that people tend to categorize themselves and others into groups by characteristics as age if such categories become salient. Further they prefer their own ingroup (Tajfel & Turner, 1986). This can result in negative team climate and performance as reported above. On the other hand, information elaboration of diverse team members can improve problem solving within groups (Kerschreiter et al., 2003). Both theories were integrated by van Knippenberg et al. (2004) in the categorization-elaboration model emphasizing the possibility of both positive and negative outcomes for diverse teams. Consistent with this reasoning, a more specific model focusing on age-diverse teams, the so called ADIGU model was developed (e. g., Liebermann et al., 2013; Ries et al., 2013; Wegge & Meyer, 2020). The model includes several moderators which influence the likelihood of observing more positive or negative effects of age-diversity. It was tested and confirmed in different work samples in Germany (Fritzsche et al., 2014; Ries et al., 2013; Wegge & Jungmann, 2015; Wegge et al., 2012). Based on these results the main moderating factors of the model informed the contents of the training.

**Design:** Approximately 90 teams and their 135 leaders participated over a 2-year-time span in this research project. Three month after the first survey to assess the current status of indicators such as health, team climate, age-differentiated leadership, the training group took part in the intervention. For month later, all blue-collar workers filled out the second survey. One year after the training group the waiting control group was trained. A final survey was conducted four months later. The evaluation framework by Kirckpatrick (1959) was used to assess training effectiveness (Jungmann et al., 2016). Here, we analyze how the training affects the health of employees of the trained supervisor by taking into account the hierarchical data structure by using a multilevel approach for the longitudinal data (N1 = 989, N2 = 838, N3 = 937; N1-3 = 463).

Results: First results indicate a training effect for some health indicators. For example, physical complaints decrease immediately (n.s.) after the training. These effects seem to disappear fast and 16 months after the training physical complaints are significant higher than before the training in all groups. Significant intraclass correlation coefficients (ICC 1 = 0.67; ICC2 = 0.81) on person and on team level (ICC1 = 0.12; ICC2 = 0.60) imply the need for further multilevel analyses. It is expected that at least some health outcomes will be better in the two trained groups than in the non-trained group.

Limitations: The training was just conducted in one large organization. In addition, just 463 blue collar workers participated more than once in the surveys.

Conclusions: Based on earlier research, age-differentiated leadership has a positive effect on health related outcomes. The results of this study will show how far this can be generalized to production work.

Relevance for the congress: Demographic change is an issue, which will affect society, work and family in the next decades. In the work context, qualified workforce decreases. As a consequence, organizations need to obtain young workers and need to keep older workers healthy and committed to the company. Age-differentiated leadership is probable a promising approach to solve the challenges linked to these developments.

*Keywords: Age-differentiated leadership, Health, Training*

## Paper 4

### What's a Leader to Do? Developing Tools and Resources for Managing an Aging Workforce

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**Background:** Population aging is a global trend with far reaching societal implications, including maintaining sufficient numbers of qualified workers (Czaja, 2020). One response to the aging phenomenon is developing strategies to encourage and support extending workers' labor force participation. At the national level, countries have raised the qualifying age for receiving government-sponsored retirement-related benefits (e.g., U.S. Social Security) or offered incentives to companies who hire and retain older workers. Yet, employers have been slow to implement organizational policies and practices to support an older workforce (Perron, 2020).

Recognizing the critical need to protect older workers' safety and health in the workforce, in 2015 the U.S. National Institute for Occupational Safety and Health established the National Center for Productive Aging and Work (NCPAW). NCPAW researchers strive to understand physical and psychosocial aspects of work that contribute to a productive aging workforce and thus are mutually beneficial to workers and employers alike. The theoretical approach of productive aging focuses on the positive aspects of aging and emphasizes the important contributions older individuals can continue to make in their workplaces (Grosch et al., 2019). Productive aging at work is characterized by a work environment that is safe and healthy and gives workers of all ages the power to be successful and thrive in their jobs (Grosch, 2020). To facilitate its work in support of productive workforce aging, NCPAW regularly collaborates with the academic community to conduct original research, and to translate and disseminate research to the public, including employers and health and safety professionals.

**New contributions:** Whilst researchers have recently begun to develop and test various strategic frameworks related to productive workforce aging, such as the 3i model (e.g., Parker & Andrei, 2020) and the Later Life Workforce Index (Wilckens et al., 2021), scientific-based guidance developed for use by organizational leaders is lacking. To address the research-to-practice gap, the NCPAW research team is working on several projects aimed at educating employers and business leaders on ways to create an age friendly workplace and support productive aging. Many of NCPAW's practice-focused projects involve partnering with academic-based researchers to produce scientifically rigorous, empirically supported resources for public dissemination. These partnerships hold promise for meeting the needs of the employers, employees, and the broader scientific community. This presentation will provide an overview of four current NCPAW projects in diverse industry sectors that involve developing and disseminating promising strategies that employers can use to address the health and safety needs of their older workers.

NCPAW is creating an online tool that managers and safety and health professionals within manufacturing companies can use to assess the age friendliness of their workplace. Using the work ability framework (Gould et al., 2008), the tool will assess four areas: the physical work environment, organization and leadership policies and practices, professional development, and individual health resources. A similar project is developing an ageing workforce module for the Small Business Safety and Handbook jointly published by the U. S. Occupational Safety and Health Administration (OSHA) and NIOSH (2021). In a third project NCPAW is developing a training intervention for hotel managers and supervisors that provides guidance and practical strategies for designing an age-inclusive

workplace to support hotel housekeeping employees, a working population that tends to be older than the national average. Lastly, NCPAW is developing general educational and guidance materials for employers and business leaders on psychosocial factors in the workplace that are associated with productive aging at work.

Conclusions – research and/or practical implications: Providing employers with theoretically sound and empirically supported organizational policies and practices is critical for confronting the challenges that come with an aging workforce. Research collaborations to assess the aging workforce is necessary to mitigate a labor shortage and ensure the health and safety of this group. Broad dissemination of theoretically grounded and empirically supported findings to employers is equally as important to ensure best practices are implemented in the workplace. NCPAW leverages collaborations with the academic community to move the field of workforce aging forward and bridge the research to practice gap.

Relevance to the Congress theme “The future is now : the changing world of work”. Workforce aging is no longer something that will happen in the future – it is happening now. Creating resources designed for and freely available to employers is important toward communicating much needed guidance on effective strategies and important considerations for managing an aging workforce.

Relevant United Nations Sustainable Development Goals: Decent work and economic growth.

*Keywords: Organizational guidance, Dissemination; Worker well-being*

## Paper 5

### What does it take? Antecedents of age-oriented leadership

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Research goals and theoretical background: The demographic developments in most industrialized countries lead to an increased proportion of older employees and age-diversity in the workforce, and this trend will continue over the coming decades (Czaja, 2020; Schlick et al., 2013; Truxillo et al., 2015). Offering age-oriented human resource management practices might help promoting health and performance of workers across the working life. Several researchers have identified leadership behavior as a key factor for enhancing performance and work ability of older workers and age-diverse workforces (e.g. Ilmarinen & Tempel, 2002; Wegge, Jungmann, et al., 2012; Wegge, Schmidt, et al., 2012).

Age-oriented leadership (AOL) can be characterized as leadership behaviors that promote health, satisfaction, and performance by accounting for age-related skills, needs and motives of aging employees and that leverage the potential of age-diverse teams (Braedel-Kühner & van Elst, 2012; Jungmann et al., 2015; Kunze et al., 2011; Wegge, Schmidt, et al., 2012). Though AOL provides a useful tool, many organizations and leaders report not to be prepared for challenges associated with the demographic change (Bruch & Kunze, 2007; Müller et al., 2014). In this vein, most often the terms 'demographic change', 'age diversity' or 'aging' itself are too abstract (Bendig et al., 2011) and might delude leaders to underestimate their impact. Despite knowing that employees' age is an important factor, leaders only adapt their leadership behavior to a small, limited amount (Muecke, 2008).

Given the positive effects of AOL, this is quite surprising. What is missing from the literature is an understanding of the processes through which AOL-behavior emerges. Therefore, we aim at identifying important antecedents contributing to leaders' engagement in AOL. Based on the literature, we propose and test a new model of potential antecedents comprising leaders' individual characteristics (e.g., attitudes towards own aging process) as well as contextual factors (e.g., age composition of the team they lead). We further hypothesize that attitudes towards own aging process and knowledge on aging are important moderators of the effects of age on AOL.

Design and research methodology: We used two samples to test our hypotheses. In study 1 we surveyed 576 leaders of a German pharmaceutical company in a cross-sectional sample. We conducted multiple regression analyses to examine the impact of individual attributes and contextual factors predicting leaders engaging in AOL. Furthermore, we tested a three-way interaction between age, knowledge on aging and attitudes towards aging on AOL. In study 2, we collected data of 90 leaders and their respective subordinates from a German car manufacturing company across a 4-month period. Correlational analyses and multiple hierarchical regression analyses will be conducted.

Results obtained: In study 1 we found that older leaders, leaders with a more positive attitude towards their own aging, and leaders with a high span of leadership are more likely to engage in AOL. Moreover, we found age-based differences among the antecedents and a three-way interaction showing different patterns in the interaction of knowledge and attitudes towards aging for younger and older leaders. Preliminary results for study 2 highlight the importance of leaders' age stereotypes and appreciation of age-diverse teamwork for engaging in AOL. Further results will be presented

Limitations: Both studies used self-report survey data, which might be subject to social desirability biases. Study 1 is solely based on leaders reports, whereas study 2 incorporates data from leaders and their subordinates. Study 1 is based on cross-sectional data and thus, limited in the ability to make causal claims. Data in both samples was gathered predominantly among blue-collar workers, which might limit generalizability to white-collar jobs.

Conclusions and implications: Our study highlights the importance of individual as well as contextual factors that increase the likelihood of leaders engaging in AOL.

The results suggest that age-related knowledge and attitudes are interwoven in predicting AOL. Hence, both should be addressed in leadership training on AOL. At the same time, organisations should create conditions (e.g., time for leadership) that enable leaders to engage in AOL.

Relevance to the congress theme: Our research contributes to the conference theme through enabling leaders to consider age in their leadership behavior and, thereby, making use of the additional value of AOL for aging and age-diverse workforces.

Relevant UN SDGs: Good health and wellbeing; Decent work and economic growth.

*Keywords: Age-oriented leadership, Attitudes on aging, Older and younger leaders*

## **symposium S028**

### **Career and Work Role Transitions Across Different Career Stages: Insights From Europe**

Wehrle Katja, Justus-Liebig-University Giessen; Annabelle Hofer, University of Cologne

science

#### What will be Covered and Why

Scholarship emphasizes the changing nature of modern careers as careers grow more complex and new career forms and trajectories emerge. The resulting career landscape confronts workers with increasing demands for intra- and inter-organizational mobility and career self-management. While people's career moves typically occurred in organizations and through a series of jobs, these moves gradually make way for transitions between organizations, sectors, and occupations. While the reasons for career transitions are diverse, people generally face professional and personal change as they build, modify, or exit their earlier careers and work roles to enter new ones. Career transitions happen throughout people's career journeys – from work entry to retirement – and they bring about changes in people's work-role requirements and contexts, and in the collective, relational, and personal aspects that constitute how people understand themselves, their work, and their careers.

To date, career research has focused on internal labor market transitions, particularly on the mechanisms related to workers' career progression and barriers to future employment. Yet, research still lacks insights into the transition processes and into how people experience the movements between different career stages and situations. More insights are needed on what shapes and influences people's career transitions and on how people experience career transitions and adapt to new career phases and work roles. These insights are critical, as they would enable us to offer solutions that can support people during transitions.

This symposium addresses these gaps by combining in-depth qualitative and longitudinal quantitative research from diverse European countries on the factors shaping and the experiences unfolding in people's careers at different stages and situations. For this, the contributions cover diverse samples ranging from pupils to professionals in their early careers to those reentering work and seeking to gain leadership positions. We begin with two studies focusing on people's earliest career transition – the school-to-work transition. Using a longitudinal design across 18 months via three time points, the first study examines the development of adolescents' career preparedness including career preparedness transition outcomes from 9th grade until the transition to a vocational and educational training in Switzerland. Next, the second study applies a longitudinal quantitative design to assess the role of internships in helping young people who struggle to transition from school to work decide on their future career. The study integrates four data time points from young people not in employment, education, or training, who took part in a one-year vocational preparation program in Germany. We then shift perspective to two interview studies that unravel employed persons' lived experience in crucial work role transitions. Drawing on two data sets of medical residents with versus without prior paramedical experiences in Germany, the third study generates a grounded theory on how an established professional identity influences the development of a new professional identity in an intra-institutional work role transition. The fourth study moves on to mothers at managerial levels seeking to progress to leadership positions in European companies. Via an inductive thematic analysis, the study reveals the embeddedness of the ideal-worker-norm in organizational practices and structures, and how this norm can influence mothers' career progression. Finally, our discussant, who is an expert on career transitions and career development, offers an in-depth discussion of the studies' findings and their implications.

Overall, we offer new insights into modern career topics and developments and new solutions that facilitate career and work role transitions.

#### Relevance to the Congress Theme

This symposium highlights how workers transition through their careers at different parts of their career journeys. We illustrate how modern work developments gradually change the nature of careers and workplaces, creating a new world of work that is characterized by high demands for worker mobility.

#### Implications

The symposium illustrates the complexity and the factors shaping career and work role transitions. We extend career research and foster theory development by studying topical issues relating to career transitions. We inform counseling, intervention, work design, and HRM practices.

#### Overall Conclusions

The contributions reveal the importance of a right person-job fit and a clear vocational self-concept for people's career progression. We show how internal (e.g., decisional self-efficacy) and external factors (e.g., internships) facilitate transitions and how people's former work roles influence their continuing careers. We illuminate how workplace structures can foster identity tensions, perpetuate gender inequality, and depict career barriers.

discussant: Jos Akkermans, Vrije Universiteit Amsterdam

*Keywords: career transitions, career mobility, work role transitions*

## Paper 1

### School-To-Work: Social Cognitive Influences on Career Construction Responses

Julian Marciniak & Andreas Hirschi | University of Bern

#### Research Goals and Why the Work was Worth Doing

Research into school-to-work transitions do not test the development of career preparedness longitudinally, and even fewer assess actual career preparedness transition outcomes (Marciniak et al., 2020). In this study, we investigated the development of career preparedness of adolescents in 9<sup>th</sup> grade until the transition from school to vocational and educational training (VET). Specifically, we investigated the impact of decisional self-efficacy and outcome expectations on the transition outcomes of job satisfaction, occupational commitment, and person-job fit, 18 months later during VET. We furthermore postulate that this relationship is mediated by four career construction adapting responses. Our goal is to enrich the theoretical literature by (a) investigating the mediating role of adapting responses, and (b) by combining the theoretical assertions of the career construction theory and the social cognitive career theory.

#### Theoretical Background

We are drawing on the social cognitive career theory (e.g., Lent et al., 2002, 2016), which posits that self-efficacy and outcome expectations are central predictors of subsequent career behaviors. For career behaviors, we draw on the career construction theory (Savickas, 2002, 2005) which defines adapting responses (Rudolph et al., 2017) as distinct outcomes of the career construction sequence. Recently Savickas and colleagues (2018) have defined a specific measurement of career adapting responses in adolescents, namely crystallizing a vocational self-concept, exploring occupations, making a decision, and preparing for the transition.

#### Methods

Our sample consists of 598 students (48.2% female) from the German-speaking parts of Switzerland with the mean age of 14.49 (SD =1.04). We used a longitudinal design across 18 months, with three time points. We first collected self-efficacy and outcome expectations at the beginning of grade nine, we then collected adapting responses at T2 four months before the transition to VET (N =594), and collected outcome variables roughly one year later at T3 (N =222).

#### Results

The results show that decisional self-efficacy is positive and significant predictor of all four career adapting responses. However, outcome expectations was only found to be a significant and positive predictor of crystallizing a vocational self-concept ( $b = .16, p < .001$ ). We found no direct effects of career decisional self-efficacy and outcome expectations on the outcomes of job satisfaction, occupational commitment, and person-job fit 18 months later. Still, a mediation analysis showed an indirect effect of decisional self-efficacy via crystallizing a vocational self-concept towards a person-job fit during VET with an unstandardized estimate of .07 (95% CI [.01;13]). For job satisfaction and occupational commitment, we found no significant indirect effects.

#### Limitations

The biggest limitation is the attrition rate towards T3, where we lost more than 50% of our sample, which can be attributed to two factors: (1) instead of doing the last data collection within the context

of a class room, we now had to do individual follow-ups and (2) the COVID-19 pandemic just started at T3, which led to a decreased response. Next, an additional data collection at the beginning of VET could have provided more insight into the development of outcomes of the school-to-work transition.

#### Implications

Our results are fairly surprising, as only decisional self-efficacy and crystallizing a vocational self-concept seemed to be the only significant predictors of find the correct person-job. These results support the older but still very relevant notions of finding the right person-job fit (e.g., Holland, 1997). Additionally, future research should investigate whether the other adapting responses might have more immediate impact on other transitional outcomes. Practitioners may use these results to inform their career counselling practice, by make sure that adolescents develop a clear vocational self-concept during school. They may use exercises that bolster decisional self-efficacy in order to improve their self-concept, which then may lead to an increased person-job fit.

#### Relevance to the Congress Theme

Given that the career transitions become increasingly unpredictable (Lent, 2018), research needs to investigate which factors significantly benefit individuals when facing a career transition. This is especially true for the first career transition, the school-to-work transition. Hence, this research is getting a glimpse at a pivotal career decision while living in an increasingly changing world of work.

#### Relevant UN SDGs

Decent work and economic growth

*Keywords: career preparedness, career transition, school-to-work transition*

## Paper 2

### Setting Sails for Your Harbor: Examining the Relationship Between Career Decidedness and Internships in NEETs

Gloria Willhardt, Miriam Schäfer & Ute-Christine Klehe | Justus-Liebig-University Giessen

#### Research Goals and Why the Work was Worth Doing

Early unemployment bears the risk of lasting effects such as long-term unemployment and associated individual strain and societal costs (Scarpetta et al., 2010). To prevent such a spiraling effect of unemployment in young years, we follow youths across a one-year early career program aimed at helping them prepare for and decide on their future career trajectory. The present study aimed to shed light on the situation of unemployed youths and to identify mechanisms that can lead to a positive job outcome in the context of such a program.

#### Theoretical Background

Career decidedness, the certainty one has over one's occupational course (Jaffe, 1998; Lounsbury et al., 2004), has long been the focus of early-career research (see Gordon, 1998). Decidedness towards one's career can have beneficial effects on several psychological variables. Developing career decidedness thus is a crucial developmental task for teenagers and young adults (Super, 1981) in preparing for the transition from school to work (e.g., Marciniak et al., 2022).

Successful school-to-work transitions result in adequate integration in the labor market and psychosocial networks and set the first building block for a promising career (Akkermans et al., 2021; Steiner et al., 2022). However, some young people struggle with this transition, with far-reaching consequences (e.g., Burgess et al., 2003). One way to enhance people's decidedness status about their occupational future could be the increased employment of internships. Typically used for soon-to-be graduates in universities or schools, internships provide some sort of orientation about certain occupations and might offer insight into typical workdays and tasks in said jobs. This can either lead to adoption of more decidedness for a specific field or job or less, when people realize that the work is not what they thought it would be (Brooks et al., 1995). Additionally, some sort of work experience additional to a degree has proven beneficial for entry in the labor market (Ebner et al., 2021).

The current study employed a sample of 264 NEETs – young people not in employment, education, or training – and followed their development over the course of a one-year early career program. NEETs are at high risk for long-term consequences such as reduced earnings (Mroz & Savage, 2006), diminished job satisfaction, happiness, and health (Scarpetta et al., 2010), and often face higher risks for long-term unemployment (Carcillo et al., 2015).

#### Methods

We assessed NEETs self-described career decidedness at four measurement points, as well as the internships they completed over the course of the program. Using a random intercept cross-lagged panel model, we were able to estimate the development of career decidedness, self-efficacy beliefs concerning their search and the influence of the internships over the program course on an employment outcome.

#### Results

Results so far indicate that career decidedness, number, and length of internships were positively associated with NEETs' outcomes, that is, the more decided they felt at program completion, and the more and longer internships they completed, the higher was their chance to go back to school for a degree or find employment.

#### Limitations

The current study employs a convenience sample, that is, all students who, at a given point, were enrolled in a government-directed early career preparation program. We cannot make any statement about the voluntary motivation to participate. Furthermore, not all participants completed the program; the dropout rate over the four waves was about 62%.

#### Implications

With this study, we shed light on the role of internships in helping young people with otherwise bleak outlook decide on their future career. Practical implications include advice for program design targeted specifically to younger people.

#### Relevance to the Congress Theme

Bringing young people in decent, sustainable work must be a top priority, especially after recent years with youth unemployment on the rise in certain countries (ILO, 2020).

#### Relevant UN SDGs

No poverty; good health and wellbeing; quality education; decent work and economic growth

*Keywords: school-to-work transition, vocational education, youth unemployment*

### Paper 3

#### **Medical Residents' Identity Baggage: Dynamics Between an Established and Emerging Professional Identity in an Intra-Institutional Work Role Transition**

Katja Wehrle & Ute-Christine Klehe | Justus-Liebig-University Giessen; Mari Kira, University of Michigan

##### Research Goals and Why the Work was Worth Doing

In contemporary working life, people frequently transition between jobs, professions, and careers, thus moving away from one professional identity towards a new one (Ibarra & Barbulescu, 2010). Professional identity research has addressed professional identity construction and development along people's unfolding careers (Pratt et al., 2006) and, reflecting the transitions in people's careers, recent research has alluded to the role of people's lingering 'identity baggage' in the construction of new professional identities (Wittman, 2019). Identity baggage refers to the idea that pre-existing professional and personal identities influence the formation and enactment of a new professional identity. Yet, we lack empirical insights into how people construct new professional identities when their role transition happens within the same institutional settings and identity construction happens on the foundation of a relevant pre-existing professional identity. Such intra-institutional transitions are further complicated when they elevate a person's hierarchical status and, thereby, require them to navigate impressions of belonging to two different status groups. Seeking to build theory around how an established professional identity influences the development of a new professional identity in an intra-institutional work role transition, we ask: How does an existing paramedic identity influence the development of a physician identity?

##### Theoretical Background

Identities are self-referential cognitive and meaning structures that form as people take on new roles, supporting them in making sense of themselves and their surroundings (Gecas, 1982; Tajfel & Turner, 1986). As people transition into new positions within, across, or beyond organizational boundaries, their work-related roles change and, with them, the collective, relational, and personal aspects that have defined their work-related role identities (George et al., 2022). Consequently, people adapt their identities to meet the new role's expectations; they, e.g., cognitively restructure existing identities or abandon them (Petriglieri, 2011). Yet, people may also seek to retain established identities, particularly when these are central to them and enable the expression of their authentic self (Wittman, 2019). People's understanding and crafting of a meaningful professional self may thus be colored by the sustained identification with a former role, and so people may construct a new identity in interplay with former ones.

##### Methods

This inductive qualitative study adopts a grounded theory approach (Gioia et al., 2013) to generate a theoretical model of how an established identity influences professionals' identity development. For this, we, first, analyze the identity development among 36 medical residents with a prior professional paramedic training in Germany to then, second, contrast the findings with the data of 33 medical residents without a professional paramedic training to explore how physicians' identity development differs between the groups.

The German medical school context offers a rich opportunity to address our research question. The medical profession constitutes the prototype of a profession (Hughes, 1956), and medical residency is a crucial, practice-focused period for construction of a physician identity (Pratt et al., 2006). In addition, due to competitive admissions to physician training programs, many applicants apply several times, bridging the time between medical school applications with other professional training in healthcare.

## Results

Holding an established paramedic identity uniquely influenced medical residents' identity development; it shaped their framing of the physician work and role. Participants experienced identity tensions between their paramedical and physician identities, as they recognized changed relationships to patients, conflicts between work activity priorities, a hostility of their former in-group, and a longing for the "old". Nevertheless, they managed to cope, e.g., by aggregating their paramedical and physician identities: (1) They formed a salience hierarchy between them (e.g., recognizing and prioritizing changed responsibilities, while occasionally adopting former work activities) and (2) developed integrity towards a physician identity (e.g., stressing the relevance of their unique interdisciplinary competence). Established health-care-related identity resources facilitated identity aggregation (i.e., knowledge of the care system and clinical skills, experience with patient care and other worker groups, and personal maturity).

## Limitations

This study bases on cross-sectional data.

## Implications

We decipher how an established professional identity influences the development of a new professional identity in an intra-institutional work role transition. Theoretically, we contribute to career and work role transition, identity work, and socialization research. Practically, we inform medical studies' curricula and clinics' work design, and highlight the relevance of interdisciplinary competence in physicians' work.

## Relevance to the Congress Theme

This study focuses on how former identities shape emerging identities in intra-institutional work role transitions among professionals whose career model is gradually changing.

## Relevant UN SDGs

By revealing medical residents' various role conflicts and the severe institutionalized restraints that impede them in performing their work as desired, we inform on the SDGs of 'good health and wellbeing', 'decent work and economic growth', and 'quality education' in the healthcare sector.

**Keywords:** *lingering identities, role identities, work role transition*

## Paper 4

### Organizational Enablers and Barriers to Mothers' Career Progression

America Harris & Ulrike Fasbender | University of Hohenheim

#### Research Goals and Why the Work was Worth Doing

Despite improvements for women in the labor market, mothers continue to experience lower earnings, labor market participation, and progression to leadership than child-free women and fathers. The “motherhood penalty,” which is the financial and career disadvantages of motherhood, perpetuates gender inequality. Most research on motherhood penalties takes individual-level and familial-level approaches, while organizational factors contributing to the motherhood penalty have been scantily addressed (Fuller & Hirsh, 2019). However, the organizational-level approach is vital to providing a holistic understanding of career barriers within organizations, as gender inequality comes in multi-leveled forms. Drawing on systemic intersectionality theory (Acker, 2006) and the concept of the “ideal worker” (Acker, 1990), this study investigates the embeddedness of the ideal-worker-norm within organizational practices, policies, job criteria, and reward systems and how this may help or hinder mothers' career progression.

#### Theoretical Background

Systemic intersectionality theory foregrounds the organizational context and workplace structures, which may provide further understanding of the career progression barriers mothers face because it can help to identify organizational factors that act as systemic barriers. Systemic intersectionality posits that social categories, such as gender and motherhood, interlock and affect each other interdependently at the macro-level of organizations, social structures, and cultural ideologies (Castro & Holvino, 2016).

Research indicates gendered assumptions underlie workplace structures and culture, disadvantaging mothers (Acker, 2012; Kmec et al., 2014). The concept of the ideal worker is a framework for the social construction of gender that could help identify organizational barriers that hinder mothers' career progression. The ideal worker is an unencumbered worker who is devoted to work and assumes the ability to work long hours, continuously full-time, without family interference. Studies find that the ideal worker image and norm privileges men, marginalizes women, and penalizes mothers who navigate between work and family roles, which maintains gender segregation and reinforces gender inequality in the workplace (Deming, 2022; Zanhour & Sumpter, 2022). Moreover, studies indicate mothers' uptake of flexible work arrangements are incongruent with ideal worker norms (Cech & Blair-Loy, 2014; Kmec et al., 2014). While studies refer to the pervasiveness of the ideal worker norm within work cultures, few investigate the embeddedness of the ideal-worker-norm in workplace structures.

#### Methods

This study explores the following research questions: 1) How do organizational factors shape mothers' career progression? 2) How are ideal-worker-norms embedded into work structures? We adopt a qualitative approach to facilitate understanding of participants' subjective experiences of workplace structures, which are then examined against the ideal worker framework to reveal career enablers and barriers. We will conduct fifty semi-structured interviews with mothers at managerial levels seeking to progress to high-status/leadership positions within European companies. Eight of

the fifty interviews have been completed, with the remaining to be completed by April 2023. Data will be analyzed using inductive thematic analysis.

### Results

Interim results indicate that the ideal-worker-norm is embedded in European organizational cultures, practices, policies, and job requirements in informal ways, which disadvantages mothers who cannot perform according to the ideal worker norm. While formal workplace structures embody neutral and gender-free characteristics, their informal operationalizations are embedded with the ideal-worker-norm. Preliminary findings reveal three themes: “Invisible penalties of flexible-work,” “Unencumbered male-typed job criteria,” and “Part-time work equals non-promotable work,” which hinder mothers’ career progression.

### Limitations

An inherent limitation of qualitative research is that its aim is not to achieve generalizability as the results are relevant to a segment of the population. However, theoretical generalizability will enable linking individuals’ experiences in the findings with extant literature. Additionally, casual conclusions cannot be drawn from the results.

### Implications

This study will make several contributions to academic and practitioner knowledge. It is one of few studies investigating organizational factors contributing to mothers’ career progression, thus expanding theoretical understanding of how workplace structures are implicated in perpetuating gender inequality and contributing to motherhood penalty, human resource management (HRM), and career literature. This study carries significant practical implications for HRM practitioners. By advancing knowledge on gender inequalities embedded within work structures, this study can offer interventions to deconstruct ideal worker norms within HRM practices and redesign HRM practices/policies to foster diversity at leadership levels, thus improving labor market outcomes for mothers.

### Relevance to the Congress Theme

The future of work is diverse; as such, organizations are increasingly challenged to improve diversity, equality, and inclusion within their workforce. This study carries practical implications for improving gender equality within organizations.

### Relevant UN SDGs

The study’s aim of identifying career enablers and barriers to mothers’ career progression is relevant to the UN SDG of gender equality.

*Keywords: career progression, ideal worker, motherhood penalty*

## Symposium S030

### The future is (almost) now: Changing the world of analysing time in occupational health psychology research (Part 1)

Christian Dormann, University of Mainz, Germany

science

What will be covered and why

This is Part I of a symposium that covers a range of empirical studies applying continuous time structural equation modelling (CTSEM) to investigate propositions derived by the job demands-resources (JD-R) model. Since its introduction a decade ago, CTSEM has continuously gained popularity. It represents the state-of-the-art method of analysis because it accommodates more restricted methods of analysis such as growth curve modelling, latent change score analysis, or discrete time SEM. In general, CTSEM probably is the best tool to analyse repeated measures gathered in field studies and could provide the best insight into work and organizational psychology phenomena. Part I of the symposium provides a brief introduction into the principles of CTSEM, followed by two presentations dealing with possible reciprocal relations among stressors and burnout, and it ends with some room for questions and answers. In Part II of the symposium, more complex CTSEM analysis of job stress studies are presented.

In the introduction, Dormann briefly introduces CTSEM and its strengths, so that researchers familiar with structural equation modelling or multi-level lineal modelling get an understanding of this relatively new technique. Four strengths are (a) dealing with varying time intervals within and between individuals, (b) separation of unexplained variance in structural equations and measurement error even with single item measures, (c) accounting for unobserved heterogeneity by modelling random intercepts (i.e., random intercept cross-lagged panel modelling; RI-CLPM), and (d) aggregation of effects across different studies by means of continuous time meta-analysis (CoTiMA).

The second contribution to Part I is the study by Che Mat and colleagues. This study investigates possible reversed causal effects among role conflict, student social stressors, and emotional demands and mental exhaustion and mental distance among teachers. The authors conducted a 3-wave study which huge within and between person variations in time intervals. Whereas they could not find a significant cross-lagged effect between any of the three stressors and exhaustion at the between-person level, several (reciprocal) effects emerged at the within person level. Most importantly, role conflict and emotional demands had cross-lagged effects on mental exhaustion and mental distance. Also, some positive as well as some negative 'strain-effects' of exhaustion and distance on stressors were found, suggesting some vicious circles of increasingly more strain on the one hand and some 'homeostatic' circles on the other, by which stressor and strain levels are kept within boundaries.

The third contribution to Part I of the symposium is a paper by Mueller and Guthier, which deals with reciprocal relations among illegitimate tasks and burnout. The concept of illegitimate tasks has gained much attention since the millennium. However, no single study has been published reporting possible reciprocal relations with burnout. The authors found that reciprocal effects between illegitimate tasks and burnout indeed exist. The strain effect of burnout on illegitimate tasks was significantly stronger than the stressor effect of illegitimate tasks on burnout. With their findings, the authors contribute to the increasing evidence of the importance of strain effects.

Relevance to the Congress Theme:

The world of work is changing, and so is the work of researchers, who constantly face the challenges brought by new statistical methods. Longitudinal studies that frequently spanned years and sometime even decades cannot cover the pace of changes in work anymore. Furthermore, new designs such as diary designs, experience sampling methods, or shortitudinal studies challenge the usefulness of established statistical methods. As researchers, we should change our own work, i.e., the way we used to analyse data.

Research/Practical Implications:

Overall conclusions:

Future research should use time intervals within a range of days to a few weeks, and they could vary time intervals within and between participants. Further, if the three or time points are available, RI-CTSEM models allow for analysing reciprocal within person effects, thus accommodating the strengths of several other methods to analyse repeatedly measured variables.

*Keywords: structural equation modelling, ctsem, job stress*

## **Paper 1**

### **Introduction to the Symposium Part I**

Christian Dormann, University of Mainz

This is the introduction into Part I and Part II of the symposium. It briefly introduces CTSEM and its strengths, so that researchers familiar with structural equation modelling or multi-level linear modelling get an understanding of this relatively new technique. Four strengths are (a) dealing with varying time intervals within and between individuals, (b) separation of unexplained variance in structural equations and measurement error even with single item measures, (c) accounting for unobserved heterogeneity by modelling random intercepts (i.e., random intercept cross-lagged panel modelling; RI-CLPM), and (d) aggregation of effects across different studies by means of continuous time meta-analysis (CoTiMA).

*Keywords: structural equation modelling, ctsem*

## Paper 2

### **The competing effect of within-person vs between-person of three types of job stressors on burnout**

Nurhema binti Che Mat & Mohd Awang Idris | University Malaya, Kuala Lumpur, Malaysia; Christian Dormann, Johannes Gutenberg-University, Mainz, Germany

#### Research goals and why the work was worth doing

Studies on the cross-lagged effect of job stressors and burnout provide insights on the development of burnout over time. While a plethora of longitudinal research empirically provides meaningful support on burnout as a prolonged phenomenon, it remains unclear whether different types of job stressors develop burnout in different time gaps (e.g., short, medium, and long). Thus, it is important to examine if different kinds of job stressors lead to burnout and how this relation unfolds over different time intervals.

#### Theoretical background:

Based on the job demands-resources (JD-R) model, we examine how three competing job stressors namely role conflict (RC), student social stressors (SSS), and emotional demands (ED) lead to mental exhaustion and mental distance among employees. More specifically, we used within-person and between-person analysis and investigated if there are any differences of job stressors' reactions on burnout. The present study adds to the literature because previous studies mainly missed taking possible reciprocal relations at the within-person level into account, which challenges the common interpretation that stressors cause burnout (cf. Guthier et al., 2020).

#### Design/Methodology:

Leveraging on the benefits of unequal time intervals in the continuous time method (Voelkle et al., 2018), we collected data amongst teachers in Malaysia (N = 80) three times within a year at various time intervals to reflect different time gaps (short term and long term). Participants were informed that they will be getting reminders to do their second questionnaire on the fifth day upon completion of the first questionnaires and subsequent reminders on monthly basis will be sent out to motivate them to participate in the third questionnaires. Once the third questionnaires completed, the researcher did not follow up for any participation anymore. In any stages of study, participants were informed that they may opt to leave or continue the study voluntarily.

Participants responded to the questionnaire at a time point on their own choice. As a result, the time intervals for the second data collection ranged from 5 days to 8 months, and for the third data collection they ranged from 1 month to 12 months from the first data collection. Since the nature of study involves the different time intervals within and between persons, we used continuous time structural equation modelling (CTSEM) as the state-of-the-art method for analysing data with varying time intervals.

#### Results:

Using the R-package CTSEM, we found that the effect of three competing job stressors on mental exhaustion and mental distance are different to each other, especially when comparing within-person and between-person effects. At the between-person level, there was neither a significant cross-lagged effect between job stressors on mental exhaustion nor mental distance. On the

contrary, within-person cross-lagged effects were found for two job stressors. Role conflict significantly increased both mental exhaustion and mental distance. We also found that mental exhaustion reduced role conflict, and mental distance increased role conflict. Cross-lagged effects were also observed for emotional demands and mental distance. Results revealed that emotional demands increased mental distance, but mental distance reduced emotional demands. However, neither was there a cross-lagged effect of emotional demands on mental exhaustion. SSS has no cross-lagged effect on neither mental exhaustion nor on mental distance.

#### Limitation & Conclusions:

There are a few limitations of this study. First, our participants are specifically in a teaching profession, thus should not generalise to the other occupations. However, as our main research is to investigate psychological process for experiencing student related stressor, role conflict and emotional demands, our participants selection was appropriate. Second, the study was conducted during covid-19 pandemic, whereby teachers had to change their teaching method from physical classroom to online classroom, and they also worked from home rather than engaging their students in physical presence, there are some other stressors perhaps confounding our result. In addition, since the data collection approach involves several times intervals, it is difficult to keep participants remain engage in the study. Although we were able to get 148 participants involvement in the first data collection, but only 80 participants completed all three data collections in a year. In general, the study reveals on how job stressors are important factor that able explain fluctuation and prolong effect of burnout symptom.

*Keywords: ctsem, job stress, teachers*

### Paper 3

#### **Longitudinal moderation effects of personality on reciprocal relations between burnout and illegitimate tasks**

Annika Müller, Christina Guthier | Johannes Gutenberg University of Mainz, Germany

Research goals and why the work was worth doing:

The effect of stressors on burnout has been studied many times. Interestingly, a longitudinal meta-analysis found that the reverse ‘strain effect’ of burnout on stressors is twice as large as the ‘stressor effect’ of stressors on burnout (Guthier et al., 2020). Thus far, the strain effect burnout on stressors has been rarely studied so far, and possible moderators of the strain effects have not been investigated yet. Since such moderator effects are important as they could mitigate the vicious circle of stressors and burnout, our study fills in this gap. In particular, we investigate personality as a potential moderator of the stressor effect and the strain effect between illegitimate tasks and burnout.

Theoretical background:

Illegitimate tasks are perceived as unnecessary or unreasonable (Semmer et al., 2010). Illegitimate tasks can threaten one's identity (Semmer et al., 2015). According to the Stress-as-Offense-to-Self (SOS) framework, illegitimate tasks as a stressor result from a task associated with a negative social message that can result in a threat to the positive self-image (Semmer et al., 2015). Any kind of threat (e.g., social, emotional, physical) causes stress reactions. To deal with stress, a person can become exhausted, and this can lead to burnout in the long run. There is also the possibility that burnout increases the perception of stressors like illegitimate tasks. Since the perception of illegitimate tasks highly depends on personal role expectations and subjective perceptions of the appropriateness of the tasks, this perception should change due to altered emotional information processing when suffering from burnout. Therefore, we expect that both illegitimate tasks increase burnout and burnout increases illegitimate tasks. Since illegitimate tasks are highly subjective, we assume that the reciprocal effects will differ between people and that certain personality traits will buffer the reciprocal effects. For example, given that extroverted people consciously select positive aspects of stress and tend to seek more social support (Hemenover et al., 1996), we assumed that an extroverted exhausted person is less likely to perceive tasks as illegitimate due to support or social contact and the more positive view. Thus, a reducing moderation effect of extraversion can be assumed.

Design/Methodology:

We conducted a two-wave panel study. The average time interval was ten days, but there was variation across employees so that continuous time analysis was the method of choice. Data were collected by using online surveys for employees who were at least 50% employed. A total of 1.111 completed questionnaires and longitudinal data from N = 192 participants were available. The Bern Illegitimate Tasks Scale (Semmer et al., 2010), the German version of the Maslach Burnout Inventory-Student Survey (MBI-SS; Schaufeli et al., 2002), and the MRS-30 to measure the Big 5 personality dimensions (Schallberger et al., 1999) were applied to measure the Big Five personality dimensions. Data were analyzed with moderated structural equation modeling.

Results

Both reciprocal effects between illegitimate tasks and burnout were significant with the strain effect of burnout on illegitimate tasks being stronger than the stressor effect of illegitimate tasks on burnout. Moderator analysis showed that conscientiousness significantly decreased the strain effect of illegitimate tasks on burnout. No significant moderation effects were found for the other personality dimensions.

#### Limitation & Conclusions:

The results confirm the meta-analytical established reciprocal effect of stressors and burnout and further confirm a stronger strain effect than stressor effects. Strain effects should therefore be considered in theoretical models and future studies to better understand how they emerge. Further, conscientiousness moderates the strain effect, by which the vicious reciprocal cycle between stressors and burnout gets weaker. Again, there is a need to better understand how exactly this moderating effect emerges, and future studies should investigate this effect in more detail.

*Keywords: ctsem, job stress, illegitimate tasks*

## Symposium S031

### The future is (almost) now: Changing the world of analysing time in occupational health psychology research (Part II)

Christian Dormann, University of Mainz

science

What will be covered and why

This is Part II of a symposium that covers a range of empirical studies applying continuous time structural equation modelling (CTSEM) to investigate propositions derived by the job demands-resources (JD-R) model. In Part I of the symposium, an introduction into ctsem and two typical job stress studies analysed with ctsem are presented. In this second part, some complex studies are presented involving a moderated ctsem analysis of the effects of job resources, and a random intercept continuous time meta-analysis (RI-CoTiMA) of the effects of job resources in diary studies, and a RI-COTiMA of reciprocal relations among job demands and burnout. Finally, Laurenz Meier as invited discussant provides a critical evaluation of both parts of the symposium.

The first contribution to Part II of the symposium is a paper by Loh and colleagues. They proposed that a psychologically healthy workplace with abundant task-level resources is beneficial for improving workplace creativity. Specifically, they aim to understand how psychosocial safety climate (PSC) interacts with job resources (i.e., supervisor support and co-worker support) to influence employee creativity. Loh et al. applied a multi-wave quantitative diary design and collected data from 35 engineers, and they analysed their data with CTSEM. Their main findings are that co-worker support predicted future creativity, and this effect was even stronger in a high PSC context. Supervisor support predicted future creativity only when employees were in a high PSC context, emphasizing that a psychosocially sustainable work environment, i.e., a high PSC context, supports employee creativity.

The second study presented in Part II of this symposium is study by Plueckhahn and colleagues. This study represents the first meta-analysis of possible reciprocal relations conducted with diary data. In particular, the authors investigate reciprocal relations between relational resources at work and negative affect using RI-CoTiMA. They found the strain effect of negative affect on relational resources to be stronger than the effect of resources on affect. By this, the authors provide first empirical evidence that strain effects are important to be modelled in diary studies. They also found that both cross-lagged effects reached their maximum after only about 2.5 hours, suggesting the absence of a carryover effect on the next day. Further, the authors also conducted analyses of statistical power suggesting that future diary studies should sample much more participants than done in previous studies to achieve an adequate probability to find truly existing effects.

The third paper by Dormann and Driver extends a recently published CoTiMA of  $k=48$  longitudinal studies (Guthier et al., 2020;  $N = 26319$ ) on the reciprocal relations among workload/time pressure and burnout by using RI-CoTiMA. The CoTiMA results by Guthier et al. could be challenged because they did not account for possible bias due to stable interpersonal differences (i.e., unmeasured traits). The present CoTiMA did so by including random intercepts. Still, the results largely confirm the results by Guthier et al. and show that workload is less likely to cause burnout than burnout is likely to cause increased (perceptions of) workload. In neither of the different models tested, workload/time pressure significantly increased burnout.

This discussant (Laurenz Meier) will critically discuss the results present in Part I and in Part II of the symposium. He is an internationally recognized expert of the analysis of longitudinal and quantitative diary data using advanced statistical methods, and he will provide critical remarks as well as suggestions for further research.

Relevance to the Congress Theme:

The world of work is changing, and so is the work of researchers, who constantly face the challenges brought by new statistical methods. Longitudinal studies that frequently spanned years and sometime even decades cannot cover the pace of changes in work anymore. Furthermore, new designs such as diary designs, experience sampling methods, or shortitudinal studies challenge the usefulness of established statistical methods. As researchers, we should change our own work, i.e., the way we analyse our data.

Research/Practical Implications

Overall conclusions:

Future research should use time intervals within a range of days to a few weeks, and they could vary time intervals within and between participants. Further, if the three or time points are available, RI-CTSEM models allow for analysing reciprocal within person effects, thus accommodating the strengths of several other methods to analyse repeatedly measured variables.

discussant: Laurenz Meier, University of Neuchâtel

*Keywords: structural equation modelling, ctsem*

## **Paper 1**

### **Psychosocial safety climate and workplace creativity: A continuous-time modelling approach**

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Research goals and why the work was worth doing:

Working in a positive organizational context is essential for employee creativity. Employees' ability to create novel products and solve problems with innovative solutions improves corporate growth and effectiveness. Being creative also has value in shaping an employee's stress appraisal and enhancing their well-being. Given the importance of creativity, organizational researchers have devoted much effort to understanding the factors of boosting and cultivating creativity in workplaces. To improve our understanding of workplace creativity, there is a need for more attention to be given to the contextual effect and to how it interplays with other factors to influence creativity.

Theoretical background:

In the current study, we proposed that a psychologically healthy workplace with abundant task-level resources is beneficial for improving workplace creativity. Specifically, we aim to understand how psychosocial safety climate (PSC) interacts with job resources (i.e., supervisor support and co-worker support) to influence employee creativity. As posited by the Job Demands-Resources (JD-R) model, job resources, such as social support are key determinants of employees' performance, motivation, well-being, and creativity. The effect of job resources could be boosted if a positive work context such as a high PSC exists. Psychosocial safety climate (PSC) is a facet-specific organisational climate that reflects the organisational policies, practices, and procedures related to employee psychological health. A high PSC workplace consists of abundant resources and signals that employees are free and secure to use these resources. However, the interactive link between PSC, job resources, and workplace creativity has not yet been investigated; neither have been possible reciprocal effects. In addition, most of the longitudinal studies between job resources, organisational climate and creativity have ignored the influence of time intervals. This is unfortunate because this may reduce the validity and generalizability of results. We used continuous time structural equation modelling (CTSEM) to test our hypothesis to overcome this issue.

Design/Methodology:

A multi-wave quantitative diary design was included in this study. We collected data from 35 engineers from an Australian engineering firm. After omitting respondents with less than two observations, a total of 123 observations were included in the analysis. We analysed the data with CTSEM using the R package ctsem.

Results:

CTSEM results suggested that job resources, particularly co-worker support, predicted future creativity. Higher co-worker support was related to higher creativity (5.0012, lower level [LL] = 3.6307; upper level [UL] = 6.3778, 95% confidence interval [CI]). The effect was even stronger when being in a high PSC context (1.4424, LL = 0.7237; UL = 2.1547). Supervisor support predicted future creativity only within high PSC contexts (0.3286; LL = 0.1703; 0.4852). Unexpectedly, the findings revealed a negative reversed effect of creativity on supervisor support (-20.0859; LL = -25.5958; UL = -14.6843) and co-worker support (-66.4920; LL = -96.8514; UL = -35.5602), indicating that the more creative a person is, the less likely they are to receive supervisor and co-worker social support. This negative effect is slightly reduced by PSC (-0.0890; LL = -0.1106; UL = -0.0672).

#### Limitations:

Our study is limited with a small sample size from a single occupation and types of job resources (we only examined social support in the current study). Future research should include a larger sample and examine other resources, such as opportunities for learning and rewards. Even so, our study is the first attempt to understand the interplay of a psychologically healthy workplace and job design on creativity. We propose that high PSC is a significant element for creating a creative organizational environment and a protective factor for creative people.

#### Conclusions – research and or practical implications:

From the findings, we suggest that a high PSC work context is the key to boosting the impact of job resources and improving employees' creativity. In addition, we argue that building a high PSC is good for enhancing creativity and creating a friendly working environment for creative people.

#### Relevant UN SDGs:

Building a psychologically healthy and humane workplace is one of the global agendas in this changing world of work, as recognised by the International Labor Organization and the United Nations. Our study answers the call to promote decent work and economic growth in the latest UN SDGs.

*Keywords: Psychosocial safety climate, creativity, ctsem*

## Paper 2

### **Challenging Unidirectionality. A Continuous Time Meta-Analysis of Short-Term Reciprocal Effects of Relational Resources and Negative Affect.**

Wiebke Plückhahn & Thomas Rigotti | Johannes Gutenberg-University Mainz; Verena C. Haun, Julius-Maximilians-University Würzburg

Research goals and why the work was worth doing:

Prevention of long-term health-impairment processes is essential, especially when considering potentially harmful changes at the modern workplace. Recently, the reciprocal interplay of employee well-being and work characteristics has gained attention. Focusing on social relationships at work, we conducted a meta-analysis of time-lagged bidirectional effects between relational resources and negative affect. We provide insights into fundamentals of the dynamic relationships by analysing shortitudinal effects that might result in long-term build-up processes.

Theoretical background: The study of work characteristics has shaped research in work and organizational psychology during the recent decades. This is for good reason, as a variety of studies has linked work characteristics to positive as well as negative personal and organizational outcomes. Some longitudinal research papers and meta-analyses, however, also refer to strain effects, pointing out that employee well-being in turn seems to impact the experience of work, too. Drawing on that and Job Demands-Resources (JD-R) theory, we investigate reciprocal effects of relational resources at work and negative affect. Relational resources emerge from connections and bonds with colleagues and supervisors. When studying health outcomes, they have been shown to prevent depressive states and long-term health constraints. As past work focused on medium- to long-term effects, we examine daily diary data to understand fundamentals of dynamic processes and provide fine-grained insights into effects within a workweek. First, we investigate whether bidirectional effects already occur during this short time span. We then test whether resource and strain effects are of equal magnitude. Furthermore, we inspect the respective time lag after which the effects are largest.

Design/Methodology/Approach/Intervention: We conducted a documented literature research, including studies being published within the past 5 years from German speaking samples. The final sample consisted of 8 studies with a total of 1291 working individuals providing 6546 data points. We estimated cross-lagged effects using the usual cross-lagged panel model (CLPM) implemented in time continuous meta-analytical modelling (CoTiMA), and we extended the analysis by including random intercepts to identify pure within person effects (RI-CoTiMA). Further, we tested for equality of cross-lagged effects, and conducted power analyses to determine minimum sample sizes.

Results:

Overall, we found evidence for both the resource effect from social resources on negative affect, as well as the reversed effect from negative affect on social resources on the within-person and between-person level. On the latter, cross-lagged effects were equally strong and reached the biggest effect size after approximately 1.5 days, whereafter they slightly decreased. Remarkably, on the within-person level the strain effect of negative affect on relational resources was even stronger than the effect of resources on affect, meaning that short-term negative affect reduced relational resources more strongly than relational resources decreased negative affect reported shortly thereafter. Both cross-lagged effects reached their maximum after only about 2.5 hours before they almost completely decayed after only one day. Additionally, power analyses revealed large minimum

sample sizes to reliably detect short-term effects at between-person level. Within-person models clearly seem to be more economical, however, only when examining time lags of less than one day.

Limitations:

The sample includes only German-language data and relatively few studies. Therefore, our results are not entirely generalizable. Furthermore, it is unclear whether we surveyed resources themselves, as job characteristics usually are fairly stable, and it is questionable to what extent they actually fluctuate at an hourly level. It is more likely that, implicitly, the appraisal of resources was examined.

Conclusions:

Short-term negative affect influenced relational resources at least as much as vice versa, underlining the importance of considering reciprocal relationships of job characteristics and affect in future research designs. Especially the rapidly decaying within-person spikes should be further examined. Future studies should also pursue the question of how these microlevel effects build up into long-term burnout and/or depression. Here, our power analyses provide guidance on necessary sample sizes.

Relevance to the Congress Theme:

The short-term dynamic relationships of job characteristics and employee affect are important to understand in the rapidly changing world of work. Since we investigate very recent studies in this meta-analysis, the results show the pattern of effects at modern workplaces.

Relevant UN SDGs:

This study refers to the sustainable development goals of good health and wellbeing, as well as decent work and economic growth.

*Keywords: Resources, Stress, ctsem*

### Paper 3

#### **Traits Out – Stress Gone? A Random Intercept Continuous Time Meta-Analysis (RI-CoTiMA) of Workload-Burnout Relations**

Christian Dormann, University of South Australia & University of Mainz, Germany; Charles Driver, University of Zuerich, Switzerland

Research goals and why the work was worth doing:

The effect of workload on burnout has been investigated many times and workload has been regarded as one of the major causes of burnout. Surprisingly, a recent continuous-time meta-analysis (CoTiMA) of longitudinal studies found that the reverse 'strain effect' of burnout on stressors is twice as large as the 'stressor effect' of stressors on burnout (Guthier et al., 2020). The CoTiMA by Guthier and colleagues applied the common cross-lagged panel model (CLPM), which has been criticized because cross-lagged effects could be biased, and they represent a blend of within and between person effects. Therefore, a random intercept alternative (RI-CLPM) has been proposed by Hamaker (2015), which eliminates trait variance and yields within person effects, which researchers are usually interested in. Since Guthier et al.'s finding – stress effects are smaller than strain effects – is extremely challenging for job stress researchers, and since it could well be possible that their finding relates to the problems of CLPM to yield unbiased within person effects, we used the same set of  $k = 48$  longitudinal studies and analysed them with a new CoTiMA using random intercepts (RI-CoTiMA).

Theoretical background:

All job stress models propose that stressors cause strain (stressor effect), but virtually no model proposes that strain causes stressors (strain effect). However, some longitudinal studies found strain effects, and in these instances most researchers explained them post hoc by proposing mechanisms such as the stressor perception effect, the stressor creation effect, or the drift effect by which employees suffering from strain drift to more stressful jobs/tasks in the future. Until the recent meta-analysis by Guthier et al. (2020), however, there were few systematic investigations of possible reciprocal relations among stressors and strains such as workload and burnout. Unfortunately, interpreting the strain effect the authors found is difficult because it represents a blend of within and between person effects. For both theory building as well as for worksite interventions it is important to know if strain effects are not caused by personality characteristics (i.e., traits) and instead represent within person processes. Therefore, the present study proposes that stressor effect of workload and the strain effects of burnout exist at the within person level, and that the strain effect is larger than the stressor effect.

Design/Methodology:

We used the same set of  $k = 48$  longitudinal studies included in the recent CoTiMA by Guthier et al. (2020). Among these were 6 studies with 3 or more waves, which were required to estimate random intercepts. Estimating random intercepts, however, was not limited to these 6 primary studies. Rather, the subset of these 6 studies enabled estimating random intercepts for the whole set of  $k = 48$  studies.

Results:

A RI-CoTiMA of subset of  $k=6$  studies with three or more waves yielded a continuous time significant stressor effect with negative (sic) sign (-.5623), whereas the strain effect was significant and positive

as expected (1.8475). When extending the analysis and including all available k=48 studies, the stressor effects was positive and significant as expected (.9748), and the strain effect was significant and larger (1.8546), as expected. All analyses suggest that stressor effect and strain effects have their largest magnitude across time intervals of around 1 month, which is much shorter than the interval of 27 month reported by Guthier et al. (2020).

#### Limitation & Conclusions

The results confirm the previously meta-analytical established reciprocal effect of stressors and burnout and further confirm a stronger strain effect than stressor effects. Strain effects should therefore be considered in theoretical models and future studies to better understand how they emerge. We still do not know why the subset of k=6 studies with three or more waves yielded a negative stressor effect suggesting the workload might decrease burnout, and we will test some possible study-level moderators as possible explanations later. Still, there is a need to better understand how exactly strain effects moderating effect emerges, and future studies should investigate this effect in more detail. Since the largest effects emerged across time intervals as short as 1month, future studies should take this into account, too.

*Keywords: stress, burnout, continuous time meta-analysis*

## Symposium S032

### Applying Socio-Technical Systems Thinking to the Changing World of Work

Matthew Davis, University of Leeds; Patrick Waterson, Loughborough University

science

#### Overview:

The world of work is changing rapidly, for example, with the emergence and introduction of new technologies, advanced machine learning and artificial intelligence (AI), flexible work patterns and shifting ideas of what it means to “go to work” following the COVID-19 pandemic. Our symposium brings together three presentations that each applies Socio-Technical Systems principles (Cherns, 1979; Clegg, 2000) and tools to demonstrate how this thinking can be used to tackle specific challenges posed by changing world of work. The presentations share a common view that the changes that we are witnessing are not neatly attributable to or solvable by a single discipline. They are complex problems and to adequately understand and address them requires recognising the interaction between human behaviour, technology, infrastructure and management practices – in other words, taking a systems perspective.

In presentation one, Waterson describes a computer program capable of identifying factors contributing to harm during pregnancy and birth and explains how this can be used to design specific ways to improve maternal care for Black ethnic mothers. Waterson explains the complex set of factors that contribute to maternal harm. The example is used to illustrate the opportunity to use socio-technical systems principles to inform the design of healthcare systems. Waterson sets out an agenda for the use of machine learning in other healthcare contexts (e.g., the design of effective integrated care health pathways) and guidance for the application of the framework and principles laid down by Clegg (2000).

In presentation two, Grote, considers how work and organizational psychologists can help stakeholders to co-create and co-design AI. Grote describes how the development of AI raise fundamental questions about the distribution of control and accountability in socio-technical systems. AI is becoming increasingly capable of acting autonomously – this has profound implications for humans working alongside or accountable for such technologies. Grote and colleagues propose a design theory for the accountable design and use of AI, supporting practitioner decision-making on developing and using AI.

In presentation three, Davis considers how socio-technical systems tools and principles can be used to inform the design of the future workplace and examines how socio-technical systems thinking itself needs to be extended to better reflect the new world of work. A study by Davis and colleagues using the systems scenarios tool (SST) provides insights into how different office designs, organizational policies and building management practices interact to affect occupants. Davis considers how competing individual needs can be supported within contemporary office design.

The symposium concludes with an interactive discussion that challenges participants to consider new applications for socio-technical systems thinking to contemporary organizational problems and to identify barriers (and solutions) to use.

#### New Perspectives/Contributions

Our symposium provides three different illustrations as to the application socio-technical systems thinking to current challenges relating to the changing world of work. We provide work and

organizational psychologists with illustrations as to how principles, frameworks and tools can be applied to help understand and address these and offer a new design theory to help guide AI design. We present new empirical and conceptual research.

#### Relevance to the Congress Theme

We directly contribute to the congress theme demonstrating how socio-technical principles, tools and methods can be applied to: 1. help understand the impact of new technologies, work processes, physical work environments and work patterns, and; 2. equip work and organizational psychologists to take an active role to design, shape and improve the changing world of work.

#### Relevant UN SDGs

We directly address a number of SDGs, most notably "decent work and economic growth", "good health and well-being", "reduce inequalities" and "industry, innovation, and infrastructure".

#### Research/Practical Implications:

The symposium will help extend both research and practice by providing worked examples of how socio-technical systems principles, methods and tools can be applied. The discussion will prompt reflection around extensions and refinements to existing theory and further application areas.

*Keywords: socio-technical systems, artificial intelligence, hybrid work*

## Paper 1

### **New Directions for Sociotechnical Systems – the use of Machine Learning to improve the investigation of patient harm**

Patrick Waterson, Human Factors and Complex Systems Group, Loughborough University, UK

#### Theoretical Background

The field of sociotechnical systems (STS) has always been an eclectic one. Over the course of the last 70 years or so new fields and disciplines have been added to the list of collaborators that STS researchers work with. One of the latest collaborations is with colleagues working in the area of machine learning, artificial intelligence and data science. This paper will describe some work which has begun with the aim of applying machine learning to a large number of investigation reports covering patient safety with maternity in the UK NHS. In particular, the focus is on harm caused to patients from Black communities, as well as other ethnic minorities. Black women are five times more likely to die in the UK as a result of complications in their pregnancy than White women. Women of Black heritage are around 83% more likely to suffer a 'near miss' in childbirth. Research also found that Black children have a 121% increased risk of stillbirth and a 50% increased risk of neonatal death. At the moment, we do not have an accurate picture of the causes contributing to these statistics. Research points to biological factors (e.g., obesity or the birth history of mothers) as one cause of poor outcomes in maternity. Similarly, social and economic factors (e.g., language barriers, unemployment) are thought to play a role. Finally, the quality of care (e.g., poor communication with the mother, lack of knowledge on health issues) given to Black mothers and families is likely to be a factor.

One challenge is to provide an objective assessment of how these factors interact and influence each other. The Healthcare Safety Investigation Branch (HSIB) has carried out more than 2000 investigations over the last few years into things that go wrong during pregnancy and birth. Approximately 10% of these investigations involve Black mothers and families. One of the challenges HSIB faces is identifying patterns and trends within and across all of this data and using these to influence national bodies (e.g., CQC, NHS Improvement) and established and emerging campaigns (e.g., the NHS Maternity Transformation Programme, the NHS Long Term Plan).

#### Method

We will describe in our presentation a computer program that is capable of analysing the investigation reports and extracting data based on a set of codes for identifying factors contributing to harm during pregnancy and birth. The computer program uses machine learning to probe deeper into how different factors (e.g., regional, biological, clinical, care quality) interact, influence one another and lead to harm. The computer program also allows us to design specific ways in which maternal care for Black ethnic mothers and families can be improved.

#### New Perspectives/Contributions

Part of the presentation will be given over to a demonstration of how the computer program works and the codes that are learnt by the machine learning algorithm. These codes cover factors which contribute to maternal harm. Some of these are care-related (e.g., lack of escalation, delays in treatment) and some are related to background physiological factors (e.g., eclampsia, high levels of BMI). Part of the presentation will also be given over to discussing our collaboration with maternity

groups drawn from Black and ethnic minority groups (e.g., Five X More). We will also set out an agenda for the use of machine learning in other healthcare contexts (e.g., the design of effective integrated care health pathways). The work we describe is grounded in the framework and principles laid down by Clegg (2000) and we will describe how our work fits in and complements this earlier research. The research we will describe is funded by the UK Health Foundation.

#### Relevance to the Congress Theme

We directly contribute to the congress theme, addressing the positive role of new technology (artificial intelligence and machine learning) in understanding differences in outcomes from a work system (maternal healthcare providers).

#### Relevant UN SDGs

We address a number of SDGs, principally "good health and well-being", "reduce inequalities" and "industry, innovation, and infrastructure".

*Keywords: socio-technical systems, artificial intelligence, patient safety*

## Paper 2

### **Organizing AI: A design theory for making decisions about learning algorithms in networks of accountability**

Gudela Grote, ETH Zürich, Switzerland; Kevin Crowston, Syracuse University, New York, USA; Sharon Parker, Curtin University, Australia

#### Theoretical background

Information systems researchers have long bemoaned the lack of interest from management scholars in the role of technology for organizations and organizing. The recent transformative opportunities for automated decision-making based on learning algorithms and artificial intelligence (AI)-based technologies more broadly have dramatically changed this state of indifference. Many authors have expressed strong concerns regarding profound negative consequences of AI. Often, the predictions seem to draw on the paradigm of technological determinism, where technology is assumed to have foreseeable effects because users have no choice but to integrate it into their work in predefined ways. We argue that management research, and in particular research in work and organizational psychology, needs to develop a more proactive stance towards these new technologies in order to better support organizations and employees in managing both emerging threats and opportunities. The envisioned changes brought about by AI, defined as "algorithmic processes that learn from data in an automated or semi-automated manner" (NIST, 2022), are massive and raise fundamental questions about the distribution of control and accountability in socio-technical systems. As technologies' capabilities for autonomous action are rapidly growing, human actors find themselves in the uncomfortable situation of being held to account for actions they barely understand and have no control over. Rather than accept such developments as inevitable, stakeholders need to be empowered and enabled to co-create and co-direct accountable design and use of AI with the aim to align control and accountability for all parties involved.

#### New Perspectives/Contributions

We propose a design theory for creating and governing networks of accountability to foster accountable AI design and use based on accountability negotiations. Our theory and the testable design propositions derived from it are meant to guide prospective research on the impact of emerging AI technologies, but also to provide immediate support for organizational strategists in their attempts to harness the benefits of these technologies. We argue that decisions about technology development and implementation should be founded in a concern about "how things ought to be" (Simon, 1996) rather than in explanatory science about how things are. In a similar vein, Aguinis et al. (2022) have emphasized the need to convert exploratory and explanatory research in organizational behavior and human resource management to prescriptive and normative research.

In our theory, we propose that multiple stakeholders have to be brought together in networks of accountability rather than relying on the decisions of single actors at different stages of system development and implementation. Borrowing from risk theory, we postulate that stakeholders need to be enabled to conduct accountability negotiations across prospective, real-time and retrospective modes of organizing in an AI cycle and to consider and integrate rationalist and constructivist perspectives on accountable AI. We formulate four sets of design propositions concerning (1) the set-up of networks of accountability as preconditions for (2) defining transition mechanisms in the AI

cycle, which in turn are necessary prerequisites for the governance of networks of accountability both in terms of (3) adequate consideration of rationalist and constructivist perspectives and (4) handling of conflicts. Assumed outcomes of successfully creating and governing networks of accountability are alignment between control and accountability for all stakeholders, effective performance of the socio-technical systems in which AI is developed and used, and employee well-being.

#### Conclusions – research and practical implications

By proposing a design theory for the accountable design and use of AI, we expand the existing literature on AI in management towards prospective and normative research. Our design propositions map out avenues for future research, but also support practitioner decision-making on developing and using AI. By outlining the workings of networks of accountability, we shed light on how the intricate relation between technology, work, and organization can be managed, taking both rationalist and constructivist perspectives into account. Furthermore, we outline how risk should be considered more systematically and fundamentally in technology management, encompassing economic, physical and psychosocial risks.

#### Relevance to the Congress Theme

We directly contribute to the congress theme, as the impact of new technologies on work is imminent and work and organizational psychology should play a stronger role in shaping this impact. Our theory provides a framework for such more proactive research.

#### Relevant UN SDGs

By linking technological innovation with work design, we address a number of SDGs, foremost "good health and well-being", "decent work and economic growth" and "industry, innovation, and infrastructure".

*Keywords: socio-technical systems, artificial intelligence, design theory*

## Paper 3

### Applying socio-technical systems principles to the design of the future workplace

Matthew Davis, University of Leeds; Hannah Collis, University of Exeter; Linhao Fang, Emma Gritt, Simon Rees & Helen Hughes | University of Leeds

#### Background

COVID-19 changed where we work. Hybrid working (working from multiple workspaces e.g., office, client sites, home, third spaces) has become main stream. This work arrangement is preferred by office-based employees in the UK and across the EU (e.g., Davis et al., 2022; Eurostat, 2022). In this presentation we target academic impact by addressing the knowledge gap this shift to hybrid and more flexible forms of working creates, specifically in terms of the changing experience of work itself and how the future workplace needs to be adapted. Existing management and organizational psychology literatures have examined psychological and organizational implications of remote or home working, but more dynamic forms of working, such as hybrid working, remain underspecified and poorly understood. We demonstrate the value of applying socio-technical systems principles (e.g., Cherno, 1979; Clegg, 2000) to inform the design of the future workplace and examine how socio-technical systems thinking itself needs extending to better reflect the features of dynamic work environments.

#### Method

We employed the socio-technical Systems Scenarios Tool (SST) methodology (see: Hughes et al., 2017) to: 1. Identify the socio-technical factors influencing the employee experience of current workplaces that had been retrofitted to accommodate hybrid working practices; 2. Identify criteria for success and performance outcomes in future workplaces between different organisational stakeholders; 3. Explore participant generated future workplace scenarios (e.g., alternative physical designs, technology, process and management configurations) with trade-offs and contingencies identified. We worked with three UK based case study organizations (a private sector financial services firm, a public sector research organisation, and a private sector global engineering firm), each predominantly employing knowledge workers within traditional office environments. We followed the SST approach by first gathering contextual information via company documentation, floor plans, meetings with management and conducting employee interviews (n=46). This information informed the design of the workshop materials to guide participants through discussion and evaluation of their workplace design and ways of working in both the current and future scenarios. Four workshops were conducted within these organisations, each lasting four hours and involving 73 participants drawn from across departments, roles, seniority and tenures.

#### Findings and Conclusions

The workshop data was analysed by applying a socio-technical systems framework (Davis et al., 2014) using a template approach (Hughes et al., 2017; Clegg, et al., 2017). This approach generates key findings from integrating diverse data to map the trade-offs and inter-dependencies inherent in the design of future workplaces. Our analysis provides insights into how occupants are affected when different office designs, organizational policies and building management practices interact. We use these findings to explicitly consider how competing needs (e.g., individual vs team, working preferences, job characteristics) can be supported within a contemporary workplace context. Discussion will reflect on how the application of socio-technical systems principles, frameworks and

tools can help inform the design of future workplaces so they can both support the employee experience and promote organizational performance. Discussion will also consider the opportunity to extend existing socio-technical principles (see Davis, 2019) so they reflect the rapidly changing nature of work post COVID-19. Our discussion builds upon the developing discourse within the work and organizational psychology domain (e.g., Ayoko & Ashkanasy, 2020; Davis et al., 2019; Ward & Parker, 2020), regarding the opportunity to explicitly consider the physical work context within work design theory. We conclude by noting the practical implications and opportunities that this rapid shift to hybrid working presents for organizations and organizational psychology practitioners, to both inform and facilitate this change.

#### Relevance to the Congress Theme

We directly contribute to the congress theme, as the impact of changing work patterns, new technologies and physical work environments are rapidly changing the experience of work. We present insights and methods to aid work and organizational psychologists take an active role in designing and improving the future workplace.

#### Relevant UN SDGs

We directly address a number of SDGs, most notably "decent work and economic growth" and "industry, innovation, and infrastructure".

*Keywords: socio-technical systems, physical workplace, hybrid work*

## Symposium S033

### **The Challenges We Face: What Can Work and Organizational Psychologists Learn from Entrepreneurs and How can Psychology Help Entrepreneurs?**

Constanze Eib, Uppsala University

science

What will be covered and why

Despite the importance of entrepreneurs for innovation and job creation, as well as the sizable percentage of self-employed in the European labor market, Work and Organizational Psychologists (WOP) still seem to not regard entrepreneurs as central population to study. With this symposium, we aim to change this view. Entrepreneurs, self-employed, giggers, freelancers are a heterogenous group of the working population. Some are in precarious situations, some lonely, some feel inadequate, some are passionate and some playful and creative. Studying entrepreneurs can provide answers to multiple challenges of our world. In this symposium, we approach these challenges: an aging population, gender inequality, future ways of work including a lack of a clear organizational support network and gamification.

The symposium presents a collection of new and exciting studies using psychological theory on different types of entrepreneurs:

Chadwick & Dawson present two quantitative studies (cross-sectional, longitudinal) with entrepreneurs operating in the US. Based on the imposter phenomenon (a psychological bias, leading capable people to feel inadequate in the face of success) and gender-role incongruity theory (Eagly & Karau, 2002), they investigate predictors of women entrepreneurs experiencing imposter perceptions. Also, they study the consequences of feeling like an imposter and the moderating effects of social support and psychological resilience.

Purc & Laguna explore older entrepreneurs' reasons and motives to continue working at retirement age. Using a qualitative approach with entrepreneurs operating in Poland, they find that older entrepreneurs experienced a variety of motives to continue running a business apart from financial reasons. Also, they explored older entrepreneurs' views on their age and their well-being while working.

Wach et al. examine solo self-employed in Germany during the COVID-19 pandemic. Lacking an organizational safety net, solo self-employed were hit hard by the pandemic and faced many stressors and challenges. Building on transactional stress theory (Lazarus & Folkman, 1984) and using a mixed method design, the authors find specific coping strategies and recovery activities that helped this precarious group of entrepreneurs to maintain their well-being.

Eib et al. examine the impact of others (i.e., stakeholders) in shaping entrepreneurs' work environment. They suggest that entrepreneurs operate within a network of people and institutions that are sources of entrepreneurs' fairness perceptions. Data on solo self-employed operating in Sweden are analyzed with latent profile analysis. Findings reveal that entrepreneurs view treatment from various stakeholders differently, and these different profiles vary in work outcomes and well-being.

Mukerjee et al. conclude the symposium with three survey studies on the development of two play at work scales, using data from SME owners in France. They propose that play and entrepreneurship are both processes that share similarities; however, a lack of a reliable and valid measure on play at

work hinders progress on this topic. As the practice of play at work is rising (Mainemalis & Ronson, 2006), especially with the millennial workforce bringing in a 'play and game culture' to their workplace, the study of play is arguably of interest to all WOP.

#### Relevance to the Congress Theme

In this symposium, we tackle several challenges we are all facing right now in this changed world of work. Chadwick & Dawson confront gender inequality in entrepreneurship and the challenge of highly competent people feeling inadequate. Purc & Laguna approach the challenge of an aging population in Europe with unsustainable pension systems. They study motives that help prolong an entrepreneurial career as well as age-related experiences. Wach et al. study coping and recovery of entrepreneurs during the pandemic to learn how to build resilience against future crises. Eib et al. grapple with the challenge of how workers, who work outside of an organizational support network, are affected by external institutions and people. Mukerjee et al. provide us with ideas on how play, creativity and gamification may change our future way of work.

#### Research/Practical Implications

The collection of studies is designed to give new thoughts and ideas to WOP, entrepreneurs, and policy-makers. We develop insights into: what entrepreneurs need to create a sustainable career, how institutions can support entrepreneurs, and how to reduce gender inequalities in entrepreneurship. We also contribute to the entrepreneurial well-being literature, alike we introduce psychological theories into entrepreneurship.

#### Overall conclusions

To solve the big challenges of our times, we as WOP need to be present in all businesses, no matter how small or large. Entrepreneurial businesses will change our future – the question is: how can We help entrepreneurs do that best.

*Keywords: entrepreneurs, self-employed, well-being*

## Paper 1

### The Complex Role of the Imposter Phenomenon Among Women Entrepreneurs

Alexandra Dawson & Ingrid Chadwick | Concordia University

#### Research goals and why the work was worth doing

In line with gender-role incongruity theory (Eagly & Karau, 2002), women tend to experience competing social expectations of what it means to be a woman versus a working professional, making them more susceptible to feel like imposters (Sandford et al., 2015). This paints a bleak picture for women entrepreneurs in the male-dominated context of entrepreneurship. Scholars have accordingly argued that women entrepreneurs are more likely to experience imposter fears than men, and that this may help explain why fewer women become entrepreneurs and why, once they do, they tend to be less likely to succeed (Ladge et al., 2019).

The goal of this research is therefore two-fold. First, grounded in the literatures on the imposter phenomenon (Clance & Imes, 1978) and gender-role incongruity theory (Eagly & Karau, 2002), we seek to better understand the extent to which women entrepreneurs experience the imposter phenomenon, and whether certain women are more or less likely to do so. Second, we aim to explore both business and personal outcomes of experiencing the imposter phenomenon in entrepreneurship for women relative to men, and whether there are critical factors that can alleviate its negative effects (or possibly enhance positive effects).

#### Theoretical background

The imposter phenomenon is a psychological bias, leading highly capable and intelligent individuals to attribute their success to external factors such as hard work or luck, feel inadequate and fraudulent, even in the face of success, and believe others overestimate their abilities (Clance & Imes, 1978; Tewfik, 2022). Not surprisingly, feeling like an 'imposter' is associated with negative outcomes such as anxiety, low self-efficacy, and maladaptive behaviours including self-denigration (Ferrari & Thompson, 2006).

The imposter phenomenon is often triggered in high achievement contexts, leading to its prevalence among people of all backgrounds and demographics in today's complex and competitive working world (Badawy et al., 2018). However, research suggests that high-achieving women in male-dominated contexts, such as entrepreneurship, may be exceptionally affected due to gendered expectations for success in such domains (Kets de Vries, 2005; Ladge et al., 2019).

Despite claims about the potential harmful impact of the imposter phenomenon for women's entrepreneurship, there are scarce empirical investigations available to date. This is an important oversight as women are entering entrepreneurship at increasing rates across the globe (Elam et al., 2019). Hence, we need to better understand the prevalence and implications of women experiencing imposter fears, but above and beyond that, we need to investigate the role of different factors that may help these women avoid or at least overcome this bias.

#### Methods

We are conducting two complementary studies using validated measures (to be completed by March 2023). Study 1 is a survey of 150 women entrepreneurs in Canada who are asked to report on their experiences of the imposter phenomenon (using Clance's (1985) scale), and offer demographic,

business, and industry information to shed light on what types of women are more or less likely to feel like imposters in entrepreneurship. This study also incorporates measures of a potential identity conflict respondents may experience as women and entrepreneurs (a potential antecedent to the imposter phenomenon), including their gender evaluation (Luhtanen & Crocker, 1992).

Study 2 is a time-lagged survey of 100 men and 100 women entrepreneurs, in which respondents are asked about the imposter phenomenon at time 1, followed by individual (e.g., wellbeing) and business (e.g., performance) outcomes at time 2. Moderating factors such as social support and psychological resilience will also be measured to investigate ways to mitigate any harmful effects that the imposter phenomenon may produce, including differences in results for men versus women.

#### Preliminary results

Preliminary results from Study 1 suggest the imposter phenomenon does not affect all women entrepreneurs equally, depending on demographics and gender evaluations. Furthermore, the implications of feeling like an imposter may not be as clear cut as the literature suggests, encouraging more research on this important topic.

#### Limitations

It may be fruitful to study women entrepreneurs in other countries to replicate the findings.

#### Research/Practical Implications

Our research seeks to test and extend theory on the role of the imposter phenomenon for women entrepreneurs, and to ultimately contribute insights that enable more women to thrive in entrepreneurship.

#### Relevance to the Congress Theme

We contribute to improving the changing world of work by focusing on reducing gender inequalities. The imposter phenomenon may be one factor that can explain the gender inequality in entrepreneurship.

#### Relevant UN SDGs

Decent work and economic growth, Gender equality, Reduced inequalities, Good health and wellbeing

*Keywords: imposter, gender inequality, entrepreneurs*

## Paper 2

### **Do You Want to Work Forever? Reasons to Continue Running a Business From the Perspective of Entrepreneurs at the Retirement Age**

Mariola Laguna & Ewelina Purc | The John Paul II Catholic University of Lublin

#### Research goals and why the work was worth doing

Due to the population aging, visible especially in developed countries, people, including entrepreneurs, often have to work longer than it used to be (Herrador-Alcaide et al., 2021; Noone et al., 2021; Vignoli et al., 2021). There is a growing research interest in startup activities by older individuals (e.g., Halvorsen & Morrow-Howell, 2017). However, little is known about specific motivations and perceptions of entrepreneurs who continue running their businesses even when they could be retired. Hence, a qualitative study was conducted to explore older entrepreneurs' reasons for continuing to operate a company at retirement age. Moreover, age-related difficulties and perceptions of the work situation of such entrepreneurs were investigated.

#### Theoretical background

Age matters when starting and/or operating a business. In general, younger people recognize more opportunities to start a business (Bohlmann et al., 2017), and indeed are more likely to start a business (Levesque et al., 2006). However, older people, over the course of their lives, have acquired more knowledge and experience relevant for business operations (Small, 2012; Kautonen, 2013; Stirzaker et al., 2014; Fachinger, 2019). Moreover, research has shown that the human and social capital of older people contributes to reducing business failure rates (Wainwright & Kibler, 2014). In addition, due to retirement benefits, older entrepreneurs have a steady income (Fachinger, 2019), with the result that the financial risk of running a business is lower. However, when they invest their savings into the business and the business does not survive, they have much less time to rebuild their position and raise funds than young entrepreneurs (Wainwright & Kibler, 2014). All these premises suggest that there are specific motivations and factors responsible for continuing running businesses at the retirement age.

#### Design/Method

The data used in the study were collected in qualitative semi-structured interviews. Participants were 50 Polish entrepreneurs (34% women) aged 60-83 years, running their businesses for 25.3 years on average. In Poland, the retirement age is 60 for women and 65 for men. Participants were asked about (1) reasons to continue running a business, (2) age-related difficulties, and (3) perceptions of older entrepreneurs' work situation. Data were analyzed with a thematic analysis approach.

#### Results obtained

Results show that reasons why older entrepreneurs continue to run a business were to satisfy financial needs, the need to be active, out of passion, and perceiving running a business as a mission. Surprisingly, few participants experienced age-related difficulties. Some entrepreneurs indicated difficulties related to their worsening health and psychophysical capacity and due to their limited ability to use new technology. However, despite these few age-related difficulties, older entrepreneurs perceived their vast experience as an advantage over younger entrepreneurs. As for their perception of the overall situation of older entrepreneurs, many believed that running a business was an obligation – participants were convinced that as long as health and other factors

allowed it, one should continue working even after reaching the retirement age. It is consistent with the theory of continuity of aging (Atchley, 1989), which assumes that older people have higher psychological well-being when they maintain similar lifestyles and activities as when they were younger.

#### Limitations

Entrepreneurs were selected on the basis of their availability; the sample is thus not representative. Due to restrictions involving the COVID-19 pandemic, some entrepreneurs were interviewed face-to-face and others by phone. Future studies may combine qualitative and quantitative methodological approaches to further study the relationship between quality of life and running a business at retirement age.

#### Research/Practical Implications

The study results provide relevant insights into older entrepreneurs' work situation, which can be used by scholars and policymakers in supporting their valuable activity. Reasons for continuing to operate a company at retirement age and age-related difficulties were identified. It should be emphasized that older entrepreneurs have a great potential to contribute to countries' economic development.

#### Relevance to the Congress Theme

Better understanding the changing world of work has to include the issue of population aging in developed countries. Research shows that the older the population in a country, the lower the rate of overall entrepreneurship is (Liang et al., 2014). Considering the societal and economic importance of creating and maintaining businesses, it is vital to get insights into factors stimulating older entrepreneurs to continue running a business and into the difficulties they face.

#### Relevant UN SDGs

The topic is related to UN sustainable development goals concerning poverty reduction, decent work and economic growth.

*Keywords: retirement, aging, entrepreneurs*

### Paper 3

#### **How do the solo-self-employed safeguard their wellbeing during a crisis? Insights into stress, coping and recovery during the Covid-19 pandemic**

Martina Pieperhoff, TU Dresden; Ute Stephan, King's College London; Dominika Wach, TU Dresden

##### Research goals and relevance

The current study integrates stressor coping research with insights from the recovery literature to explore, first, what stressors the solo-self-employed experience during the Covid-19 pandemic and, second, how they deploy problem- and emotion-oriented coping alongside recovery as mechanisms to maintain their life satisfaction and prevent vital exhaustion. Our current mixed-method study contributes insights to the growing research on entrepreneurial well-being (e.g. Stephan, 2018), and in particular, to coping and recovery as potential solution to entrepreneurial ill-being that help entrepreneurs to sustain their wellbeing whilst navigating their intensely stressful work.

##### Theoretical background

Based on a Lazarus and Folkman's transactional stress and coping theory (1984) as well as stressor detachment model (Sonnetag & Fritz, 2015), we explore in what ways the COVID-19-pandemic was experienced as threatening for solo-self-employed and their businesses. In response to stressors such as uncertainty, loneliness, or financial pressures, we expected solo-self-employed to engage in problem-focused coping, for instance, via exploration and testing novel business ideas, as well as in emotion-oriented coping to reduce their psychological distress. We view recovery as emotion-oriented coping strategy that promotes psychological well-being (Van Harreveld, Van der Pligt, Claassen, & Van Dijk, 2007).

##### Design/Method

We conducted 22 in-depth qualitative interviews with German solo-self-employed from two sectors in Saxony during March 2021. We explored COVID-19 related stressors experienced by the participants as well as their coping strategies including recovery from work in their leisure time and during the workday. We analyzed the data drawing on Mayring's summarizing content analysis (2015) and used MaxQda software to code the interviews and calculate interrater reliability. Prior to this study we conducted online survey to collect data on participants' well-being, resilience, and socio-demographic data, including information regarding the negative impact of COVID-19-crisis on their business.

##### Results

The main themes regarding "stressors" related to financial problems, uncertainty and lack of social contacts. Typical "coping strategies" were mindfulness, maintaining a positive outlook, and taking advantage of the pandemic to engage in personal professional development. Interestingly, most participants recognized and implemented new business opportunities as a way of coping, while hiking, walking and exercise were typical "recovery" strategies. In regard to well-being, solo-self-employed reported moderate life satisfaction and vital exhaustion. We also gained valuable insight about how certain coping strategies were preferred by solo-self-employed to deal with specific stressors, and identified different types of participants based on their profiles of utilization of particular coping and recovery mechanisms.

## Limitations

Our findings showed moderate interrater-reliability (Kappa = 0.56) calculated based on eight randomly selected interviews that were coded by an independent research assistant blind to our research questions. Our sample was rather small and homogenous which prevent us from deriving more general conclusions.

## Research/Practical Implications

Investigating stressors, coping strategies and well-being in vulnerable groups such as solo-self-employed, who were particularly strongly hit by the pandemic, has the potential to offer insights that could be valuable in future crises. Transactional stress theory seems very well suited in the context of the COVID-19-pandemic and self-employment. It highlights the relevance of social support as coping strategy and suggests that solo-self-employed should actively search for networking opportunities to better deal with crises. On the more negative site, professional coaching and counselling should address entrepreneurs' negative emotions such as anger and fears, to help alleviate their distress.

Attempts to provide coaching tailored to the needs of solo-self-employed in crises may orientate on existing coaching as proposed and evaluated by Schermuly et al. (2021).

## Relevance to the Congress Theme

Our contribution is of high relevance for the congress theme "The Future is Now: the changing world of work". At a time when systemic health and climate crises (e.g. flooding, fires) are becoming more frequent, it is paramount that we have a robust understanding of how entrepreneurs cope with crises to be able to support them. This is also important as solo-self-employed account for 54.4% of all self-employed in Germany being its "economic backbone". To build a resilient economy, research is needed to predict how entrepreneurs overcome a crisis (i.e., their businesses survive) and how they may even thrive in times of crisis by recognizing new opportunities and innovation.

## Relevant UN SDGs

Good health and wellbeing (SDG3)

Decent work (SDG9)

*Keywords: well-being, COVID-19, entrepreneurs*

## Paper 4

### **Not so alone after all? From where do entrepreneurs get fair treatment at work – and does it matter for their well-being?**

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Research goals and why the work was worth doing:

The aim of this study is to investigate sources of fairness perceptions for entrepreneurs. With this, we make a theoretical contribution to the entrepreneurship literature by proposing that entrepreneurs indeed have a support network, even though it is different from the organizational support net employees have. We suggest that entrepreneurs operate within a network of people and institutions that shape entrepreneurs' work environment in fundamental ways. Moreover, we make a theoretical contribution to the justice literature by looking at sources of fairness perceptions outside of an organizational support network.

Theoretical background:

Research on the importance of the work environment of entrepreneurs has been increasing in recent years. Entrepreneurs are seen as independent creators of their work environment, balancing high workload, loneliness, financial insecurities with high autonomy and meaningful work. One of the aspects missing from this literature is the consideration of stakeholders in shaping entrepreneurs' work environment.

From research on employees, we know that fairness perceptions are an important psychosocial work environment factor with substantial associations to work outcomes, well-being and health. The fairness literature is vast but limited in at least one important way – research is mostly conducted within organizations, with employees being the primary target of interest. One reason may be that fairness perceptions stem from interactions with so-called sources. The source of fair or unfair treatment that informs employees' fairness perceptions is the immediate supervisor or organizational representatives. Entrepreneurs, however, lack both supervisor and organizational representatives. Thus, entrepreneurs are an interesting population to study to determine whether fairness extends beyond organizational boundaries. Previously, it has been suggested that entrepreneurs also have fairness perceptions, and that these may be informed by the treatment they receive from their different stakeholders, like state agencies, banks, clients, etc. However, there is no empirical work that studied sources of entrepreneurs' fairness perceptions.

In this study, we investigate fairness perceptions in relation to different stakeholders of entrepreneurs. Using a person-centered approach, we explore whether stakeholder justice perceptions form distinct profiles. Profiles are validated with demographics, business variables as well as work and well-being outcomes.

Methodology

Data from 453 solo self-employed operating in Sweden were collected. Stakeholder fairness perceptions were assessed with five items. Each question started with "To what extent do you feel fairly treated...?", ending with "by governmental agencies and municipalities", "by clients", "by bankers or financiers", "by unions", by "unemployment fund". Importantly, in the Swedish context, entrepreneurs are, in part, integrated into unions and unemployment funds.

Results obtained:

Generally, fairness perceptions were highest for treatment by clients, medium for banks, government agencies, unions, and lowest regarding the unemployment fund. Latent profile analysis extracted distinct profiles of stakeholder justice, which not only differed in level but also in shape. Profiles significantly differed in performance, job and career satisfaction, as well as in well-being and health. In terms of covariates that differentiated between profiles, demographic variables made mostly no difference. Instead, variables concerned with security factors (e.g., income security, impact of COVID-19, lack of clients) differentiated between profiles.

These results suggest that justice perceptions of entrepreneurs may stem from various stakeholders, and that it makes a difference for entrepreneurs' work and well-being outcomes how they perceive treatment from these stakeholders.

Limitations:

Cross-sectional data, the limited number of stakeholders investigated, and the specificity of the sample may limit drawing wide-ranging conclusions.

Research/Practical Implications:

The study of justice perceptions within entrepreneurs is a new area of research and very little theoretical or empirical work has been done. The idea that stakeholders impact the work environment of entrepreneurs, which in turn, affects entrepreneurs' work and well-being outcomes, has theoretical implications that needs to be explored further.

The Swedish welfare system is built around employees' needs. Anecdotal evidence suggests that many entrepreneurs feel that they do not get their fair share out while paying into the system (e.g., parental leave, sick pay, pension rights). Thus, studying how entrepreneurs perceive fairness from various stakeholders may provide insights into what policy changes are needed to foster greater interest in becoming an entrepreneur in Sweden as well as provide a sustainable and positive entrepreneurship climate for current entrepreneurs.

Relevance to the Congress Theme

As entrepreneurs are an increasing force in the labor market, it is important to study the work environment they face. Understanding how fairness is perceived by entrepreneurs, and how different stakeholders impact entrepreneurs may help to make being an entrepreneur a more sustainable career choice.

Relevant UN SDGs

Decent work and economic growth; peace, justice, and strong institutions, good health and wellbeing, reduced inequalities

*Keywords: justice, well-being, entrepreneurs*

## Paper 5

### **“Playing the fool or playing to be serious”? Development of play scales for work organizations**

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science

Research goals and why the work is worth doing

Play is a phenomenon as old as civilization. As put by Huizinga “play is older than culture” (2014: 1). In the field of management however, play has traditionally been seen as opposite of work. This was unequivocally stated by Frederick Taylor: “It is a matter of ordinary common sense to plan working hours so that the workers can really “work while they work” and “play while they play,” and not mix the two” (Taylor, 1911: 126). Play has always been present in work organizations though, notwithstanding surreptitiously, away from the managerial gaze (Roy, 1959). In the last two decades, many organizations have institutionalized play with the belief that it has positive consequences, both on workers’ motivation, well-being, performance, as well as on the organizations (Mainemelis & Ronson, 2006).

An attempt to forge a synthesis between the view that work and play are opposite has been put forth by studies arguing that work, especially creative work, can become a kind of play (Starbuck & Webster, 1991; Schrage, 2000). Playing with work tasks to increase productivity called ‘serious play’ – in the form of prototyping, brainstorming, etc., – has become common in many organizations (Schrage, 2000). On the other hand, ‘diversionary play’, that is play unrelated to work tasks but enjoyable, undertaken often to recharge and replenish from work, always present in work organizations (Roy, 1959), is now openly carried out by workers, often encouraged by managers. Such play can take many different forms, e.g., socializing, jokes and humor, or games (Dumas & Rothbard, 2013; Abramis, 1990; Filipowicz, 2002).

Despite growing interest and recognition among management scholars that play is omnipresent in work organizations most empirical work on play are case studies or ethnographic studies that have zoomed into one (or two) organization(s) (Hunter et al., 2010; Sørensen & Spoelstra, 2011; Nath, 2016; Mukerjee & Metiu, 2022). These studies have been essential to understand and theorize about the phenomenon of play at work, and helped us gain a deeper understanding of the ways in which play unfolds in work organization and benefits work. Recently, scholars have studied and created a scale to measure playful work design initiated by employees at work (Scharp et al., 2022).

However, with the changing nature of work, especially with the rise of the millennial workforce (Wey Smola & Sutton, 2002) who grew up in a gaming culture, and demand freedom at work, play is becoming more and more pervasive in organizations (Mukerjee & Metiu, 2022). Therefore, investigating play in organizations, through a theory-based measure is now timely. As a part of a larger research project, in this paper we develop measurement scales for two types of play documented in work organizations: diversionary and serious play. We do this by testing our scales on entrepreneurs.

Our motivation to focus on entrepreneurs is driven by two principal reasons. Entrepreneurship can be seen ‘as becoming in the moment of life where initiative, spontaneity, imagination and immediacy emerges’ (Hjorth & Steyaert, 1999), a process that shares stark similarity with play. Surprisingly, while the popular press has often alluded that creating a company demands playful imagination, and

entrepreneurs are people who ‘work hard and play hard’, the entrepreneurship literature has remained surprisingly silent about the role of play in the entrepreneurial process.

Secondly, unlike employees/managers working in large organizations, entrepreneurs, especially small to medium business owners, have the freedom to create and shape their firm’s environment (Kauannui et al., 2010), and are often the creator and gatekeepers of the firm’s culture. Thus, entrepreneurs are a good proxy for measuring the extent of play present in their enterprise.

#### Theoretical background

We draw on anthropological theories of play (Bateson, 1972; Huizinga, 1955) as well as existing works on play in organizations (Mainemelis & Ronson, 2006; see Petelczyc et al., 2018 for a review) to conceptualize the dimensions of diversionary and serious play.

#### Design/methods

For creating the scales for diversionary and serious play, we will follow three stages: item development, scale development, and scale evaluation (Boateng et al., 2018). We will use three datasets solely consisting of French SME owners (N=80, N=250, N=250). Data collection is expected to finish until December 2022. Other measures used for checking validity are available upon request from authors.

#### Expected results

Preliminary data are available and suggest that play can be assessed with a reliable and valid scale.

#### Limitations

We aim to contact samples representative for SME owners in France, though the sample may be biased as we are dependent on voluntary participation.

#### Research/Practical Implications

Organizational life is no longer narrowly defined as being just about work. The notion of organizational life now represents “a site for the search for ‘personal wellness’, a place and time where ‘well-being’ is defined and self-expression actively encouraged, where ‘happiness’ is sought through a proliferation of techniques celebrating the self” (Costea, Crump, and Holm, 2005: 141). As a result, play at work has started to receive increasing interest. Furthermore, with the millennials’ desire to balance work with play and freedom, play is progressively becoming an organizational reality that begs for serious research enquiry.

#### Relevance to the Congress theme

By developing scales to measure the two most frequent types of play studied in work organizations, our study contributes to one of the central research agenda of organizational studies – understanding the changing context and nature of work (Barley et al., 2017).

#### Relevant UN SDGs

Decent work and economic growth; good health and wellbeing

*Keywords: play, scale development, entrepreneurs*

## Symposium S034

### On Sleep and its Many Faces: Portraying the Manifold Relations of Sleep and Work

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science

Employees spend about one third of the day asleep and about one third of the day at work. Specifically, humans seem to sleep even one hour longer than the usual employee spends working per day. This makes sleep and work two vastly important domains that structure employees' everyday lives. Importantly, both sleep and work can mutually affect each other. On the one hand, sleeping long and well can restore energetic resources needed to function effectively at work, for example, to experience work engagement or perform well. On the other hand, work can impair sleep, for example, due to time constraints or ruminative processes.

Different aspects can characterise sleep. While sleep duration refers to the amount of time spent sleeping, sleep quality, efficiency, and fragmentation describe experiencing restorative sleep such as not having trouble falling and staying asleep. Also, the timing of sleep matters as social sleep lag describes a discrepancy between employees' biologically preferred and actual sleep times. All these sleep characteristics can differentially relate to employees' work experiences and behaviour. However, research on the interplay of sleep and work is still in its infancy – with many studies only investigating sleep quality as a control variable for other daily relationships.

The presentations in this symposium portray the manifold ways sleep and work can be related. In the first presentation, the authors investigate state and trait workaholism as predictors of employees' sleep quality depending on their after-work recovery experiences. In the second presentation, the authors examine the bidirectional relationship between emotions experienced at work and objectively assessed sleep characteristics of nurses involved in shift work systems. In the third presentation, the authors investigate how workload and job control predict latent profiles of sleep characteristics (sleep duration, bedtime, wake time, sleep quality, and sleep fragmentation) that are, in turn, related to fatigue and burnout. The fourth presentation demonstrates how sleep quality (subjectively and objectively assessed) affects creativity at work via mindfulness. Finally, the last presentation introduces employees' daily social sleep lag as a boundary condition for after-work recovery processes.

Thus, the presentations in this symposium combine views on sleep as an outcome of work-related processes, as a predictor for experiences and behaviour at work, as well as a boundary condition for after-work recovery processes, highlighting the various ways sleep is relevant in everyday working life. At the same time, the presentations illustrate the many faces of sleep by differentially investigating various sleep characteristics and combining different methodological approaches (objectively vs. subjectively assessed sleep characteristics, person- vs. variable-centred approaches to data analysis). Thereby, this symposium helps to paint a clearer picture of the complex interplay of sleep and work as two major domains in employees' everyday lives.

To sum up, this symposium seeks to inspire future research on how to sustainably budget resources to achieve both - good sleep and favourable work experiences. Understanding these processes is also highly relevant for practitioners to prevent vicious circles of impaired sleep and poor work behaviour. The changing world of work poses many challenges but also opportunities for employees' sleep. On the one hand, increased flexibility to work from home, as we observed during the peaks of the COVID-19 pandemic, can be associated with favourable sleep outcomes. Working from home can enable employees to follow their biologically preferred sleep-wake rhythms and sleep longer due to

missing commuting. On the other hand, increased workload and demands pose challenges to employees' sleep. Time constraints as well as limited recovery can thwart maintaining good and long enough sleep. Overall, enabling employees to sleep long, well, and at the right time is crucial to achieving the UN Sustainable Development Goal of good health and well-being. At the same time, sleep is also a key element when aiming to achieve the UN Sustainable Development Goal of decent work and economic growth by providing employees with resources to be sustainably productive at work. This symposium thus emphasises the relevance of considering sleep in organisational research by portraying the manifold ways that sleep and work can be related.

*Keywords: sleep, well-being, work behaviour and experiences*

## Paper 1

### **Daily Fluctuations in State Workaholism, Sleep Quality, and Recovery Experiences: Does Workaholism Act as an Internal Stressor?**

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**Research Goals.** This pre-registered study aimed at empirically evaluating the conceptualisation of workaholism as a multilevel construct, exhibiting both differences between individuals (trait workaholism) and within-individual fluctuations (state workaholism). More specifically, it focuses on perceived sleep disturbances as a primary strain outcome by investigating the within-individual relationship between state workaholism and sleep quality, controlling for the corresponding association at the between-individual level. Moreover, moving from the hypothesis that workaholism acts as an internally generated demand or stressor, we investigated whether its within-individual relationship with sleep quality was buffered by the daily level of recovery experiences.

**Theoretical Background.** Over the last decade or so, workaholism has caught increasing attention both inside and outside the academia, also due to the rising awareness on the health and well-being implications of work intensification. It has been most widely conceptualized as a dysfunctional tendency to work excessively and compulsively; a stable trait implying unsustainable effort and time spent at work. Indeed, at the between-individual level, trait workaholism has been shown to act as an internal job-related demand leading to strain responses such as sleep disturbances (Clark et al., 2016). Only in the last two years, a few studies provided initial evidence of within-individual fluctuations in state workaholism and their potential short-terms consequences. Here, we built from the Effort-Recovery (Meijman & Mulder, 1998) and the Stressor-Detachment model (Sonnentag & Fritz, 2015) to investigate the straining effects of state workaholism on sleep quality and the potential buffering role of recovery experiences. Considering the Perseverative Cognition Hypothesis (Brosschot et al., 2006), we expected that higher-than-usual state workaholism could lead to prolonged activation in the evening due to job-related compulsive and perseverative thoughts, eventually compromising sleep quality. However, we expected such relationship to be weakened in those working days with higher-than-usual levels of job detachment and relaxation.

**Design.** The study involved a sample 114 full-time workers (51% women) from several job sectors that participated in a daily diary protocol over two workweeks. Each day, participants reported their state workaholism (diary 1: end of the working day), after-work recovery experiences (diary 2: bedtime), and sleep quality (diary 3: next morning), using seven-point adaptations of widely used and validated scales (i.e., Dutch Work Addiction Scale, Recovery Experience Questionnaire, Mini Sleep Questionnaire). Specifically, the six-item workaholism measure exhibited satisfactory reliability at both within- and between-individual level, with multilevel confirmatory factor analysis supporting the cross-level invariance of factor loadings, a critical condition for conceptualizing multilevel constructs.

**Results.** Multilevel modelling conducted on 725 complete observations indicated that sleep quality was negatively related to both trait and state workaholism, controlling for recovery experiences and gender. Moreover, we found evidence of within-individual interactions between state workaholism and recovery experiences, with the former becoming unrelated to sleep quality in those days characterised by higher-than-usual levels of detachment and relaxation.

Limitations. The limitations of this study include the relatively small convenience sample (i.e., between-level statistical units) and the sole use of self-report measures.

Conclusions. Accounting for such limitations, this is to our knowledge the first study investigating the within-individual relationships between workaholism, recovery, and sleep quality, the first investigation of state workaholism that temporally separated predictor and outcome measures, and the first pre-registered study on workaholism, implying stronger methodological rigour than previous research. Our results provide convincing support to the conceptualisation of workaholism as a multilevel construct exhibiting cross-level isomorphism and homologous relationships with sleep quality across levels. Moreover, our findings corroborate the idea that workaholism acts as an internal job-related stressor triggering strain responses, particularly when not accompanied by adequate recovery. While this study contributes to the advancement of workaholism research by enriching its conceptualisation and nomological network, it is also informative for planning interventions aiming at reducing the related short-term strain responses. Indeed, such innovative within-person approach to workaholism research can help organisations preventing job-related triggers of state workaholism before it manifests as more stable signs of work addiction.

Relevance to the Congress Theme. This study contributed to advancing the knowledge and prevention of a problematic and prevalent phenomenon that is particularly peculiar of the demanding and competitive modern workplaces. Based on our and previous findings, there is an urgent need to change the increasingly spreading long work-hour culture to promote healthier working conditions.

Relevant UN SDGs. Good health and well-being; Decent work and economic growth.

*Keywords: State workaholism, Sleep quality, Recovery experiences*

## Paper 2

### Shift Work in the NHS: Sleep and Emotional Wellbeing of UK Nurses

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**Research Goals.** Primary research objectives were to explore the directional interplay of shift work, sleep, and emotions among NHS nurses in the UK. A focus was on daily affective events and momentary ratings of mood, wellbeing, and alertness. Secondary outcomes expand on existing research to identify potential differences between nurses working standard and non-standard shift patterns and their impact on natural sleep cycles, daily rhythms and cognitive performance. Factors which might protect NHS nurses or improve toleration of shift work (e.g., chronotype, post-shift recovery activities) were also considered.

**Theoretical Background.** Shift work is especially common among health and social work professionals, with 1 in 3 involved in a shift work system. Long-term shift work (especially at night) poses a significant risk for chronic sleep and circadian disruption. Poor sleep can have numerous adverse outcomes: increased medical errors, impaired decision making and attention, cognitive performance, diagnostic ability, poorer mood, emotional reactivity, wellbeing and greater psychosocial stress (Farquhar, 2017; Mansukhani, Kolla, Surani, Varon, & Ramar, 2012; Rosa et al., 2019; Zohar, Tzischinsky, Epstein, & Lavie, 2005). Although sleep and emotions are closely linked, prior studies have largely been cross-sectional, relied on subjective sleep data, and lacked ecological validity. Few studies have considered the role of daily mood and emotions experienced within natural or 'real world' settings (e.g., in the workplace) and their impact on the amount and quality of sleep obtained (Ashkanasy & Humphrey, 2011; Weiss Howard & Beal Daniel, 2005; Zohar et al., 2005). This project aimed to address these limitations to assess sleep-emotion dyads among healthcare staff through daily diaries, experiencing sampling (ESM) and actigraphy.

**Design / Methodology / Approach.** Nurses with standard and non-standard shift schedules wore an actigraph continuously for 2 weeks. In line with prior studies with healthcare professionals, variable shift types, patterns, lengths and nursing activities were considered. ActiGraph wGT3X-BT devices were worn daily and combined with sleep diaries to track acute and chronic sleep disturbances. Smartphone-based experience sampling (ESM) recorded momentary measures of affect, emotional wellbeing, and alertness each day. Nurses also completed daily emotional diaries and perceived workload post-shift. During the study, participants completed a short battery of cognitive tasks and online questionnaires; these included detailed information on nursing speciality, shift schedules, perceived work schedule control and recovery activities.

**Expected Results.** Full results will be available in January 2023 and presented at the EAWOP Congress (May 24–27, 2023).

**Limitations.** Completing multiple and repeated daily assessments can be burdensome. The high workload and nature of on-shift nursing activities may result in missing data responses. However, smartphone ESM push-notifications are personalised for each nurse according to their daily shift schedule, with real-time reminders. Adherence and compliance to the study protocol has also been high so far.

**Conclusions – Research and/or Practical Implications.** This research addresses limitations in the literature by integrating non-invasive, ambulatory markers to explore the bidirectional relationship of

sleep, mood, and emotions in healthcare staff. The study aims to identify the potential adverse impacts of sleep loss and fatigue arising from diverse shift patterns and work schedules.

Relevance to the Congress Theme. Demand for a 24-hour healthcare system has resulted in long, often widely unregulated working hours (Greig & Snow, 2017; M. R. Smith & Eastman, 2012). Schedules with short recovery times between shifts (<11 hours) are associated with increased insomnia, sleepiness, and fatigue (Eldevik, Flo, Moen, Pallesen, & Bjorvatn, 2013; Foster, 2020). As a result, there is an urgent need to address the negative impacts of sleep and circadian disruption in healthcare and elucidate how best nurses can recover and recuperate from work-demands on intervening days.

Relevant UN SDGs.

Good Health and Wellbeing

Decent Work and Economic Growth

*Keywords: Positive and negative feelings, Mental health, Shift patterns*

### Paper 3

#### **Sweet Dreams are Made of This: Estimating Workers' Latent Sleep Profiles as a Mechanism of Fatigue Accumulation**

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**Research Goals .** Sleep is a central part of the recovery process that enables workers after a day of effort expenditure to function well again the next day. Previous studies show the importance of sleep as a recovery mechanism, but they typically rely on variable-centred approaches (e.g., Hülshager, 2016; Rook & Zijlstra, 2006; Weigelt et al., 2021). Such studies show independent effects of different sleep dimensions on mental and physical health outcomes, but insufficiently address how the combination of levels and intraindividual variability of sleep dimensions across the week can affect fatigue accumulation (Matricciani et al., 2018). Using a person-centred approach in the form of latent profile analysis (LPA) on daily diary data, this study aims to identify subgroups with different sleep patterns over the week and their predictors and outcomes. By doing so, the study highlights how person-centred can help in theory development on how sleep predicts fatigue.

**Theoretical Background .** The two-process model of sleep (Borbély, 1982) is used to select relevant and important sleep indicators, namely sleep duration, bedtime, wake time, quality, and fragmentation. The study uses the average levels and the intraindividual variability within a week of aforementioned sleep dimensions as the basis of the sleep profiles. Based on the Effort-Recovery model (Meijman & Mulder, 1998), the profiles are expected to predict possible indications of fatigue accumulation (i.e., prolonged fatigue and burnout). Furthermore, this study draws on the Job Demands-Control model (Karasek, 1989) to identify potential predictors of sleep profiles membership, that is, workload, job control, and the interaction between the two.

**Design/Methodology .** This study uses one-week daily diary data with a follow-up questionnaire three weeks later. 316 Indonesian employees filled out three different kinds of online questionnaires: A baseline survey for the predictors, daily surveys for the sleep indicators, and one final survey for the outcome variables. LPA in MPlus 8 was used to identify profiles of co-occurring sleep levels and variability over one week. These profiles were then included in an R3STEP (i.e., multinomial regression) analysis to identify their potential predictors. Finally, we performed direct inclusion into the LPA model to understand the sleep subgroups' outcomes.

**Results Obtained .** The LPA identified four profiles: 'Average Sleepers', 'Deep Owls', 'Short Sleep Compensators', and 'Restless, Erratic Sleepers'. Moreover, R3STEP revealed that workload, job control, and their interaction did not predict profile membership. Compared to the 'Average Sleepers', 'Restless, Erratic Sleepers' had higher prolonged fatigue, 'Deep Owls' had some higher cognitive impairment, and both profiles tended to have higher mental distance and burnout secondary symptoms.

**Conclusions .** The findings firstly identify a novel set of sleep profiles that naturally occur in workers. Moreover, the results highlight the importance of person-centred approaches by illustrating how combinations of sleep averages and their intraindividual variability across a week can predict prolonged fatigue and burnout dimensions. Practically, the results offer a more fine-grained

understanding of alarming sleep patterns and highlight the importance of sleep compensation in preventing adverse states of accumulated fatigue.

Limitations . A potential limitation of this study results from its relatively small sample size for conducting LPA. Ideally, larger samples are used for this analysis, but nonetheless, we are able to estimate a working model with this limited sample. A second limitation might relate to the generalisability of our findings because of its specific Indonesian sample. A third potential limitation is that we relied on subjective measurements for our sleep indicators while objective sleep indicators could also be considered. Given these limitations, future studies with larger samples in different contexts that include objective sleep indicators seem useful to solidify our results.

Relevance to the Congress Theme . Our study relates to the changing world of work in various ways. Its emphasis on well-being and recovery matches the increased interest in these topics within the global workforce. Moreover, by moving from a variable-centred to a person-centred approach, the study connects to the emerging trend of looking beyond variables alone to understand employee functioning.

Relevant UN SDGs . This study is relevant to the SDGs related to health and well-being and decent work as it connects to promoting the well-being of workers.

*Keywords: latent sleep profiles, fatigue accumulation, job demands and control*

## Paper 4

### **How Sleep Helps to Solve Daily Problems – The Relevance of Sleep Quality and Mindfulness for Creativity at Work**

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**Research Goals.** Studies have shed light on the relevance of mindfulness for psychological well-being and cognitive performance (e.g., Carson & Langer, 2006; Henrikson et al., 2020; Sedlmeier et al., 2012). According to these studies, trait mindfulness as well as mindfulness training foster creativity (Carson & Langer, 2006; Lebuda et al., 2016). Researchers assume that the individual state of mindfulness (Suelmann et al., 2018) as well as individuals' creative performance (Kamp et al., 2022) vary across situations and time. However, research has scarcely examined the relationship between mindfulness and creativity on the level of daily processes and has not addressed the question of whether a mindful start of a workday matters for creativity at work (Kamp et al., 2022). Further, research has not yet investigated the role of sleep for whether mindfulness occurs at the beginning of the workday. We therefore focus on high-quality sleep as a recovery process that may restore regulatory resources and hence facilitate states of mindfulness. To provide first evidence for our prediction, the current study investigated the indirect effect of day-specific sleep quality on creativity at work via day-specific mindfulness.

**Theoretical Background.** Drawing on resource-based theories of self-regulation (Ridder & Wit, 2006; Vohs & Baumeister, 2016), we argue that self-regulatory resources are necessary to shift attention on the current moment in a non-judgmental way and to achieve a state of high mindfulness (Vago & Silbersweig, 2012). Thus, the restoration of self-regulatory resources during high-quality sleep at night (Barnes et al., 2011; Kühnel et al., 2016) should support experiencing mindfulness in the morning. Next, we argue that mindfulness should support radical and incremental creativity during the workday. A non-judgmental state of mind helps to detach from usual thoughts and being aware of upcoming unusual thoughts should support generating novel and original ideas and solutions to everyday problems (Henrikson et al., 2020; Prabhu et al., 2008). In conclusion, we hypothesised that after nights with higher-quality sleep compared to days with lower-quality sleep employees are more mindful the next morning and therefore experience more radical and incremental creativity during the workday.

**Design.** To test our hypotheses, we conducted a daily diary study with 136 employees. Participants completed two questionnaires each day over the course of two workweeks: the first questionnaire assessed sleep quality (with the single item of the PSQI by Buysse et al., 1989) and mindfulness (with the MAAS by Brown & Ryan, 2003; modified by Höfling et al., 2011) before work (t1), the second questionnaire assessed radical and incremental creativity (with the scale of Madjar et al., 2011) after work (t2). Further, participants wore actigraphy devices (ActiGraph® wGT3X-BT) that capture indicators of sleep quality (sleep efficiency).

**Results.** Results from multilevel analyses showed that previous night's sleep quality and sleep efficiency positively relate to employees' state mindfulness. On days with a higher level of mindfulness participants reported more radical creativity throughout the workday. Our findings also

revealed positive indirect effects of sleep quality and sleep efficiency on radical creativity via mindfulness. However, mindfulness did not significantly predict incremental creativity, resulting in non-significant indirect effects of sleep quality and sleep efficiency on incremental creativity via mindfulness. Results including day-specific control variables will be discussed.

**Limitations.** According to potential limitations, subjective sleep quality and mindfulness were measured at the same time point. Having obtained an indicator of sleep quality assessed with the help of actigraphy, however, is a strength of this study that mitigates this limitation. In addition, we did not examine moderators, such as individual differences that may alter the effects of sleep and mindfulness on creativity.

**Conclusions.** This is the first study that sheds light on the relationship between sleep quality, mindfulness, and creativity on a within-person level. Our findings suggest that different day-specific processes seem to operate regarding radical creativity and incremental creativity. Further research might want to examine these differences. To facilitate employees' radical creativity, we recommend fostering mindfulness as well as sleep quality. To achieve this, organisations could provide interventions addressing sleep hygiene and mindfulness and take care that employees' sleep is not endangered by excessive workload and work-related extended availability.

**Relevance to the Congress Theme & Relevant UN SDGs.** Interventions targeting employees' sleep and mindfulness contribute to ensuring employees' health and well-being, and thus to the sustainable development goals of the UN.

*Keywords: sleep quality, mindfulness, creativity*

## Paper 5

### **Mind the Misalignment: Daily Social Sleep Lag as Boundary Condition for Employees' Recovery**

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**Research Goals.** Even though studies demonstrated that circadian misalignment between actual and biologically preferred sleeping times matters for employees at work and circadian perspectives on recovery were suggested, these perspectives have not yet arrived in empirical recovery research. We thus embed the concept of circadian misalignment into the recovery literature by investigating employees' daily social sleep lag (i.e., the discrepancy between employees' actual and biologically preferred sleep-wake times) as a boundary condition for their recovery processes.

**Theoretical Background.** Building on the stressor-detachment model (Sonnentag & Fritz, 2015), we propose that low recovery experiences (i.e., relaxation and mastery) explain the relationship between job stressors (i.e., interpersonal conflicts at work) and low next-morning well-being (i.e., vigour). Introducing the circadian perspective (Zijlstra et al., 2014), we portray recovery as a process regulating arousal throughout the day. As daily social sleep lag increases the discrepancy between actual (determined by biological preferences) and required (determined by work) arousal levels, we suggest that it can change the occurrence (i.e., if and how employees recover after stressful workdays) and the effectiveness (i.e., how well employees benefit from recovery) of daily recovery experiences. Specifically, we propose that daily social sleep lag strengthens the negative relationship of interpersonal conflicts and recovery experiences. In addition, we suggest that daily social sleep lag strengthens the relationship of relaxation (i.e., low-arousal recovery experience) and next-morning vigour but weakens the relationship of mastery (i.e., high-arousal recovery experience) and next-morning vigour. In contrast to previous research focusing on stable between-person differences in circadian misalignment, we focus on within-person fluctuations in social sleep lag to account for the dynamic nature of sleep.

**Design/Methods.** To test our hypotheses, we conducted a daily diary study with 305 employees who responded to daily surveys throughout two workweeks (Monday to Friday), providing data on 2,040 days.

**Results.** Analysing the data using two-level path models in Mplus 8.7, we found that low mastery experiences, but not relaxation, explained the negative association between interpersonal conflicts and next-morning vigour. Social sleep lag served as a boundary condition such that mastery experiences translated less to next-morning vigour on days with high (vs. low) social sleep lag. Additional analyses demonstrated that daily social sleep lag was a relevant boundary condition for this relationship over and above other frequently studied sleep variables (i.e., sleep quality, sleep duration), underlining the relevance of the timing of sleep.

**Limitations.** Limitations of our study are that we relied on self-report measures and retrospectively assessed recovery experiences in the next morning, raising concerns about common-method bias.

**Implications.** Adding to previous research on the role of circadian misalignment for employees at work, our study thus demonstrated the relevance of circadian misalignment for employees after work, namely for their recovery processes. Likewise, these results indicate that recovery experiences are not equally effective on any given day: Experiencing mastery was only related to next-morning vigour on days when social sleep lag was low. Furthermore, our study emphasises the need to take a

day-level perspective on social sleep lag because neglecting within-person fluctuations underestimates the dynamic nature of sleep and the circadian system during the week. We encourage future research to transfer our results to other recovery opportunities, for example, breaks during the workday. At the same time, scholars might investigate the temporal sequence of employees' recovery experiences in greater detail, for example, to disentangle whether especially increasing mastery experiences (i.e., high activation) shortly before sleep do not translate to vigour.

Relevance to the Congress Theme. Our results imply that employees should try to not engage in challenging activities offering mastery experiences (e.g., physical activity, creative activities) on days with higher social sleep lag but instead reschedule those activities to days with lower social sleep lag to fully benefit from them. At the same time, increased flexibility to work from home in the changing world of work can enable employees to reduce their circadian misalignment and better follow their biological preferences during the workweek.

Relevant UN SDGs. Taken together, by demonstrating daily social sleep lag as a boundary condition for employees' after-work recovery processes, our study bridges the gap between research on recovery from work and circadian misalignment. Combining these two streams of research can help determine under which circumstances employees recover from work best, highlighting the need to take circadian processes into account in recovery research. Thereby, our study provides relevant insights into how to achieve the UN Sustainable Development Goal of good health and wellbeing .

*Keywords: social sleep lag, recovery experiences, interpersonal conflicts*

## **symposium S036**

### **Addicted to work: Towards a better characterization of the organizational and clinical implications of workaholism**

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science

What will be covered: In the last decade or so, there has been increasing attention towards the phenomenon of workaholism or work addiction, a dysfunctional form of heavy work investment with potentially strong negative implications for workers well-being and organizational vitality. Such a trend may, at least in part, be explained by a higher prevalence of certain working conditions (e.g., intensification and digitalization) that have accentuated the need to invest heavily at work, creating a context in which workaholic tendencies may be strengthened. Indeed, it has been noted that the widespread use of ICT, which allow people to work anytime and anywhere, may lead to both work intensification and to the need (real or perceived) to be virtually always available. This could lead to addiction to ICT, working long hours, and stress. In such circumstances, the belief that being available 24/7 is a sign of success may easily develop, no matter the associated costs for health and well-being.

Thus, there is a need to further document the correlates and impact of workaholism. Unfortunately, the quality of the available research has been still recently defined as 'low', since most studies in the field have adopted small-scale cross-sectional designs. Such evidence may be less useful as the basis to develop credible interventions and persuade organizational leaders on the noxious nature of workaholism. With this symposium, which benefits from a multidisciplinary (WOP and clinical psychology) approach, we aim to improve the characterization of workaholism and strengthen the evidence on its negative implications. The symposium includes two WOP longitudinal studies. The first study (Balducci et al.) adopts a daily diary approach and investigates whether daily fluctuations in workaholism explain stress reactions as indicated by blood pressure and end-of-day emotional exhaustion. The second study (Avanzi et al.) aims at construct clarification by focusing on the similarities and differences between workaholism and overcommitment, including how they might be differentiated and related together and with health outcomes (i.e., burnout). Two additional studies adopt a clinical focus. One (Kun et al.) is a large-scale survey examining the hypothesis that addictive workers might use psychoactive substances in order to cope with their negative mood states. The other (Atroszko et al.), also based on a very large sample of workers, aims at both identifying different profiles of work-addicted individuals and their clinical correlates, such as attention deficit hyperactivity disorder, obsessive-compulsive disorder, anxiety, and depression. A fifth study (Buczny & Oostrom) focuses on workaholism measurement and presents a new situational judgment test to assess workaholic tendencies. Together, the studies will contribute to advance our understanding of the peculiarities of workaholism and to strengthen a recently launched international collaboration aimed at raising further awareness on the phenomenon: <https://workaddiction.org/>

Relevance to the congress theme: Excessive and dysfunctional work investment is prevalent in the modern world of work, often fueled by the so-called long work-hour culture. This – which may have increased during the recent pandemic – may be responsible for up to 775.000 deaths for CVD due to overwork each year, according to a recent study. Importantly, such a culture and its associated phenomena, such as workaholism, are not inevitable results of contemporary realities such as global competition and technological change, but of managerial decision and discretion. Thus, there is a need to document the impact of workaholism to promote a general change towards a more balanced

work-life relationship, which may act as an important protective factor for health, well-being, and performance in contemporary and future working life.

Research/Practical Implications : To remain healthy and competitive, organizations need motivated and engaged individuals, not work addicted. Altogether, the studies included in the present symposium will strengthen the quality of the available evidence on workaholism. They will further document why workaholics constitute a significant problem rather than an important resource for organizations and society, and highlight some potential avenues for prevention. Integrating WOP and clinical psychology frameworks may also allow us to address the problem better and align with the World Health Organization's plan for improving mental health in the workplace.

Overall conclusions: Workaholism is a significant and prevalent problem affecting workers' health, while at the same time having no added value for job performance. The present symposium will contribute to advance our understanding of the far-reaching health and well-being implications of the phenomenon.

*Keywords: workaholism, work addiction, well-being at work*

## Paper 1

### **A daily diary investigation on the relationship between day-level workaholism, blood pressure, and emotional exhaustion**

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**Research goals :** Most research on workaholism has been based on the idea that workaholism is an enduring personal characteristic, a trait-like phenomenon. Such an approach, however, overlooks the potential within-individual variance in workaholism, the study of which may be very useful for revealing micro (e.g., day-level) processes related to the health impairment effects of workaholism. Thus, the objectives of the present study were to investigate whether workaholism may fluctuate from day to day and whether such fluctuations are consequential in terms of job strain as indicated by systolic and diastolic blood pressure and emotional exhaustion.

**Theoretical background :** Based on the ideas of Whole Trait Theory of personality, according to which a trait or stable disposition may be seen as a distribution of momentary states – which may vary even across short intervals of time – we hypothesised that workaholism, similar to other enduring personal dispositions, shows significant variation within individuals from day to day. Additionally, given that workaholism acts as an uncontrollable internal pressure or demand, leading to a high effort expenditure at work and thus to the experience of high levels of job strain, we also hypothesised that workers report more accentuated stress reactions in days associated with higher levels of workaholic symptoms than usual. In line with allostatic load theory, postulating that primary stress reactions may involve both physiological and psychological indicators, we expected that day-level workaholism is positively and significantly related with day-level blood pressure and day-level exhaustion.

**Design/Methodology:** We conducted a mobile-based daily diary study by surveying participants (N=135; 51.1% females) multiple times per day for a period of one to two weeks (i.e., a maximum of ten consecutive working days). Before the daily surveys, which were administered in the morning (1st) afternoon (2nd) and at bedtime (3rd), participants measured their blood pressure by using a validated wrist blood pressure monitor device. We also measured a variety of constructs, including the ones focused by the present investigation. Workaholism was measured in the afternoon by asking participants whether they experienced common workaholic symptoms during the day, while emotional exhaustion was measured at bedtime. The adopted scales provided adequate psychometric properties at both between and within-individual level. To test the proposed hypotheses, we implemented multilevel linear regression models. Results are preliminary since further analyses are in progress.

**Results:** In line with some previous studies, day-level workaholism showed significant variance both at the between and the within levels (ICC = 0.61), indicating that all days are not created equal as far as the experience of workaholic cognition and behavior is concerned. Multilevel models revealed that daily workaholism levels were positively and significantly related at the within level, with daily systolic and diastolic blood pressure measured in the afternoon ( $b=1.28$  mmHg,  $SE= 0.38$ ,  $t = 3.36$ ,  $p < .001$ ; and  $b=1.05$  mmHg,  $SE= 0.32$ ,  $t = 3.29$ ,  $p < .01$ , respectively), and with emotional exhaustion as reported at bed time ( $b=0.16$ ,  $SE= 0.04$ ,  $t = 3.66$ ,  $p < .001$ ). The results generally supported the formulated hypotheses, highlighting some day-level mechanisms with which workaholism may potentially affect health and well-being in the longer run.

Limitations: The most important limitation is the convenience sample obtained, including participants from different occupations and sectors. Additionally, the relatively low number of participants (i.e., level-2 units) may constitute a further study limitation.

Conclusion: Day-level (or state) workaholism may produce significant negative perturbations to health and well-being, which may perhaps explain the longer-term consequences of workaholism such as accentuated cardiovascular risk or mental health problems including depressive symptoms. Organizations should seriously consider discouraging workaholic behavior among their employees with the aim of protecting job-related well-being and, consequently, job performance. This may be done, for example, by allocating manageable workloads, discouraging excessive competition and reward practices of the type 'one wins all', and by promoting disconnection from work and the adoption of a 'balanced' work-life interface. Health promotion interventions aiming at training employees on stress management strategies such as mindfulness may also be helpful to facilitate unwinding from the work tension and fatigue associated to workaholism.

Relevance to the congress theme: Work may be killing individuals or make them sick not only by exposing them to noxious conditions such as high strain work situations, but also by promoting – in interaction with personal characteristics – certain unhealthy work styles such as workaholism. There is an urgent need to change the currently spreading long-work-hour culture for contributing to better and healthier working conditions.

Relevant UN SDGs: Good health and well-being; decent work and economic growth.

*Keywords: workaholism, blood pressure, diary study*

## Paper 2

### **The relationship between workaholism, overcommitment, and burnout: The moderating role of job satisfaction**

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Research goals : Both workaholism and overcommitment have been defined as an irrational or obsessive attachment to work. These two constructs are often considered similar, yet they are conceptualized in quite different ways, and they in fact could represent different aspects or “moments” of work addiction. The aim of this study was to longitudinally test a model in which workaholism increases overcommitment, especially for stronger satisfied employees, and overcommitment, in turn, increases job burnout over time.

Theoretical background : Both workaholic and overcommitted employees are characterized by an excessive attachment to their job, with negative consequences for their health. However, the relation between these two constructs is not well explored until now. In particular, we hypothesized that overcommitment is more related to external stimuli and conditions (such as job satisfaction and job demands) than workaholism. Neuroticism should be the root of overcommitment, while conscientiousness should be the root of workaholism. Furthermore, we expect that workaholism could be a more distal antecedent of job burnout, whereas overcommitment should be the more proximal one. In particular, in this study, we hypothesized that overcommitment mediates the relation between workaholism and burnout. Moreover, we hypothesized that the more employees are satisfied, the stronger will be the relation between workaholism and overcommitment over time.

Design/Methodology: We conducted a three-wave (time-lag = 1 month) longitudinal design in a sample of Italian workers. We used well-validated scales that provided adequate psychometric properties. At the first administration, 501 employees answered our questionnaire, while the final longitudinal sample at T3 was 89. At T1, we used partial correlations to disentangle the actual relation between workaholism and overcommitment on the one hand, and the other constructs on the other. MPlus was used to test our longitudinal moderated mediation model. We controlled for job burnout and overcommitment measured at T1, and we controlled for personal (i.e., gender, neuroticism, and conscientiousness) and contextual (i.e., job demands) factors.

Results: As expected at T1, by using partial correlations, overcommitment ( $r = .50, p < .001$ ), but not workaholism ( $r = .06, p > .05$ ), was significantly and positively related to job burnout. Again, overcommitment was positively and significantly related to neuroticism ( $r = .34, p < .001$ ), but not conscientiousness, while workaholism was positively related to conscientiousness ( $r = .13, p < .01$ ) but not neuroticism. Interestingly, overcommitment was negatively related to job satisfaction ( $r = -.24, p < .001$ ), whereas workaholism was positively related ( $r = .19, p < .001$ ). Contrary to our expectations, both constructs were significantly and positively related to job demands. Regarding the main longitudinal analyses, the results supported our hypotheses outlining that overcommitment at T2 fully mediated the relation between workaholism at T1 and job burnout at T3. Furthermore, job satisfaction was a significant moderator of the first path, meaning that workaholism increased overcommitment over time, especially for more satisfied employees. Results were robust and remained significant even when taking the control variables into account.

Limitations: The final sample was small. Only self-report measures were used. Future studies could use other-report measures or objective ones.

Conclusion: From a theoretical point of view, our findings may help researchers to clarify some inconsistencies found in the workaholism literature, better redefining its conceptualization. Workaholics may be driven to hardly and compulsively work mainly by internal pressure rather than external rewards, and this hard work could be associated with fugacious positive feelings. On the contrary, overcommitted employees are more sensitive to external factors and rewards, likely because they are characterized by extreme impatience, irritability, and focus on negative emotional states. While workaholism seems to be a root of overcommitment over time, the latter is the more proximal precursor of employees' job burnout and ill-health. From a practical point of view, organizations could prevent negative consequences for employees' well-being by acting in terms of fair rewards or avoiding reinforcing an overwork climate. Our results also highlight that this work addiction dynamic plays a stronger negative effect for more satisfied employees. In this sense, like individuals affected by other addictions, experiencing work enjoyment could "paradoxically" reinforce these maladaptive job strategies.

Relevance to the congress theme: Nowadays, job demands are increasing and organizations request an increasingly stronger commitment to work. However, an excessive and not adequate attachment, such as work addiction, could become detrimental to both employees' health and performance.

Relevant UN SDGs: Good health and well-being.

*Keywords: workaholism, overcommitment, burnout*

### Paper 3

#### Work addiction and psychoactive substance use

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**Research goals:** The current study aims to explore the associations between work addiction and psychoactive substance use. Since individuals affected by work addiction show specific characteristics and symptoms that might motivate them to manage their internal states with psychoactive substances, we investigated the characteristics of this relationship in a general population study.

**Theoretical background :** Work addiction is a syndrome characterized by excessive and obsessive overwork that disturbs the individual's physical, mental, and social health (Oates, 1971). Work addiction is also defined as a behavioral addiction showing the seven main components (salience, tolerance, withdrawal, mood modification, conflicts, relapse, and problems) identified in other addictive disorders (Griffiths & Karanika-Murray, 2012). It is well documented that individuals affected by work addiction show a higher level of neuroticism, negative affectivity, anxiety, and obsessiveness and they have poorer self-esteem than healthy workers (Kun et al., 2020). These people are always in a rush, want to perform better than others (high perfectionism), and spend their free time with work (Clark et al., 2010; Robinson, 1998). They are motivated to overwork to avoid their negative feelings, frustrations, and rumination (Stoeber et al., 2013; Kun et al., 2021). It is also found that emotional discharge as a maladaptive coping strategy mediates between work addiction and psychological and physical complaints (Shimazu et al., 2010). Based on the above, it can be presumed that individuals with work addiction might use psychoactive substances in order to cope with their negative states. Stimulants can help them to keep more awake and perform better and to experience higher self-esteem (Lasco, 2014, Lende et al., 2007), while depressants might be used to mitigate their elevated level of stress and anxiety (Grant et al., 2009), and to help them to fall asleep (Roehrs & Roth, 2001). Therefore, we hypothesized that individuals with work addiction will show a higher prevalence of both stimulant (i.e., nicotine, caffeine, illicit stimulants) use, and legal depressant (i.e., alcohol and prescription tranquilizer/sedative) use.

**Methodology:** Data from the first wave of the Budapest Longitudinal Study (BLS) was analyzed. The BLS follows young adults for five years because this age group is in a sensitive period in terms of development of different behavioral addictions. Stratified sampling method was used to have a representative sample in terms of district of residence and age of young adults (aged between 18-35 years) living in Budapest. The total sample size was  $N = 3,076$  (females = 50.3%,  $M$  age =  $SD = 4.34$ ), and only those individuals were involved in the analyses who had a current, full-time job. Work addiction was assessed by the Bergen Work Addiction Scale (BWAS; Andreassen et al., 2012; Orosz et al., 2016), and questions were used to measure lifetime (LTP), last year (LYP), and last month prevalence (LMP) of the following licit and illicit substances: nicotine, caffeine (coffee and energy drinks), ecstasy, amphetamine, cocaine, crack, new psychoactive stimulants (NPS), alcohol, and prescription sedatives/tranquillizers. All the variables for smoking and illicit stimulant use habits were dichotomous categorical variables, namely, the participants could choose between the answers 'yes' or 'no' (e.g., Did you use ecstasy in your life / during the last year / last month/?). Regarding coffee and energy drink consumptions, we asked the number of cups of coffee / cans of energy drink

consumed during a weekday/weekend day in the last 30 days. First, we performed a Latent Profile Analysis (LPA) based on the seven items of the BWAS, then we compared the worker profiles in the substance use habits (LTP, LYP, and LMP) by using  $\chi^2$  statistics (for dichotomous variables) and BHC method (for continuous variables).

Results: As a result of LPA, we found a three-profile solution that classified individuals based on their work addiction symptoms. While “Non-problematic workers” (N = 2,238; 70.92%) did not show any symptoms of work addiction, „Excessive workers” (N = 609; 19.29%) showed moderate level of work addiction symptoms. Individuals in Profile 3 (“Addictive workers”; N = 309; 9.79%) showed the highest risk of work addiction. We found that “Addictive workers” showed the highest prevalence rates of cigarette, e-cigarette, amphetamine, cocaine, crack, NPS, alcohol, and prescription sedatives/tranquillizer use. Contrary to our assumptions “Addictive workers” drink significantly less amount of coffee than „Non-problematic workers”, however, addictive workers drink significantly more energy drinks on a regular weekday than excessive workers do.

Limitations: The cross-sectional design of the study does not allow us to conclude any causal relationship between work addiction and substance use. We used self-report questionnaire for assessing work addiction and it might cause bias in the self-perception of the participants. Questions regarding substance use habits are very sensitive, therefore some of the respondents might hide their real frequency of substance use.

Conclusion: Previous studies showed that individuals affected by work addiction show more psychopathological symptoms (e.g., obsessive-compulsiveness, depression, ADHD) than healthy workers (Andreassen et al., 2016; Atroszko et al., 2017). It is clear now that work addiction is not a “positive addiction”, and our current findings also show the maladaptive pattern of this syndrome. We can assume that an increased level of stimulant use serves as an enhancer for addictive workers: it helps them to stay awake, to be more energized and to feel more comfortable. At the same time, depressants, such as alcohol and prescription drugs can have a stress management function for these workers because they cannot easily relax after a long day and have sleeping issues too (Salanova et al., 2016).

Relevance: The prevention of work addiction is crucial for organizations because of the several negative health consequences of the syndrome. Organizational health promotion programs should emphasize the importance of work-life balance, and they should help employees to develop more adaptive and effective stress management and time management strategies.

Relevant UN SDGs: Good health and well-being.

Funding: The research was supported by the Hungarian National Research, Development, and Innovation Office (Grant numbers: KKP126835, K134807).

*Keywords: work addiction, workaholism, substance use*

## Paper 4

### **Latent profiles of work addiction and components of attention deficit hyperactivity disorder: Potential risk factors and consequences**

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**Research goals:** The study aims to investigate the profiles of work addiction and attention deficit hyperactivity disorder (ADHD) and analyze their potential antecedents and consequences in individuals showing symptoms of work addiction based on screening in the general population of working adults in Norway. Identifying specific patterns of co-occurrence of work addiction and ADHD may allow for a better understanding of their relationship and its consequences for diagnosis of work addiction, its risk factors, and related harm, as well as provide guidelines for clinical management and organizational solutions.

**Theoretical background :** Work addiction and attention deficit hyperactivity disorder (ADHD) show consistent and considerable associations across studies and countries. Work addiction was previously suggested to be a compensatory mechanism for ADHD in some individuals. Moreover, non-ADHD-related work addiction type was suggested based on the studies and theoretical considerations concerning the relationships of work addiction with perfectionism, obsessive-compulsive personality disorder, eating disorders, particularly anorexia nervosa, and conscientiousness. This type is rather associated with excessive controlling behaviors and perfectionism than impulsiveness and behavioral disinhibition.

In the current study, we expected to identify two main profiles. The first profile would group individuals with high levels of work addiction and high levels of ADHD components of inattention, motor hyperactivity, and verbal hyperactivity. The second profile would consist of individuals with high levels of work addiction but low/average levels of ADHD components. Intermediate profiles are feasible; however, no specific predictions based on previous studies can be reliably made. Different profiles of work addiction and ADHD co-occurrence may have somewhat specific risk factors and different potential consequences. It can be hypothesized that individuals with high levels of work addiction and ADHD components would have higher symptoms of OCD, anxiety, and depression than individuals with high levels of work addiction and low/average levels of ADHD symptoms because comorbidity is generally related to worse outcomes, management, and prognosis. Moreover, members of the former profile were expected to be younger than members of the latter profile because ADHD symptoms were previously found to be lower in older age groups.

**Methodology :** Data were collected from the Norwegian population ( $n = 16,426$ ; women = 63.8%, M age = 37.3 years, SD = 11.4, min. = 16, max. = 75) via convenience sampling. A wide range of professions was included. Latent profile analysis was conducted on a subsample (7.8% of the total sample) of individuals meeting the polythetic cut-off score that identifies those at the highest risk of work addiction ( $n = 1,287$ ; women = 67.8%, M age = 34.0 years, SD = 10.5, min. 16, max. 71). Work addiction was assessed with the Bergen Work Addiction Scale (BWAS), ADHD components of inattention, hyperactivity motor and hyperactivity verbal were assessed with the Adult Attention Deficit Hyperactivity Disorder Self-Report Scale (ASRS 1.1). Potential antecedents included gender, age, managerial status, and OCD measured with the Obsessive-Compulsive Inventory-Revised (OCI-R), whereas potential consequences included anxiety and depression measured with the Hospital

Anxiety and Depression scale. First, we performed a latent profile analysis (LPA) based on BWAS and three ADHD components. After identifying the profiles, we explored the associations between latent profile membership and its potential predictors and consequences. All calculations were performed using the MPlus, version 8.

Results : Three basic profiles of work addiction types were identified, including (1) those with high levels of work addiction and low levels of ADHD symptoms (34.5%), (2) those with high levels of work addiction and elevated levels of ADHD symptoms (54.6%), and (3) those with the highest levels of work addiction and ADHD symptoms (10.9%). Members of the first profile were older and exhibited fewer symptoms of OCD than members of the two remaining profiles. Moreover, individuals with the highest levels of work addiction and ADHD had the highest levels of anxiety and depression; individuals with high levels of work addiction and elevated levels of ADHD symptoms had higher levels of anxiety and depression than individuals with high levels of work addiction and low levels of ADHD symptoms. Additional validation data (currently still gathered) from the Polish sample will be discussed during the conference.

Limitations : The study's cross-sectional design does not allow us to conclude any causal relationship between profiles and their potential antecedents and consequences. We used self-report questionnaires for assessing work addiction and ADHD symptoms, as well as for potential antecedents and consequences, which are related to potential bias typically identified for such methodology.

Conclusion : Work addiction and ADHD are closely associated and often co-occurring. In the current study, the most severe cases of work addiction were related to the highest symptoms of inattention and hyperactivity. These individuals showed the highest levels of potential harm, including depression and anxiety. However, the profile with high levels of work addiction and low/average levels of ADHD symptoms was also identified, which shows that work addiction is not always associated with this psychopathology. These profiles notably differed in potential risk factors, such that the members of the profile with the highest levels of ADHD were younger and exhibited more OCD than those with high levels of work addiction but low/average levels of ADHD symptoms. The results show that there is a profile of work addiction which is most severe and comorbid with a wide range of psychopathology, including ADHD, OCD, anxiety, and depression. This profile constitutes about 10% of those with the highest scores on BWAS, which roughly translates to about 1% of the general population of working adults in Norway.

Relevance : Work addiction is a relatively frequent and serious organizational problem. It is comorbid with various mental health problems, including ADHD, depression, anxiety, and OCD. It should be systematically addressed by proper prevention programs. Most importantly, raising awareness about its nature, causes and consequences should be the first step to developing effective and systematic solutions.

Relevant UN SDGs : Good health and well-being; decent work and economic growth.

Funding : University of Bergen

*Keywords: work addiction, ADHD, well-being*

## Paper 5

### **A workaholism situational judgment test (WSJT)**

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**Research goals:** The current instruments applied to measure workaholism are based on simple self-report items arranged into questionnaires. As such instruments are prone to various biases, the current research was carried out to address these limitations and, thus, develop and validate a new instrument: a situational judgment test. Based on the Work Craving Theory, we created a series of items describing a plethora of work-related situations and tested whether the situations were relevant to measure workaholism.

**Theoretical background:** Workaholism has been more consistently defined as a pathological phenomenon: a chronic pattern of high work investment involving an uncontrollable obsession and concern with work. Work addiction has been linked to many negative outcomes: reduced psychological well-being, perceived health, and psychiatric disorders, such as depression and anxiety. Workaholism may increase turnover intention and negatively impact job satisfaction and performance; ultimately, workaholism may harm business growth. Due to the lack of a unanimous conceptualization of workaholism, researchers have struggled to create an accurate operationalization of this construct. Still, they use self-report to measure workaholism regardless definition of the construct. Such measures generally are susceptible to various biases, require the ability and motivation to use introspection, and are susceptible to faking. To increase the validity of the self-report instrument, the researchers contextualize instruments. Situational judgment tests (SJTs) are contextualized measures as they present a detailed description of work-related situations with a set of responses representing various options to choose from. Such options represent higher or lower levels of the measured construct. Respondents are typically asked to select the answer option that best represents how they would respond in that situation. There is substantial evidence for the criterion and predictive validity of SJTs. Importantly, SJTs are generally well-accepted by candidates and display lower levels of adverse impact.

Compared to self-report measures, SJTs are less prone to faking. Additionally, SJTs are less susceptible to measurement contamination because they can help avoid measuring unintended constructs. Contextualization of workaholism instruments is justified as the previous research suggests that situational factors can modify workaholism levels over time.

The Work Craving Theory suggests that workaholics experience an overpowering craving for work, leading them to engage in intense working behavior to fulfill their self-imposed unrealistic standards of work performance. Work craving comprises three components and four dimensions: the cognitive component: Neurotic Perfectionism; the behavioral dimension: Obsessive-Compulsive Desire for Work; and the hedonic component: Anticipation of Self-Worth Compensatory Incentives, and Anticipation of Reduction of Negative Affect (Relief) and Withdrawal Symptoms. As a result, workaholics experience positive reinforcements, such as increased self-acceptance and self-worth, and negative reinforcements, such as reduced negative affect. In short, workaholics pursue rewards by engaging in compulsive work and acquiring neurotic performance standards.

**Design/Methodology:** We created a set of 56 SJT items of the Workaholism Situational Judgment Test (WSJT). Five experts evaluated each item based on three criteria: complexity, relevance, and content contamination. Then, each item was corrected, and after an additional evaluation, we selected 48 of the best items (12 per dimension) for further validation. As the items were prepared in English, we utilized the help of a professional English proofreader (native speaker) to correct the items. We conducted a study (N = 960) in the US and UK Prolific samples. We measured various constructs to assess convergent (work craving; the WCS), criterion (self-esteem, depression symptoms, perceived stress, burnout), and divergent validity (working hours, organizational commitment). All the SJT items were rotated. The order of all the used instruments also was rotated. After reading an informed consent, the participants provided their responses to the questionnaires, then gave their demographics, read a debrief, and were thanked. The monetary compensation was 7 euros per hour; every participant received 3 euros on average.

**Results:** Employing confirmatory factor analyses, we tested whether the hypothesized four-factor model of the WSJT fitted the data. The result showed a moderate fit, CFI = 0.721, RMSEA = 0.042, 95% CI [0.040, 0.044],  $p < .001$ ; SRMR = 0.050. The average correlations between the SJTs dimension and: (1) work craving were higher than  $r = .40$ , (2) self-esteem were lower than  $r = -.15$ , (3) depression symptoms higher than  $r = 0.25$ , (4) emotional exhaustion were higher than  $r = .20$ , (5) perceived work stress were higher than  $r = .25$ , (6) working hours were lower than  $r = .10$ , and (7) continuance and affective organizational commitment were lower than  $r = .09$ . An MTMM analysis indicated that the convergent validity was substantially higher than divergent validity. The reliability of the measurement of WSJT varied from .42 to .72.

**Limitations:** The current set of the WSTJ items needs to be reduced following a detailed item analysis to increase the model's fit and reliability. We plan to delete bad items (2 per dimension, 8 in total) and then collect data on a large sample (minimum N = 1500), including sampling from companies not only based on the Prolific participant pool. In addition, we want to address low reliability in the current study by carrying out a test-retest measurement. Lastly, in future studies, it is necessary to test whether the WSJT is less susceptible to faking than the equivalent self-report instrument.

**Conclusion:** The correlational analyses suggested that the WSJT is moderately related to the WCS, supporting its convergent validity and providing a potential indication that the WSJT may also have incremental validity over the WCS. Overall, the validation of WSJT showed its good psychometric qualities with room for a few substantial improvements.

**Relevance to the congress theme:** The presence of work-related disorders is one of the most important indicators of reduced well-being in the workplace. Improvements in the measurement of workaholism are one of the essential steps to adequately identify the employee who may display pathological work behaviors but, for various reasons, are not able or willing to disclose their symptoms while filling out self-report questionnaires. Organizations should be able to tackle the problem of workaholism before it becomes severe and even consider selecting out candidates that display workaholic tendencies.

**Relevant UN SDGs:** Good health and well-being; decent work and economic growth.

**Keywords:** *workaholism, situational judgement test, measurement*

## Symposium S037

### **Novel perspectives on interventions to increase workers' well-being and performance during times of change**

Renée Boesten, Eindhoven University of Technology

science\_practice

#### Description

Workers must deal with changes towards an intensified working life characterized by globalization, rapid technological developments, and leisure scarcity. These changes significantly impact workers' well-being and performance, meaning that workers need to find new ways to remain engaged, motivated, and healthy. This development has increased the search for alternative ways to arrange work and workers' work and non-work balance. This symposium contributes to work sustainability by developing interventions that may help workers be better prepared to deal with future changes and challenges. In five presentations, we discuss new insights, possible bottom-up adjustments to the work environment, corresponding interventions, and delivery methods to change both the work and the work-non-work perspective of workers.

Interventions are essential to increase workers' well-being and performance. By creating creative and playful work interventions that simultaneously foster agility, workers can be better prepared to deal with a changing environment. Literature shows that job crafting interventions may provide opportunities for workers to optimize their functioning in terms of well-being and performance, which is highly relevant given the progressively increasing complexity and independency of work. Jenny et al. ( presentation 1 ) are developing a way to promote job crafting with the digital "Crafting Playbook". They are studying how "crafting plays" can help workers reflect on their strengths, work activities, and relationships at work, creating a balance between their demands and resources, which is crucial for their well-being. Creating a playful environment can help workers to be more engaged. Another way to foster such a playful work environment is by making work activities more fun and challenging. Verelst et al. ( presentation 2 ) looked into an electronic playful work design micro-intervention to combine the state-of-the-art knowledge of playful work design, electronic intervention research, and micro-intervention research. In doing so, they aim to develop a hands-on method to boost workers' well-being and performance.

Another way to deal with changing work environments is to increase workers' resilience. Resilience is defined as successfully adapting to difficult or challenging life events. Methods to increase this resilience can help workers deal better with changing work environments. Therefore, Boesten et al. ( presentation 3 ) developed an intervention to increase the resilience of entrepreneurs by focusing on enhancing their business resources and demands, network, creativity, and work-nonwork balance. Boesten et al. expect an increase in well-being, performance, and resilience by not only looking at their business but also outside their business (e.g., non-work).

Another way to complete the cycle of transitions between the work and non-work domains and improve daily work experience is psychological reattach to work in the morning. To study the effect of psychological reattachment on workers' daily work experiences, Schleupner et al. ( presentation 4 ) developed an intervention to actively take care of their work experience and well-being, receiving information on the links between recovery after work, including psychological detachment, on employing psychological reattachment to get into a better workflow, on building mindful morning and evening routines, and on transitioning between work roles and non-work roles. Moreover, changing the worker's work hours can also change the worker's non-work perception. De Bloom et

al. ( presentation 5 ) investigated the effects of an intervention on an unlimited leave policy. In other words, workers in this intervention did not have a restriction on the number of days they wanted to take a day off. By changing the number of days off, workers can take agency over their work, increasing their autonomy and well-being. Their results showed increased engagement, a better work-non-work balance, and more job satisfaction.

#### Relevance to the Congress Theme

Workers have to handle changing work environments due to globalization, rapid technological developments, and leisure scarcity. These societal changes trigger a need for developing new types of interventions. The (online) interventions we present in our symposium can be considered a starting point.

#### Research/Practical Implications and overall conclusions

This symposium shows different aspects workers may consider while dealing with impactful changes in the work environment. By focusing on different possible intervention types that include both the work and non-work domains, we tried to elaborate on the many options employees have to effectively deal with these changes. We bring together five presentations from four countries that provide unique insight into interventions that can help deal with the changing work context by including characteristics for leisure time to maintain workers' well-being and performance.

*Keywords: Interventions, Well-Being, Work-Non-Work Balance*

## Paper 1

### The Crafting Playbook: a playful way to more balance and meaning at work

Gregor Jenny, Georg Bauer & Philipp Kerksieck | University of Zurich

#### Theoretical Background

New ways of working are being experimented with, and this experimentation is not just in the hands of organizations: individuals too must ask themselves how their work should be designed in the future. Hereby the approach of job crafting offers guidance. Crafting means reflecting on one's own strengths, work activities and relationships at work. On this basis, one tries to strengthen resources at work: Aspects such as support, participation and development opportunities increase motivation and protect against the potentially negative consequences of high demands at work. A good balance of resources and demands is therefore crucial for well-being (Jenny et al., 2020). Likewise, meaning at work is experienced when one is productive, feels a sense of belonging, develops competencies and can strengthen one's own identity (Rosso et al., 2010).

#### New Perspectives

We aim to promote job crafting with the digital "Crafting Playbook", into which "Crafting Plays" are implemented. Plays are short activities concerning balance and meaning at work. For example, users can learn more about the interplay of job resources and demands in a mini-game or chat with a program about meaning at work. The Plays are structured in such a way that the users internalize a positive story of work as resourceful and meaningful ("Story Plays"), reflect on themselves and their work ("Reflection Plays") and plan and implement changes in everyday life ("Action Plays"). The target audience is the general working population, whereby Plays can also be applied collectively in teams ("multi-player option"). To make the Plays attractive and effective, they combine expert knowledge with creative and experimental elements. They are developed by researchers and students together with the private sector, administrations and education: these join together to form the "Crafting Circle" and establish the processes for funding and expanding the Playbook in an agile way. Finally, the decision for the terminology of the "Playbook" and the "Plays" is on the one hand based on the wish to differentiate from the field of coaching applications, because these are often closely linked to face-to-face coaching. On the other hand, it is a desire to emphasise the creative, experimental and also playful with this terminology: In work and organizational psychology, the influence of positive psychology is increasing and concepts such as "Playful Work Design" have been introduced: This involves giving work activities a playful touch from time to time by encouraging humorous interactions or challenging oneself in a playful way, and studies have shown that this is positively related to engagement at work (Scharp et al., 2022).

#### Conclusions

Developing digital solutions is a challenge for researchers that should not be underestimated (Arigo et al., 2019). The demands on technology, user interaction (UI) and experience (UX) are high and the costs considerable. With the Crafting Circle we aim to establish an agile format for both development and financing the Playbook. In addition, individual and collective change processes usually require a lot of energy. Thus the Playbook is built of Plays that attract users with little initial effort and without having to get involved with extra services or experts. Health promotion is increasingly using this format in the classic areas of exercise, nutrition and relaxation: Many applications offer short daily units of 5-10 minutes to build up the desired behaviors - depending on the nomenclature, these are

“Daily Challenges” or “Micro Activities”, which are designed to guide people into new routines in small steps (Cobb & Poirier, 2014). And last, the role of eliciting positive emotions through the Plays is crucial, not only to trigger learning and development processes (Fredrickson, 2013), but also to support adherence, i.e. the use of an application as intended by the developers (Ludden et al., 2015).

Relevance to the congress themes

This contribution highlights how “new work” also needs “new interventions” (Jenny & Bauer, under review): We need to make targeted use of digitalisation to offer experimental, creative and also playful interventions, and simultaneously adapt our interventions in an agile way to the ongoing change processes in the new working world.

Relevant UN SDGs

This work is relevant for the SDG (8) “Decent work and economic growth” and (3) “Good health and well-being”.

*Keywords: Job crafting, Playful Work Design, Digital Solutions*

## Paper 2

### The development and validation of an electronic micro-intervention for enhancing playful work design

Lorenz Verelst, Katholieke Universiteit Leuven; Marianne van Woerkom, Marijke Verbruggen & Rein De Cooman | KU Leuven

#### Research goals

While some people find their job activating and fun, between 15% and 87% of employees feel bored at work (van Hooff et al., 2017). Playful work design (hereafter PWD) is often put forward to tackle this problem. During work, workers may engage in playful work design actions to make their work activities more fun and challenging. Besides tackling work boredom, these PWD actions have been linked to several well-being (e.g., work engagement) and performance outcomes (Scharp et al., 2019). Given the potential benefits of PWD, this study aims to develop and validate an electronic PWD micro-intervention. In developing this intervention, we combine the state-of-the-art knowledge of PWD, electronic intervention research, and micro-intervention research. To validate the effectiveness of the intervention, we quantitatively and qualitatively investigate its direct effect on PWD and indirect effect on workers' well-being and performance.

#### Theoretical background

A common drawback of electronic interventions targeted at fostering behaviour and well-being is the substantial attrition rate. That is why we rely on nudging theory to make an easy-to-use, attractive, and time-efficient intervention. Further, the content of the intervention is based on goal-setting theory, stating that specific and measurable goals are essential to foster change. Accordingly, PWD actions can be stimulated by setting achievable PWD goals.

#### Methodology

The research project was conducted in Flanders, Belgium, and targeted white-collar employees, working at least 80% on a full-time contract. The electronic PWD intervention consisted of two steps, namely a short video explaining the concept of PWD and how PWD can be applied in a work context, and a self-guided exercise in which participants had to develop two PWD goals based on the provided instructions. Participants were given two weeks to attain these goals.

To validate the effectiveness of the PWD intervention, we applied a quasi-experimental design with a pre-test (i.e., right before the intervention) and two post-test measurement(s) (i.e., two weeks and six weeks after the intervention). The experimental group received the intervention, while the waiting-list control group received access to the intervention after the study.

#### Results

We are currently analysing the data. Results will be presented during the conference.

#### Limitations

One limitation pertains to our passive control group, thereby limiting our possibility to state that the content of the PWD intervention was the component responsible to foster change. Another limitation might be that the intervention was 'too micro', failing to directly foster PWD and indirectly well-being and performance.

## Conclusions and practical implications

We can conclude that an electronic PWD micro-intervention is fruitful to investigate as a possible way to foster PWD and, as such, indirectly tackle work boredom and boost well-being and/or performance. Given its potential benefits, we see high practical value for individual workers, managers, and organizations.

Relevance to the Congress Theme : The changing world of work demands personal initiative and self-management from individual employees. Our electronic PWD micro-intervention aims to boost such personal initiatives among workers. At the same time, it might help managers and organizations to facilitate the shift towards more agency of their employees.

Relevant UN SDGs :

Good health and well-being Decent work and economic growth

*Keywords: Playful Work Design, Electronic Micro-Intervention*

## Paper 3

### Resilient entrepreneurship: An online intervention study

Renée Boesten, Evangelia Demerouti, Pascale Le Blanc & Keri Pekaar | Eindhoven University of Technology

#### Research goals

Being resilient has often been proposed as helpful for entrepreneurs in dealing with changing work environments. Resilience is indispensable for entrepreneurs to continue functioning throughout disruptive events (e.g., crises) and is defined as being capable of going back to the original state of your business (Hedner et al., 2017). Resilient entrepreneurs create change and opportunities with the resources available at the time, which can even make them thrive in the face of adversity. They bounce back more easily after setbacks, are more aware of opportunities within their work environment, and deal better with (unexpected) changes (Kuckertz et al., 2020). However, it is still unclear if entrepreneurs can be taught to become more resilient. Therefore, we developed a six-day online training intervention providing participants with behavioural strategies aimed at enhancing their resilience through enhancing their business resources and demands, network, creativity, and work-life balance.

#### Theoretical background

The online six-day intervention we developed aims to enhance entrepreneurs' resilience by stimulating the participants to combine their available internal resources, call upon external resources and understand their business demands to be more resilient. We plan on doing this by focusing on the business demands and resources, developing the network, enhancing creativity, and focusing on leisure activities. To accomplish this, the first three days of the intervention focus on the available business demands and resources and how the participants can change these business demands and resources (crafting behaviour). Crafting behaviour helps entrepreneurs to deal successfully with a crisis because it allows them to mobilize the necessary resources to remain healthy and prosperous during turbulent times (Boesten et al., 2022). The topic of the fourth day is the network of entrepreneurs. Entrepreneurs extensively develop and use their networks during their careers. A more diverse network can help them better to call upon these external resources. Our intervention teaches them how to develop their external resources by developing their network and, at the same time, increasing their diversity. On day five, the intervention elaborates on creativity. To develop innovations, entrepreneurs must be creative. Innovative businesses anticipate and adjust to changing environments constantly and continuously. Our training stimulates entrepreneurs to identify new business opportunities and thus enhance their creativity. Moreover, although many entrepreneurs initially started their businesses to create a better work-life balance (i.e., an equilibrium of both work and private life demands), most of them eventually end up with extended workdays, especially during times of high work-related stress. Therefore, the last day of the intervention focuses on leisure activities, as leisure time after work is essential to stay engaged and perform well.

#### Methodology

The intervention consists of a daily short (3-5 minutes) theoretical and instruction video, followed by practical assignments the participants have to work on during that specific day. By comparing pre- and post-intervention scores on our key study variables of entrepreneurs who participated in the

training with those of a control group, we will study the effects of the intervention on entrepreneurs' use of behavioural strategies: business crafting, network development, enhancing creativity, leisure activities after work to augment entrepreneurs' resilience through higher personal well-being, better performance, idea implementation (i.e., innovations), and less work-life interference.

#### Results

The online intervention was launched in October '22, and data are currently being collected. We will be able to present the first results during the EAOHP 2023 conference. We aim to train at least 50 entrepreneurs.

#### Limitations

With an online intervention, there is always a risk of high dropout rates and decreased interest in the intervention. In addition, we cannot track if the participants actually apply their mentioned strategies during the day. However, they have to evaluate the next day what they did and how they did it.

#### Research/practical implications

This research evaluates the effectiveness of a hands-on intervention that teaches entrepreneurs behavioural strategies to remain or become more resilient, which may help them better deal with changing work conditions (e.g., crises). With this training, we offer a holistic approach to how entrepreneurs can increase their resilience.

#### Relevance to Congress theme

Work is changing nowadays, especially for entrepreneurs. Crises are often detrimental, but they may also be a trigger to look for opportunities. By developing a tool that may help entrepreneurs to increase their resilience, we contribute to the viability of their businesses by making them better prepared to deal with future changes.

#### UN SDGs

This work is relevant for the SDGs „good health and well-being” and „decent work and economic growth”.

*Keywords: Resilience, Business Strategies, Work-Home Interference*

## Paper 4

### **Start your day right: Fostering day-specific proactivity, work engagement, and self-efficacy through a training aimed at psychological reattachment**

Ricarda Schlepner, Jana Kühnel | University of Vienna

#### Research goals and why the work was worth doing

There is empirical evidence on the benefits of psychological reattachment to work in the morning for employees' anticipatory task focus, goal activation, positive affect, and work engagement throughout their workday (Sonnentag & Kühnel, 2016; Sonnentag et al., 2019). Thus, psychological reattachment should be encouraged and trained among employees. With the current study, we aimed to develop a short intervention targeting psychological reattachment and investigate its effects on employees' daily work experiences. Moreover, we investigated effects of psychological reattachment on day-specific self-efficacy, proactivity, and work engagement.

#### Theoretical background

Psychological reattachment to work in the morning is the process of mentally preparing for work, anticipating demands and tasks, and transitioning from nonwork life to work life (Sonnentag & Kühnel, 2016). It is the phenomenon complementary to psychological detachment after work in the evening, the two forming a cycle that ideally takes place every workday (Fritz & Taylor, 2019).

In previous studies, psychological detachment and psychological reattachment have turned out to bear multiple positive effects on employees' health, well-being, and performance

(Fritz & Taylor, 2019). Interventions aiming at psychological detachment have already been conducted successfully. Equivalently, we were interested in whether reattachment's benefits may become accessible for employees who learned about it in a training. In the training, employees are empowered to actively take care of their own work-nonwork balance, receiving information on the links between recovery after work including psychological detachment, on employing psychological reattachment to get into a better workflow, on building mindful morning and evening routines, and on transitioning between work roles and nonwork roles. We hypothesized that employees who participated in the training should psychologically reattach more before work compared to participants who did not participate in the training. Furthermore, employees who employ psychological reattachment to work in the morning should experience more day-specific self-efficacy and work engagement and show more day-specific proactive behavior. The effect of the reattachment training on day-specific self-efficacy, work engagement, and proactivity should unfold via psychological reattachment.

#### Design/Methodology/Approach/Intervention

Our study is an experimental daily diary study. After filling in a pre-survey, participants were randomly separated into two groups (experimental group and waitlist control group); both groups received daily surveys (one at the beginning and one at the end of the workday, 5 minutes each) for two consecutive workweeks. After the first week, the experimental group participated in the short training. Thus, the first week serves as a baseline to identify effects of the training during the second week. The training contained a 2-hour live zoom session, an interactive presentation, self-reflective exercises, take-home material, and the opportunity to ask questions and exchange with other

participants. After the two weeks, the waiting list control group had the opportunity to voluntarily participate in the training.

#### Results obtained

We collected data from 148 persons (Level 2) on 1068 days (Level 1). We analyzed the training effect by calculating a cross-level moderation analysis, time (week 1 vs. week 2) being the level-1 predictor and group (experimental vs. waitlist control group) being the level-2 moderator. The training did show a significant and positive effect on day-specific psychological reattachment. Day-specific psychological reattachment was positively related to day-specific work engagement, proactivity, and self-efficacy. We tested for conditional indirect effects within our multilevel model to investigate possible training effects for day-specific work experience via psychological reattachment. However, we did not find evidence for our hypothesis that day-specific work engagement, proactivity, and self-efficacy increased due to an increase in psychological reattachment due to the training.

#### Limitations

We did not add a follow-up measurement point to our data collection, so we did not measure long-term training effects. We chose to cover complex topics within a 2-hour short training. On the other hand, our approach is economic, easily applicable for organizations of all sizes, practicable for all kinds of settings (group trainings and individual trainings, synchronous and asynchronous setting, online or in-person trainings). The effect of the training was rather small, implying that the training may still be improved.

#### Research/Practical Implications

We obtained new insights on as well as further empirical support for benefits of psychological reattachment, namely, the positive effect on day-specific work engagement, proactivity, and self-efficacy. We provide a ready-to-use, economic training for organizations, setting the basis for a more extensive, e.g., whole-day training for employees on the topic of work-nonwork interface.

#### Originality/Value

This is the first project that tested whether psychological reattachment can be improved with the help of a field intervention. It is also the first study connecting psychological reattachment to day-specific proactivity and self-efficacy.

*Keywords: Field Intervention, Psychological Reattachment, Work-Nonwork Interface*

## Paper 5

### **Temptation Island – A multi-source cluster-randomized controlled trial on the effects and mechanisms of an Unlimited Paid Time Off Policy**

Jessica de Bloom, University of Groningen; Christine Syrek, Hochschule Bonn-Rhein-Sieg; Tim Vahle-Hinz, Psychologische Hochschule Berlin; Jana Kühnel, University of Vienna

#### Research goals

Changes towards an intensified working life characterized by globalization, rapid technological developments, and leisure scarcity have led to a renewed interest in alternative and more flexible working time arrangements. Unlimited paid time off policies are widely discussed by HR professionals around the globe. Would employees continue working and remain productive if they could instead enjoy free time while being paid their regular salary? We conducted a multi-source cluster-randomized controlled trial to examine this question by testing the effects and underlying processes of an unlimited paid time off policy which was introduced in a large company in the financial sector in the Netherlands

#### Theoretical background

We propose two pathways through which effects of UPTO's unfold: autonomy need satisfaction and social exchange. In abandoning a fixed amount of leave, companies aim to establish a culture of trust and psychological ownership. UPTO enables employees to take agency over their work and this autonomy is considered the core mechanism which can bring about positive effects of UPTO. At the same time, UPTO may create a social obligation towards the employer following social exchange theory. Taking advantage of UPTO may lead to a feeling of obligation or even guilt towards the employer. In return for UPTO, the organization may expect the employee to be an ideal worker who is willing and able to "walk the extra mile" and UPTO becomes a part of a psychological contract.

#### Design

An experimental group (N = 290) received an infinite amount of paid leave days for an entire year, while the control group (N = 293) kept working under the company's regular leave policy.

At the beginning and the end of the intervention year, we measured work engagement, job satisfaction, and work-nonwork balance via self-report questionnaires and received company-registered data on supervisor-rated performance and sickness absence rate. On a monthly basis, we assessed self-reported autonomy regarding leave taking and social pressure and received company-registered data on monthly leave hours. We also conducted semi-structured interviews four times per year in a subsample of twenty employees in the EG.

#### Results

Access to unlimited leave (i.e., EG versus CG) was related to taking more leave and a greater variability in leave taking, higher work engagement, a better work-nonwork balance, and more job satisfaction. However, unlimited leave also increased social pressure and, unexpectedly, lowered autonomy regarding leave taking. Furthermore, it appears in an inconsistent mediation pattern that lowered autonomy regarding leave taking impedes the positive effects of the unlimited leave policy. Concerning company-registered outcomes, unlimited leave was not related to task performance,

organizational citizenship behavior and sickness absence rates. Employees with unlimited leave displayed higher supervisor-rated stretch ambition compared to the control group.

Through the interviews, we observed how the new policy impacts trust, perceptions of workload and responsibility, and reciprocity norms among teams. Leave turns from an individual commodity into a collective good, amplifies pre-existing relationships, lays bare power struggles, and shifts roles and responsibilities. It also leads employees to reexamine the purpose of leave taking from hedonic to utilitarian.

#### Limitations

Limitations of this study relate to reactance/disappointment of being assigned to the control group and greater dropout in the control group (N=209-211). Team leads could decide whether they want to join the research project or not, potentially leading to selective samples. The COVID-19 pandemic during the intervention year affected people's leave taking behaviors and possibilities to talk and negotiate about leave with their team members.

#### Conclusions

The influence of and mechanisms behind unlimited leave policies are complex and partly different than expected. Unlimited leave can engender beneficial work outcomes. But employee's sense of autonomy is at risk: Unlimited leave transforms leave from an individual trading good into a collective good. Autonomy is shifted from managers to teams and individuals, and this requires negotiation and justification towards oneself and one's team upon leave utilization. Accordingly, unlimited leave constitutes a prime example for rises in collective freedom, and vertical autonomy redistribution which - paradoxically - jeopardize individual freedom. Future working life requires new skills to be developed on the individual level (e.g., self-reflection), on the team-level (e.g., negotiation strategies) as well as organizational support to orchestrate the delicate interplay between collective and individual freedom.

#### Relevance to the Congress Theme

Policies which increase employee's freedom to organize their own work (in terms of time, place, order of tasks etc.) is an extremely timely topic. Unlimited paid time off is a policy which is reflective of the changing world of work in which organizations shift responsibilities to employees.

#### Relevant UN SDGs

Good health and wellbeing

Decent work and economic growth

*Keywords: Organizational Policy, Social Exchange Theory, Self-Determination Theory*

## **symposium S038**

### **Examining the effects of the COVID-19 pandemic, remote work, and the implications on employee well-being**

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science\_practice

What will be covered and why

The onset of the COVID-19 pandemic changed our lives in many ways, from how we live to how we work. This symposium aims to discuss two important aspects of the impact of such large-scale events on employee health and well-being. First, we examine how employees were affected by the COVID-19 pandemic, including changes in their job engagement (i.e., occupational well-being) and sickness presence (i.e., health behavior). Second, we investigate the impact of changing work arrangements on employees, with a focus on remote work. Studying these changes is important for maintaining and promoting employee health and well-being in the face of major disruptive events, and for designing resilient future workplaces. Our discussant, Monica Molina, will lead discussions by presenting some of the key trends to have emerged over the last two years around home and hybrid working along with key considerations towards employee well-being.

Overall, this symposium offers a collection of studies focusing on changes in employee behaviour and well-being caused by disruptive environmental events (first part) and how flexible work arrangements can be designed to maintain and foster employee health and well-being when facing such events in the future (second part).

1) Posch et al. examine changes in employees' job engagement caused by two national lockdowns during the pandemic and the moderating role of four job characteristics (i.e., workload, job autonomy, supervisor, and co-worker support). They find the expected declines in job engagement in response to both lockdowns, which were particularly strong after the first event and partially moderated by job characteristics prior to event onset.

2) Dietz considers changes in employees' health behaviour in the working context (i.e., sickness presence) during the COVID-19 pandemic and investigates potential differences in these changes depending on spatial working arrangements. She finds an unexpected decrease in sickness presence before the lockdown depending on spatial working arrangements and no support for changes during the lockdown.

3) The study by Straus et al. investigates the fit between organisational and employee values and how it affects the well-being of remote workers. Results show that a congruence of values is not crucial for engagement but that the values' content matters, deviating from the widespread value congruence theory and research.

4) Iqbal et al. will draw upon the presence of technostress amongst remote workers and how this can lead to work-family conflict, with employees struggling to detach from work outside of regular working hours. The findings revealed that the volume of virtual meetings interrupting daily workflow was a significant antecedent of technostress. Peer support was a significant moderator, buffering the relationship between virtual meeting interruptions and techno-invasion.

Relevance to the Congress Theme

We address the first facet of the congress theme (The future is now.) by using rigorous empirical longitudinal methods to contribute to the understanding of changes in the world of work due to disruptive environmental events. Addressing the second facet (The future is now!), we provide urgent knowledge on how employees have adapted to unique circumstances, with little warning or careful planning, and discuss how we can maintain and promote employee health and well-being in such situations. Finally, we contribute to the last facet of the congress theme (The future is now?) by discussing how and where we should work, challenging the status quo of traditional working practices, and highlighting the importance of actively shaping the future of work. We seek to address questions around how workplaces can not only adapt to sudden economic, environmental, and societal changes, but also keep the maintenance of employee well-being at its core.

#### Research & Practical Implications

This symposium presents four longitudinal studies that provide comprehensive insight into the impact of sudden, disruptive external challenges on employee's job satisfaction, job engagement and work behaviours related to well-being. The synergies emerging from these studies enhance our understanding of current working practices and discuss how work design can promote and maintain employee well-being, particularly for remote workers. We pose questions for further research on employee well-being and the future world of work.

#### Conclusions

The studies in this symposium and our discussant reflect on the changes that have occurred in the last two years, as well as the impact of emerging trends we are seeing with regards to the changing world of work. Through the research presented, we aim to discuss the changes we would like to see in the future workplace that support employee well-being and the issues researchers and practitioners need to address to ensure a happy, healthy, and productive workforce.

discussant: Monica Molino, University of Turin

*Keywords: Well-being, COVID-19 pandemic, Remote Work*

## Paper 1

### **Reacting and Adapting to Disruptive Environmental Events: Interactive Effects of Events and Job Characteristics on Job Engagement**

Melina Posch & Hannes Zacher | Leipzig University; Cort W. Rudolph, Saint Louis University; Richard Janzen & Oliver Weigelt | Leipzig University

#### Research Goals

This study examines the impact of disruptive environmental events on employees' job engagement. We investigate the effects of two national lockdowns in Germany during the COVID-19 pandemic and explore the influence of event novelty as well as the potential moderating role of four job characteristics (i.e., workload, job autonomy, supervisor and co-worker support). Our study extends theory and research on transitions and adaptation processes and is relevant to practitioners who want to address the negative effects of disruptive environmental events on employees.

#### Theoretical Background

Job engagement is an affective-motivational construct that refers to employees' simultaneous investment of physical, cognitive, and emotional energy in their work role (Rich et al., 2010) and is also described as an energized form of occupational well-being (Inceoglu & Warr, 2011). Based on Event System Theory (EST; Morgeson et al., 2015) and the transition-adaptation framework by Bliese et al. (2017), we investigate the effects of two disruptive environmental events (i.e., national lockdowns during the COVID-19 pandemic) on employees' job engagement. We expect declines in job engagement due to both disruptive environmental events and a less pronounced effect of the second, less novel event. Following both events, we expect gradual increases in employees' job engagement due to adaptation. Regarding the role of job characteristics, we expect that a high (vs. low) workload amplifies the declines in job engagement due to the disruptive environmental events, whereas high (vs. low) levels of job autonomy and social support mitigate these declines.

#### Design & Methodology

To test our hypotheses, we analyzed longitudinal data with 20 measurement waves, collected between December 2019 and September 2021. The sample consisted of 652 full-time employees in Germany from a variety of professions. Job engagement and job characteristics were assessed using reliable and valid self-report measures. We used discontinuous growth curve models (Bliese et al., 2017) to analyze the development of job engagement over time and the changes related to the onsets of the first (March 2020) and second (December 2020) national lockdown in Germany.

#### Results

Our analyses revealed a decline in all three facets of job engagement at the beginning of the first disruptive environmental event and only negligible changes due to the second event. In particular, declines in physical and cognitive engagement were stronger for the first event compared to the second event. Our hypotheses regarding the moderating role of job characteristics were only partially supported. For example, higher levels of workload strengthened the decline in physical and cognitive engagement due to the first occurrence of the event, whereas lower co-worker support was associated with a stronger decrease in emotional engagement due to the second event.

#### Limitations

We assessed job engagement and job characteristics using self-report measures, which could reduce validity due to method biases. While repeated measurements help address this issue, future studies should also incorporate objective measures. Furthermore, future research could investigate the specific mechanisms through which disruptive environmental events impact employees, such as information processing requirements or the changing of routines.

#### Research & Practical Implications

This study advances theory and research on transitions and adaptation processes, as it examines employees' repeated exposure to disruptive events in their broader environment. By investigating potential moderators of these effects at the job level, we integrate event-oriented approaches with work design research. In more general terms, our research may contribute to research on the meta-concept of resilience (e.g., Hartmann et al., 2020; Infurna & Jayawickreme, 2019). Regarding practical implications, our results illustrate that disruptive environmental events can have severe and long-lasting effects on employees' job engagement that are important to address. To help employees adapt to such events, it may be promising to promote certain job characteristics, such as job autonomy and co-worker support.

#### Relevance to the Congress Theme

Changes in the world of work may originate within, but also outside the work context. The present study advances knowledge on how employees' job engagement changes due to disruptive events in their broader environment. Our research findings provide insight into how work may be designed to support employees' adaptation and resilient reactions to such changes.

#### Relevant UN SDGs

The findings of our study may help to ensure decent working conditions and employee well-being, even when employees are confronted with disruptive, often unexpected, environmental events (UN SDGs #3 and #8). Understanding the impact of such events on employee experiences and supporting employees' adaptation and resilient reactions to these events has the potential to contribute to employees' long-term health and well-being (UN SDG #3).

*Keywords: Event System Theory, Job Engagement, Job Characteristics*

## Paper 2

### **Sickness Presence during a Pandemic: The Role of Governmental Pandemic Guidelines and Telework**

Carolin Dietz, University of Technology Chemnitz

#### Research Goals

Sickness presence is defined as working while in a state of ill-health (Ruhle et al., 2020) and is a risk for individual and public health, especially during a pandemic (Kinman & Grant, 2020). This study examines the impact of governmental pandemic guidelines on employees' sickness presence. Specifically, I investigate the development of sickness presence in Germany during the early COVID-19 pandemic and explore the influence of a national lockdown as well as the potential moderating role of telework. The study contributes to the literature on antecedents of sickness presence and has practical implications for the development of strategies preventing pandemics.

#### Theoretical Background

Based on situational strength theory (Meyer et al., 2010), the study investigates the effects of situational strength (i.e., a national lockdown) on employees' sickness presence. Situational strength is defined as "implicit or explicit cues provided by external entities regarding the desirability of potential behaviours" (Meyer et al., 2010, p. 122). During the pandemic, people in Germany were asked by the government to follow the AHA-guidelines, standing for distancing, hygiene, and masks. Sickness presence may be relatively stable when governmental guidelines are relaxed (low situational strength). However, sickness presence may decrease due to strict governmental guidelines during a national lockdown (high situational strength). Regarding the role of telework, exclusively working on site may exacerbate the decrease in sickness presence during a lockdown compared to working arrangements allowing to work from home.

#### Design & Methodology

Longitudinal data was collected at seven measurement waves between June 2020 and December 2020. Participants respond to an online questionnaire at the first week of each month. The sample consisted of 634 employees working full-time in a variety of industries. To test my assumptions, I applied a piecewise growth model in Mplus. The model examines the development of average sickness presence days per month before the national lockdown in Germany (May to October 2020) and during the lockdown (October to December 2020) depending on spatial working arrangements (remote work vs. non-remote work).

#### Results

Controlling for health and job demands, results show an unexpected decline in sickness presence between May 2020 and September 2020. In addition, there was no support for changes in sickness presence between September 2020 and December 2020 during the national lockdown. The hypothesis regarding the moderating role of telework was partially supported.

#### Limitations

Sickness presence was assessed asking employees to report the number of days they worked in a state of ill-health in the last month, which could reduce reliability due to recall biases. In addition,

future studies may examine employees' perceptions of situational strength regarding governmental pandemic guidelines.

#### Research & Practical Implications

The results of this study contribute to our knowledge on antecedents of sickness presence at the societal level by giving insights into the development of employees' sickness presence during a pandemic and changes in this behaviour due to governmental restrictions. Furthermore, this study contributes to work design research by investigating a spatial working arrangement, namely telework as a potential moderator of these effects. Results have practical implications for the development of strategies to prevent pandemics. Telework may be helpful in containing the spreading of contagious diseases but seems to be less effective in preventing virtual sickness presence (Ruhle & Schmoll, 2021).

#### Relevance to the Congress Theme

Major societal events such as the Covid-19 pandemic can influence and change the world of work. The results of this study provide insights into the development of health behaviour in the working context during a pandemic. The study advances knowledge on the consequences of a work arrangement becoming more frequent, namely telework and its effects on employees' health behaviour.

#### Relevant UN SDGs

This study may contribute to the design of strategies to prevent the spreading of contagious disease during pandemics and therefore, to maintain public health (UN sustainable development goal 3 & 16). Findings further give insights into the consequences of spatial flexibility for employees' well-being and health (UN sustainable development goal 3 & 8).

*Keywords: Sickness Presence, Telework, COVID-19 pandemic*

### Paper 3

#### **Remote worker's values and well-being: Is it irrelevant what employees strive for as long as they fit the organizations' values?**

Eva Straus & Christian Korunka | University of Vienna; Jeffrey R. Edward , University of North Carolina; Anja Van den Broeck, KU Leuven; Arabella Mühl, University of Vienna

#### Research Goals

“We need employees that fit our values.” is a statement manager often use to select candidates. For Human Resources (HR) departments a fit between the company's values and the applicant's values is often crucial for hiring candidates (Adkins et al., 1994; Cable & Judge, 1995, 1997; Chatman, 1989; Kristof-Brown, 2000). Given that organizations decide to hire a candidate based on their values, positive and negative effects of value congruence should be examined in great detail.

#### Theoretical Background

Theories of value that focus on congruence assume that congruence between individual and organizational values is universally associated with positive outcomes (Greguras & Diefendorff, 2009; Kristof-Brown et al., 2005). However, other research on values that focus on the content of values show that different contents of values lead to different outcomes. For instance, the self-determination theory (SDT) suggests to differentiate between intrinsic values (e.g. contribution to the society) and extrinsic values (e.g. financial success) leading to either positive or negative individual and organizational outcomes, respectively (Kasser & Ryan, 2001; Van den Broeck et al., 2019; Vansteenkiste et al., 2007). While striving for intrinsic values leads to well-being and life satisfaction, extrinsic aspirations lead to high turnover intentions and emotional exhaustion (Vansteenkiste et al., 2008). So, is it really irrelevant what employees strive for as long as they fit the company's values?

Drawing on these two contrasting perspectives, the aim of the present study is to reveal whether a fit or the content of values (intrinsic vs. extrinsic values) is crucial for well-being (measured with items of engagement) and emotional exhaustion.

#### Design & Methodology

This longitudinal study consists of three measurements with four weeks between each measurement. A questionnaire had to be filled out at every measurement. The first questionnaire included personal values and sociodemographic items. Four weeks later, participants filled out a questionnaire containing organizational values. Eight weeks after the first questionnaire, the dependent variables were measured. Participants received the appropriate links via e-mail. The sample size of this longitudinal study was 740 (421 women; 319 men) participants.

To analyze our data, we calculated non-linear regression coefficients (polynomial regressions:  $Z = b_0 + b_1 X + b_2 Y + b_3 X^2 + b_4 XY + b_5 Y^2 + e$ ), which we tested using the bootstrap. In line with Edwards and Parry (1993), we used response surface methodology to analyze the shape of each surface along the  $Y = X$  and  $Y = -X$  lines and the location of the first principal axis.

#### Results

Our results show that a congruence of values is not crucial for engagement but that the values' content matters, deviating from the widespread value congruence theory and research. More

specifically, we disclose that engagement is high as soon as organizations support intrinsic values, independently of a person's individual aspirations. Extrinsic values are even associated with emotional exhaustion.

#### Limitations

We used self-reported data that is prone to common method bias and consistency effects (Podsakoff et al., 2003). Also, we worked with a panel provider whose pool of participants may represent a biased sample such as different demographic and employment characteristics relative to other traditional sampling techniques (Behrend et al., 2011).

#### Research & Practical Implications

This longitudinal study combines the empirical work on value congruence with research on the content of values. It reveals that the content of values has main effects on well-being and emotional exhaustion, even in case of a congruence with the environment. Considering the negative consequences of extrinsic value congruence, this study underlines the importance for organizations to promote intrinsic values such as social responsibility and personality development instead of power and wealth to have satisfied employees.

#### Relevance to the Congress Theme

Recent global events have major influences on our personal values: In times of crises, such as the COVID-19 pandemic, people are more prone to extrinsic values. As our study reveals that extrinsic values, even the congruence of extrinsic values, can have negative consequences for companies, we underline the importance for organizations to promote intrinsic values such as social responsibility instead of power and wealth to have engaged employees and to cope with times of crises (Organ et al., 2006).

#### Relevant UN SDGs

This study contributes to the 17 Sustainable Development Goals (SDGs) by investigating well-being and exhaustion of employees. By examining values at work, we provide guidelines how to improve employees' well-being and prevent exhaustion at work.

*Keywords: Organizational Values, Engagement, Emotional Exhaustion*

## Paper 4

### Working from home or living at work? Understanding the role of technostress on work-family conflict

Afshan Iqbal, Mark Robinson & Matthew Davis | University of Leeds

#### Research Goals

The traditional 9-5 working day has long been questioned. Greater workplace flexibility allows employees to balance their work and personal demands (Kossek et al, 2015). Where organisations enable flexible and home working, employees have higher levels of job satisfaction, productivity, and organisational commitment (Gajendran & Harrison, 2007; Fonner & Roloff, 2010; Charalampous et al, 2019). Flexible working also improves employee well-being and reduces burnout through better work-life balance (Dizaho et al, 2017). Such flexibility has been enabled by sophisticated technologies, allowing people to work anytime, anywhere (Gonsalves, 2020).

During 2019, only 5% of the UK workforce worked mainly from home, whereas by April 2020 almost half (47%) of the UK working population did, due to the pandemic (ONS, 2020). Almost overnight, people adapted to a new way of working, using new technologies to work and communicate with colleagues (Unsworth, 2020).

It is therefore necessary to understand how people adjusted to working in a new environment, as their personal and professional lives collide. Are there particular personal circumstances that are more conducive to successful homeworking than other circumstance? This research aims to inform academic and practitioner understanding on shaping an efficient, productive, and healthy future workplace, especially since returning to the office full-time now seems unlikely.

#### Theoretical Background

Technology has undeniably revolutionised the way we work, by providing communication options, both synchronous and asynchronous, enabling organisations to streamline operations (Leung & Wang, 2015). The technostress perspective argues that technology can be overwhelming, and people thus struggle to adapt healthily (Ragu-Nathan et al, 2008). Technology can trigger stressors, which in turn influence the strain individuals experience at work (Tarafdar et al, 2011). Thus, a perceived discrepancy between individual ability and work demands leads to some distress (Suh and Lee, 2017).

Drawing on the technostress model, this study investigates the adaptation to remote working. In particular, we explore the influences of technostress (specifically techno-overload, techno-invasion and techno-complexity) on work-family conflict. Hyper-connectivity can overwhelm people when they constantly react to noise and struggle to detach from work (Tarafdar et al, 2011). At what point does flexible work become inescapable work?

#### Design & Methodology

A three-wave longitudinal study was conducted between July 2020 and 2021 in line with the UK Government's National Lockdown strategies. A final matched sample consisted of 202 employees working from home full-time, across the UK, from a variety of professions. The sample consisted of 51% male, 44% female and 5% other. Majority of the participants were aged between 25 and 39 years (75%) and only one-third had some experience of working from home, prior to the pandemic.

Structural equation modelling was the method of analysis, testing for direct, indirect, and moderating relationships.

## Results

The findings show that virtual meetings as interruptions to workflow significantly predicts technostress (techno-overload;  $\beta = .49, p < .001$ , techno-invasion;  $\beta = .27, p < .001$ , and techno-complexity;  $\beta = .18, p < .001$ ). When testing for the indirect relationships between virtual meetings as interruptions and work-family conflict, the analysis revealed that techno-overload ( $\beta = .09, p < .05$ ) and techno-invasion ( $\beta = .09, p < .05$ ) significantly mediated this relationship. However, techno-complexity did not ( $\beta = -.01, p = .56$ ). Peer support significantly moderated the relationship between virtual meetings as interruptions and techno-invasion only ( $\beta = -.18, p < .05$ ). The findings therefore demonstrate the need to take a more nuanced view of technostress and peoples' experiences of working from home.

## Limitations

This study relies on participants recalling their experiences retrospectively, both in the survey and interview responses, which may not be entirely accurate. Future research could also use diary studies for participants to capture their experiences in real-time, rather than solely relying on memory.

## Research & Practical Implications

This paper helps advance our conceptual understanding of technostress and what this means for work-family conflict and well-being when working from home. The findings can help inform academic research by posing new questions about employee experiences of working from home as well as adapting to a new hybrid work model. It should also encourage further academic discussions around work design, well-being, and productivity. Furthermore, the findings may provide practical guidance for human resource management (HRM) and employment law policies.

## Relevance to congress themes

Recent global events, such as the pandemic have shown that changes experienced in the world of work is not always influenced by people or events associated with the workplace. Indeed, external events have a significant influence and consequently radically changed the way in which we work. The present study investigates how employees adapted to new ways of working and how we can further support employee well-being and productivity in alternative work environments.

## Relevant UN SDGs

The findings from this research align with the UN SDGs 3 (Good Health & Well-being) and 8 (Decent Work & Economic Growth). Our study provides insights into employee well-being and productivity during unexpected, disruptive environmental circumstances.

*Keywords: Technostress, Remote Work, Work-Family Conflict*

## Symposium S039

### Recovery and Behaviors after Work: New Developments

Wilken Wehrt, Maastricht University

science

In this symposium, we present five empirical papers that concern research on recovery and behaviors after work by following different methodological and theoretical angles. The motivations behind these papers are manifold, but they unite in their aim to improve research on recovery and behaviors after work. The presented works improve recovery-related research by (1) focusing on neglected aspects to improve our theoretical understanding of recovery processes (e.g., activity characteristics, implicit theories), (2) considering recent developments and interesting phenomena affecting successful recovery (e.g., telework, being in nature), or by (3) extending the range of behaviors that may deserve attention next to recovery activities after work.

Concerning the studies that focus on neglected aspects that can improve our understanding of recovery processes, Alameer et al. takes a step back systematically disentangling recovery activities and experiences. Via a latent profile approach and a large diary study sample of 345 persons, the presented study enquires if characteristics of recovery activities (e.g., physical, social, creative, mental, spiritual, virtual, and outdoor) cluster together to form recovery activity profiles that further can predict recovery experiences and well-being the next workday.

Also Seibel and Haun aim to foster our theoretical understanding of recovery processes and in particular energy management by introducing a questionnaire to assess employees' implicit theories about energy resource gains and losses during work and non-working time (ITERGL). In two online surveys, the authors evaluate discriminant and construct validity (Survey 1, N = ca. 380), and predictive and re-test reliability (Survey 2, N = ca. 300). With this questionnaire, the authors aim to challenge the assumption that energy investment at work and energy replenishment after work via recovery are the sole processes explaining how employees manage their energy. In their view, employees' thoughts on these processes (i.e., their implicit theories) may further explain how employees manage their energy resources, e.g., by affecting the decision to engage in recovery activities even after exhausting working days.

Two studies consider recent developments and interesting phenomena that may affect successful recovery. Venz et al. takes up new developments for more telework and looks at the issue of increasingly blurred boundaries between work and home. Using a diary design with data from 232 persons on 1540 workdays, their study poses the question if telework impairs recovery via people's perceived expectation to be available for work matters during one's free time.

The second study on recent developments and interesting phenomena by Kühnel et al. looks at one specific activity that did not receive much attention yet. "Shinrin-Yoku" or "Forest bathing" describes to immerse oneself into nature in a mindful manner with a focus on one's senses. In order to examine the effectiveness of forest bathing, the authors conducted a randomized field intervention with 107 participants over three weeks. Participants in the intervention group were instructed to spend time in the forest focusing on their five senses. "Forest bathing" may not only be good for recovery, but also help to decrease strain, and enable a higher sense of coherence at work.

The last presented study by Wehrt et al. extends the range of behaviors that deserve attention besides recovery activities after work. In a preregistered diary study with 137 participants, the authors aim to gain a better understanding on how and via which mechanisms work demands may

translate into self-control failures at home. In particular, they examine the role of different work demands for a wide range of self-control failures at home (i.e., overeating, media overconsumption, neglecting household and social duties) via different processes namely depletion, motivation, desires for self-reward, and desires for self-direction. The authors draw upon several recent theoretical developments stemming from social psychology to illuminate self-control processes at the work-home interface.

Together, these five papers demonstrate that research on recovery is manifold and still offers many fruitful routes to walk and explore. The perspectives provided hopefully stimulate further extension, differentiation and integration of recovery research with research on the work-home interface, and inspire further methodological flourishing in the field.

*Keywords: recovery, work-home interface, multiple approaches*

## Paper 1

### Examining the Profiles of Daily Recovery Activity Characteristics

Khalid M. Alameer, Ute R. Hülshager & Sjir Uitdewilligen | Maastricht University

#### Research goals

Alameer, Uitdewilligen, and Hülshager (2022) introduced a dimensional approach, called recovery activity characteristics, to study how people recover from work stress. The dimensional approach poses that recovery activities can be characterized by multiple continuous dimensions (e.g., physical, social, creative, mental, spiritual, virtual, and outdoor). In the present study, we aim to examine whether these activity characteristics cluster together into distinguishable profiles on a daily basis. Moreover, we will investigate whether individuals may vary on such profiles from one day to the other. Finally, we aim to explore whether these profiles predict recovery experiences and well-being outcomes in the evening and during the subsequent workday.

#### Theoretical background

Active participation in recovery activities is an essential strategy to enhance recovery from work stress (Sonnentag et al., 2022). However, research is still inconclusive about the activities that enhance recovery mainly because recovery activities have been assessed with broad categories (e.g., physical, social, low-effort activities; Sonnentag, 2001; Sonnentag & Zijlstra, 2006). However, in this category based approach, a broad range of activities are joined together that may conceptually be different (e.g. both walking and playing a team sports fall under the physical category). Moreover, the category-based approach provides limited insights into the underlying mechanisms driving the effects on recovery. Each specific activity can have multiple underlying characteristics. For example, playing football can be physically effortful and social, while dancing is physically effortful and creative.

To overcome the shortcomings of the category-based approach, Alameer, Uitdewilligen, and Hülshager (2022) introduced a dimensional approach. This approach allows for studying recovery activities using a comprehensive multidimensional approach to assessing recovery activities rather than using very broad categories to classify activities. Yet, it is likely that specific activity dimensions may systematically cluster together into activity profiles (for instance high physical and high social). The identification of such profiles provides insight into which activity characteristics naturally occur together and enable an assessment the conjoint effects of these activities on recovery outcomes.

#### Study Design/ Methodology

The project consisted of an online 10-day diary study involving two measurements per day targeting adults who work at least 19 hours and had regular daytime working hours. In the evening survey, participants answered the recovery activity characteristics questionnaire (Alameer et al., 2022), the recovery experiences questionnaire (Sonnentag & Fritz, 2007), and items to assess emotional exhaustion (Halbesleben & Demerouti, 2005) while in the morning surveys, participants answered items that assess vigor and exhaustion (Schaufeli, Bakker, Salanova, 2006; Halbesleben & Demerouti, 2005). Participants were recruited using research assistants' personal networks and the snowball sampling technique. A total of 345 employees participated in this study.

#### Results

We plan to run Multilevel Latent Profile Analysis (MLPA) to identify profiles of daily activity characteristics and to assess whether one profile differs significantly from other profiles on each outcome. But before doing this, we ran null models using Mplus decomposing between- and within-person variance in each variable. Results indicate that 27% to 66% of the variance in our constructs was within-person, supporting our use of MLPA.

#### Limitations

One limitation is that we focus only on evening activities, whereas recovery occurs in many settings (such as work breaks, weekends, and vacations). Nevertheless, the psychological mechanisms underlying recovery seem to be alike across these settings (Sonnetag et al, 2017).

#### Conclusion

Rather than examine one or two activity/activity characteristics in isolation, we examine daily recovery activity characteristics in conjunction. This allows us to identify the active ingredients of generally occurring combinations of recovery activities and provides practical recommendations to employees to help them recover from work stress.

#### Relevance to the congress theme

The new way of working (i.e. working from home, and the 24/7 access to telecommunication device) intervene in employees' personal life and make recovery from work stress much more difficult. When we think of the future of work, we need to take the importance of recovery into account. We need to push employees to engage in activities that make them recover. We need to create interventions and redesign jobs to reinforce participation in recovery activities. However, we first need to know better which activities make them recover.

#### Relevant UN SDGs:

The Study is relevant to the UN Sustainable Development goals, specifically “good health and wellbeing” and “Decent work and economic growth” goals. Stress has been shown to harm individuals, society, and the economy (Ganster & Rosen, 2013; Nixon et al., 2011). Understanding how people recover from work stress is vital to eliminate the detrimental impact of stress on individual health and wellbeing and on society and the economy.

*Keywords: recovery activity characteristics, latent profile analysis, well-being*

## Paper 2

### Implicit Theories of Energy Resource Gains and Losses during Work and Nonwork Time

Sebastian Seibel & Verena C. Haun | University of Wuerzburg

Research goals and why the work was worth doing: Previous research demonstrated that the implicit theories individuals have (e.g., about willpower) influence their cognitions and behaviours. Building on this notion, we expect that the implicit beliefs about energy resource gains and losses during work and nonwork time might explain differential behaviours and experiences during work (e.g., investing effort at work) and during nonwork time (e.g., engaging in recovery activities) above and beyond work and nonwork characteristics. As a first step to enable future research in this field, we aim to develop and validate a survey to assess implicit theories about energy resource gains and losses during work and nonwork time (ITERGL) by examining its discriminant, concurrent and predictive validity.

Theoretical Background: Based on the notion that both work and nonwork time can have energy draining as well as energy replenishing aspects, we developed a 20-items survey with four dimensions and demonstrated its four-factor structure in an initial study: (1) Implicit theories about energy resource losses during work time (ITERLoss\_w), (2) energy resource gains during work time (ITERGain\_w), (3) energy resource gains during nonwork time (ITERGain\_nw), and (4) energy resource losses during nonwork time (ITERLoss\_nw). To demonstrate discriminant validity, we suggested that ITERGL are different from implicit theories of willpower (Job et al., 2010), a work-related theory (i.e., stress mindset; Crum et al., 2013), and a non-work-related theory [i.e., recovery-related self-efficacy (RRSE); Sonnentag & Krueger, 2006]. Thus, we propose that a seven-factor model should fit the data best. To show concurrent validity, we investigate the relationship between ITERGL and job satisfaction (Judge et al., 1998), nonwork time satisfaction (adapted from Judge et al., 1998), nonwork time anticipation (Seibel et al., 2020), work prospecting (Rutten et al., 2022), and level of energy during working and nonwork time (Weigelt et al., 2022). We expect that the work time-related dimensions of ITERGL show higher correlations with work-related than with the nonwork-related constructs and vice versa. Regarding predictive validity (four weeks later), we propose that ITERGL relate to work engagement (Schaufeli et al., 2006), job engagement (Rich et al., 2010), morning recovery (Sonnentag, 2001), fatigue (McNair et al., 1992), need for recovery (van Veldhoven & Broersen, 2003), and energy during work and during nonwork time (Weigelt et al., 2022). We expect that, for instance, ITERGain\_w positively relate to work engagement, ITERGain\_nw positively relate to morning recovery, and ITERLoss\_w correlate positively with the need for recovery.

Design/Methodology/Approach/Intervention: Our study consists of two online surveys at intervals of four weeks. Survey 1 (N = 347) included the variables to evaluate discriminant and concurrent validity. Survey 2 will be used to assess predictive validity and re-test reliability. Data collection of Survey 2 will be completed in November 2022.

Results obtained or expected: Confirmatory factor analyses showed that the expected seven-factor model fits the data best, supporting discriminant validity. Regarding concurrent validity, correlations were in the expected directions, and work-related ITERGL correlated stronger with work-related than nonwork-related variables and vice versa, supporting the concurrent validity of the ITERGL questionnaire. However, RRSE was only related to work-related ITERGL, and energy during nonwork time was not related to any ITERGL. Results on predictive validity and re-test reliability will be available in November 2022.

Limitations: Because we focused on employees' self-reported cognitions during work and nonwork time, we cannot draw conclusions on whether ITERGL change employees' behaviours (e.g., invest more effort at work) and decisions (e.g., engage in leisure activities).

Conclusions: In sum, we demonstrate the validity of the ITERGL questionnaire and thus provide a parsimonious survey to study implicit theories in future research endeavours.

Relevance to the Congress Theme: The world of work is changing, and as work intensifies, employees' energy management at work and home becomes more and more important for their long-term health and productivity. Knowledge about ITERGL can be used to sensitize employees to a more sustainable energy management.

Relevant UN SDGs: Because recovery interventions have been only based on the idea that work time consumes energy resources, understanding employees' ITERGLs might contribute to developing sustainable interventions by identifying potential implicit sources for energy resource gains and losses in both the work and nonwork life domains. Therefore, our research on ITERGL might help promote psychological well-being and contribute to a healthy life.

*Keywords: implicit theories, energy resources, scale development*

### Paper 3

#### **How Working From Home Impairs Recovery From Work: Anticipated Availability as a Cognitive Process in the Stressor-Detachment Model**

Laura Venz, Leuphana University Lüneburg; Dana Unger, UiT The Arctic University of Norway; Anne M. Wöhrmann, Leuphana University Lüneburg & Federal Institute for Occupational Safety in Health (BAuA)

#### Research goals and why the work was worth doing

During the COVID-19 pandemic, many employees who shifted to regular work from home (i.e., telework) found that their recovery from work was impaired under these work circumstances. We subjected this anecdotal evidence to an empirical test and examined why telework might impair recovery (in terms of lacking psychological detachment in the evening and poor well-being in the next morning), studying anticipated availability (i.e., the expectation of having to be available and/or be contacted for work matters during one's free time) as a cognitive explanatory mechanism. Considering that telework arrangements are here to stay, it is important to understand how this work practice might interfere with successful employee recovery.

#### Theoretical background

We base our research on the stressor-detachment model (Sonnentag & Fritz, 2015), according to which job demands impair successful recovery, especially psychological detachment (i.e., being mentally away from work) and subsequent well-being. Under the umbrella of information communication technology research in work and organizational psychology (Hu et al., 2021), we combined the stressor-detachment model with theorizing on anticipated stressors (e.g., Casper & Sonnentag, 2020) and examined anticipated availability as a cognitive mechanism underlying the stressor-detachment relationship. The stressor-detachment model reveals a "paradox" (Sonnentag, 2018): Detachment is most needed when stressors are high but most difficult to achieve on such days. We argue that this paradoxical situation applies to classical stressors, such as workload, but also to telework which places numerous demands on employees (e.g., blurred work-home boundaries). We suggest that when working from home, employees perceive higher availability expectations for their off-work time than when working on-site and that this higher anticipated availability explains why employees detach worse on telework days, which will contribute to higher exhaustion the next morning. We suggest the same process to also explain why high workload impairs recovery.

#### Design/Methodology/Approach/Intervention

With a quantitative daily diary study with three daily measurement points, we collected data from 232 persons over 1540 workdays. Participants indicated if they had worked from home that day (no/yes), their day-specific workload, and anticipated availability for their off-work time at the end of work. We obtained data on participants' actual availability and psychological detachment in the evening and on state exhaustion the next morning. We tested our hypotheses with a two-level path analysis for 1-1-1 mediation with fixed slopes.

#### Results obtained

On the day level, both workload and telework positively predicted anticipated availability but were unrelated to actual availability. Anticipated and actual availability negatively predicted psychological

detachment beyond each other. Workload and telework were negatively indirectly related to psychological detachment via anticipated availability. Detachment was negatively related to next-morning exhaustion. Anticipated availability was not significantly related to psychological detachment on the person level.

#### Limitations

From a methodological viewpoint, this study is limited due to the exclusive use of self-report measures and some of the variables being measured at the same timepoint, which might result in overestimated relationships. From a content viewpoint, our research does not include moderators (e.g., segmentation preferences and norms) that could explain for whom telework, workload, or anticipated availability does not impair recovery.

#### Conclusions – research and or practical implications

We extend the stressor-detachment model, showing that beyond encountered stressors (at work and at home) also anticipated stressors can impair recovery. Indeed, anticipated stressors can function as a cognitive process that underlies the stressor-detachment relationship. Specifically, anticipation of availability for one's free time explains how high workload and telework encroach upon peoples' home life and impair recovery – no matter if people were actually contacted or not. From a practical perspective, this means that it is not enough to not contact people in their free time, but that clear expectations and norms about non-availability must be set, especially when workload is high and when people work from home.

#### Relevance to the Congress Theme

As telework and hybrid work arrangements are becoming the norm, the future of work brings new demands for many employees, including external and internal pressures to be always available. Our research helps understand specific challenges that the changing world of work brings for employee recovery and well-being. Only with this understanding can we create a sustainable world of work, now and in the future.

#### Relevant UN SDGs:

This research is relevant to the UN SDGs 3, Good Health and Well-being, and 8, Decent Work and Economic Growth.

*Keywords: psychological detachment, anticipated availability, telework*

## Paper 4

### **The Power of “Shinrin-Yoku”: A Field Intervention Study Showing Benefits of “Forest Bathing” for Employee Well-Being**

Jana Kühnel, University of Vienna; Jochen Reb, Singapore Management University; Livia Erber & Benedikt Baier | University of Vienna

The Japanese term “shinrin-yoku”, coined by Tomohide Akiyama of the Japanese Ministry of Agriculture, Forestry, and Fisheries in 1982, can be translated as “forest bathing.” Shinrin-yoku is defined as immersing oneself in nature, while mindfully paying attention to one’s senses (Kotera, Richardson, Sheffield, 2020). Since the introduction of the term, the interest in shinrin-yoku increased both among those living in our modern-day society who look for a relief from stress by being in a nature environment as well as among scientists who aim to better understand shinrin-yoku’s beneficial effects for health (e.g., Tsunetsugu, Park, Miyazaki, 2009).

Building on research in public health and environmental psychology, the current field intervention study is among the first to examine the benefits of forest bathing for employees and on work-related outcome variables. From the theoretical lens of stress reduction theory (Ulrich et al., 1991) and the effort-recovery model (Meijman & Mulder, 1998), we propose that being in and focusing on an unthreatening natural environment enables relief from job stressors and thus reduces strain. Moreover, we extend previous research by investigating whether benefits of forest bathing spill-over into how employees experience their work. Specifically, we propose that forest bathing should strengthen employees’ work-related sense of coherence (i.e., employees’ perception of their work as being comprehensible, manageable, and meaningful; Eberz, Becker, Antoni, 2011).

We conducted a randomized field intervention study with 107 participants working in diverse industries, with 55 participants randomly assigned to the intervention group and 52 participants to the delayed treatment control group. Over the course of three work weeks, all participants were asked to answer a paper-and-pencil questionnaire at the end of each work week assessing strain, psychological detachment from work, and work-related sense of coherence. Participants in the intervention group received the forest bathing instructions after filling in the first questionnaire, the participants in the waitlist-control group received the forest bathing instructions after filling in the second questionnaire. Participants who received the forest bathing instructions were asked to spend as much time as feasible in the forest, and they were given detailed instructions on how to focus on their five senses while in the forest.

In line with our hypotheses, results from repeated measures ANOVAs showed significant group (intervention vs. delayed treatment control group) × time interactions: Strain decreased, whereas psychological detachment from work and work-related sense of coherence increased, from the first to the second week in the intervention group and from the second to the third week in the delayed treatment control group. For the intervention group, strain remained on the lower, and psychological detachment and sense of coherence on the higher, level during the third week, showing that benefits of the forest bathing intervention lasted for more than a week.

This is the first study that sheds light on positive spill-over effects of a forest bathing intervention for employees. A limitation of our study in terms of generalizability of results is that only those people who had access to a forest could take part in the study. Thus, future studies may want to examine whether a walk in a park can have similar effects for people who do not have a forest nearby. To

facilitate employees' relief from stress, we recommend forest bathing as an exercise. To achieve this, organizations should provide work schedules that are compatible with spending time in a forest during daylight hours, for example by offering the opportunity to take a longer break from work so that employees can engage in forest bathing or "park bathing" on a regular basis. Those interventions contribute to ensuring employees' health and wellbeing, and thus to the sustainable development goals of the UN.

*Keywords: forest bathing, sense of coherence, randomized control trial*

## Paper 5

### How Work Translates into Self-Control Failure at Home. A Preregistered Diary Study

Wilken Wehrt. Maastricht University; Hadar Neshet Shoshan & Leon Többen | University of Mannheim

#### Research goals

The aim of this diary study is to understand how and via which mechanisms work translates into self-control failures at home. We examine incivility, aversive tasks and self-control effort at work in the morning and the afternoon as predictors of self-control failures at home. As potential mediators, we examine self-control depletion, desire to reward oneself, desire for self-direction and self-control motivation (specific for each examined self-control failure) at home. For the outcomes, we look at two forms of self-control failures at home: (1) behaviors that represent failures when exerted excessively (i.e., overeating, media overconsumption); (2) behaviors that represent failures when not exerted (i.e., neglecting household and social duties).

#### Theoretical background

Previous research on the work-home interface has focused on recovery (Sonnentag et al., 2022), and work-private life boundary dynamics (Allen et al., 2014). These perspectives inform how to manage work-life boundaries and handle work demands. However, handling work demands also implies preventing that work translates into self-control failure at home. Despite a vast literature on self-control (De Ridder et al., 2012), self-control failures at home as consequences of work have been only considered in the domain of eating, sports or sleep (Headrick & Park, 2022, Sonnentag & Jelden, 2009). It is worthwhile to extend the range of self-control failures studied at home.

In addition, research in work psychology strongly relies on the ego-depletion perspective to explain self-control failure (Wehrt et al., 2020). This is surprising, because the ego-depletion perspective has been challenged fundamentally (Frieze et al., 2019), and alternative motivational accounts explaining self-control failure have been proposed (e.g. Vaghef et al., 2021). Responding to these issues, this study examines a broader range of self-control failures at home, and tests competing mechanisms explaining why they occur.

#### Study Design/ Methodology

The study was preregistered (<https://osf.io/qbypu>). Data was collected with the help of undergraduate students via their social networks. The study consisted of a two work-week diary (Monday to Friday) with a midday, end-of-work and a prior-to-sleep survey. Incivility, aversive tasks and self-control effort at work were assessed in the midday and end-of-work survey. Depletion, desire for self-reward, desire for self-direction and self-control motivation at home were assessed in the end-of-work survey. Self-control failures at home were assessed in the prior-to-sleep survey. The final sample consists of 137 participants (n = 962).

#### Results

All analyses and results reported are preliminary. We conducted multi-level confirmatory factor analyses, yielding overall good fits and supporting the adequacy and construct validity of our models. To test hypotheses, we specified four multi-level path models, one for each specific self-control failure at home including only the specific self-control motivation. This means, we specified one

model for the self-control failure overeating, one for media overconsumption, one for neglecting household and one for neglecting social duties.

Results concerning the work-related predictors show that only afternoon aversive tasks relate to depletion and desire for self-reward at the end of work. Contrary to hypotheses, afternoon self-control effort at work related positively to motivation to avoid overeating. Results concerning the mediators predicting self-control failures were as follows: All self-control motivations predicted the respective self-control failure at home (e.g., motivation to avoid overeating predicted less overeating). Depletion at the end of work predicted neglecting social duties, but not the other self-control failures. Accordingly, there was an indirect effect from afternoon aversive tasks on neglecting social duties via depletion. Desire for self-reward at the end of work predicted overeating and neglecting household duties. Desire for self-direction predicted media overconsumption.

#### Limitations

First, we assess depletion via self-report, whereas it is not clear if people can reliably report on their current self-control capacity. Second, we do not test affect as a mediating mechanism although it has been proposed in the literature (Sonnentag, Pundt, & Venz, 2017). Third, we focus only a set of work-related predictors that may overlook other important work-related aspects, such as other social stressors or indicators of workload.

#### Conclusion

Results indicate that self-control motivation matters for self-control failures at home. Further, results indicate that different mechanisms beyond depletion are important for different self-control failures after work. Thus, understanding self-control processes after work requires considering specific behaviors and alternative explanations.

#### Relevance to the congress theme and the UN SDGs

The study is relevant for the congress theme because work-home boundaries become increasingly blurred. Thus, it is important to identify how work may undermine private life in order to find strategies to prevent and cope with such processes, on the individual and organizational level (e.g., job redesign). The study is relevant to the UN Sustainable Development goals, specifically “good health and wellbeing” and “decent work and economic growth” goals.

*Keywords: self-control failure, work-home interface, preregistration*

## Symposium S040

### Understanding the Psychological and Social Processes Affecting Unethical Behavior

Roberta Fida, Norwich Business School, University of East Anglia; Rosalind Searle, Adam Smith Business School, Glasgow University

science

What will be covered and why . Research in the industrial and organizational psychology have highlighted that unethical behavior are not the prerogative of “bad apples”, instead, research shows that under certain conditions, “good apples” may also engage in unethical behavior (Bandura, 2016; Moore & Gino, 2013; Newman et al., 2020). Research has started to identify the key social and psychological determinants (Belschak et al., 2018; Chugh & Kern, 2016; Fida et al., 2015; Griep & Vantilborgh, 2018; Moore & Gino, 2013; Searle & Rice, 2020) however there is still the need to further understand how organizational and social processes contribute to the enactment of these behavior and their routinization (Fida et al., 2018; Welsh et al., 2015). The papers in the proposed symposium present more complex approaches to understand this relevant topic.

Relevance to the Congress Theme. Unethical behaviors are a widespread phenomenon in the workplace. Research indicates that almost 41% of employees have witness some form of an unethical conduct in their working context (Ethics Resource Center - ERC, 2013). The enactment of unethical behavior can have negative and devastating consequences for organizations, the individuals as well as the broader society (Spector & Fox, 2005).

Research/Practical Implications. The first and second paper of the proposed session focused on the psychosocial mechanisms which can explain engagement in unethical pro-organizational behavior (Umphress & Bingham, 2011). The first paper extends in particular our understanding of moral disengagement (Bandura, 2016). While most of the research focused on the personal disengagement of moral standards, the authors explore the role of the collective moral disengagement. This paper demonstrates that while personal moral disengagement is a stronger predictor of counterproductive work behavior, collective moral disengagement is a much stronger predictor of unethical pro-organizational behaviors. The second paper focuses on the social exchange mechanisms which can explain the enactment of unethical behavior in the workplace. The author presents a conceptual paper which unpacks the role psychological contract and in particular the role of the perceived obligation to fulfil as a motivational force underlying unethical behavior. The paper presents a theoretical model exploring the specific conditions enabling the fulfillment of psychological contract obligation through moral disengagement mechanisms. The third paper explores how organizations themselves can contribute to unethical behavior through examining three cases of insider threat in a high security context. Drawing also on socio-cognitive theory, and adding conservation of resources theory (Hobfoll, 1989) we review the paradoxical balance a distrusting organization has to achieve, and how their organizationally-initiated changes can upset this balance creating unintended processes and consequences for individuals, teams and the organization as a whole. Using event mapping for these events, we use the insights to propose ways to reduce and deter these incidents in the future. The fourth paper focuses on the effect of vicarious experiences of interpersonal deviance on self-serving behaviors. In particular the authors explored the mediational role of communion striving and the moderation of both relational identification and susceptibility to emotional contagion.

Overall conclusions. Overall, the papers presented in the symposium advance our understanding of important processes that underlie engagement in unethical behavior in the workplace, and advance our knowledge of how to prevent them.

*Keywords: counterproductive behavior, moral disengagement, unethical behavior*

## Paper 1

### How organizations accomplish wrongdoing: Conceptualizing collective moral disengagement

Roberta Fida, Norwich Business School, University of East Anglia; Matteo Ronchetti, Department of Occupational and Environmental Medicine, Epidemiology and Hygiene, INAIL—Italian Workers' Compensation Authority; Mamoon Arshad, Norwich Business School, University of East Anglia; Rosalind Searle, Adam Smith Business School, Glasgow University; Marinella Paciello, Uninettuno University; Claudio Barbaranelli, Sapienza University of Rome; Irene Skovgaard-Smith, Norwich Business School, University of East Anglia

**Research goals.** The aim of our research is to conceptualize and empirically investigate collective moral disengagement (CoMD). Our concept of CoMD is important because organizational transgressions cannot be reduced to merely individual unethical decisions, propensities, and motives (Islam, 2020). We therefore need to better understand the role of perceptions of organizational justificatory mechanisms whereby malpractices are collectively justified rendering these collective malfeasants as permissible or even desirable activities (Ashforth & Anand, 2003).

**Theoretical background.** Individual's propensity to morally disengage is regarded as a key driver of misbehavior (Newman et al., 2020; Ogunfowora et al., 2021). It has been studied as the personal disengagement of moral standards allowing an individual to undertake "bad" actions that damage the organization and its stakeholders (Bandura, 2002, 2016; Fida et al., 2015; Moore et al., 2012; Rice & Searle, 2022). However, as Bandura emphasized, moral disengagement is not only personal but also "operates throughout a social system in ways designed to exonerate the system as a whole" (Bandura, 2016, p. 15).

Yet, research on CoMD is rare and the concept remains underdeveloped, having mainly been studied as the perceived diffusion of personal moral disengagement within a class/school (Gini et al., 2014, 2015; Thornberg et al., 2019). Instead, we posit that CoMD is more than the perception of how widespread personal moral disengagement is within a social group, rather we contend it is the perception of how "we" as a group collectively suspend morality and justify unethical activities to benefit the organization, while also violating moral and societal standards.

We develop a measure of CoMD and examine with three empirical studies its distinctiveness from personal moral disengagement and its role in predicting unethical pro-organizational behaviors (UPB). CoMD is expected to be unidimensional (H1) and distinct from personal moral disengagement (H2). We also anticipated that while personal moral disengagement should mainly predict counterproductive work behavior (CWB), CoMD should mainly predict UPB (H3).

**Methods.** To validate the CoMD scale, a rigorous multi-step and multi-sample approach was followed using three distinct studies. Study 1 and 2 followed a two-wave design and were conducted in the UK. Given the importance of replication in science (Köhler & Cortina, 2019), Study 3 was conducted in Italy to determine CoMD generalizability. Study 1 sample at T1 included 301 employees (55.6% women). T2 data were collected 10 months later (199 employees, 51.8% women). Study 2 sample at T1 included 297 employees (38.7% women). T2 data were collected after five months (154 employees, 38.3% women). Study 3 included 297 employees (39.1% women).

**Results.** Findings supported both H1 and H2. The models including both CoMD and personal MD confirmed the distinctiveness of the two constructs (Study 1:  $SBA\chi^2(1)=19.2$ ,  $p < .001$ ; Study 2:  $SBA\chi^2(1)=36.56$ ,  $p < .001$ ; Study 3:  $SBA\chi^2(1)=71.93$ ,  $p < .001$ ). H3 was also supported. In Study 1 results

showed that while CoMD was significantly associated with UPB, personal MD was significantly associated with CWB. Also, when considering UPB at T1 (in Study 2), results showed that only CoMD predicted UPB at T2 above and beyond MD and UPB at T1. Finally, the analysis of the invariance supported the generalizability of the CoMD scale across time (Study 2) and across country (Study 3).

Limitations. The first limitation of this research is that all outcomes are measured via self-reports. Also all the studies were conducted in the general working population and not in specific organizations, limiting our understanding of CoMD as a multilevel dimension.

Conclusions and Implications. As in the case of personal moral disengagement (Bandura et al., 1996; Fida et al., 2015; Moore et al., 2012), results supported the hypotheses that CoMD is unidimensional, with all the items loading onto one latent dimension (H1). Results also supported that CoMD, although correlated, is different from personal moral disengagement (H2) and that better predicts UPB (H3). Members act in accordance with, and reproduce, what they perceive to be socially established actions within their employing organization including the justification of unethical activities. Through CoMD mechanisms, organizations can foster and institutionalize ways of suspending moral control among its employees, which, when perceived as such, enable them to act conjointly in the service of organization by undertaking wrongdoing and unethical activities.

Relevance to the Congress Theme: In light of the widespread of counterproductive and deviant behavior at work we need to understand the factors facilitating the spread of them and ways to prevent them. The future is now!

Relevant UN SDGs: Good health and wellbeing; Decent work and economic growth; Peace, justice, and strong institutions

*Keywords: moral disengagement, counterproductive work behavior, unethical pro-organizational behavior*

## Paper 2

### **The paradox of organizational distrust: An exploratory study of change, counterproductive work behaviour and its prevention**

Rosalind Searle, Adam Smith Business School, Glasgow University; Charis Rice, Coventry University

**Research goals.** We explore three counterproductive work behaviour (CWB) cases examining the organizational context of “bad behaviours” and distrusting organization paradox, charting the unintended consequences following organizationally-initiated change. Drawing on socio-cognitive theory, and conservation of resources we consider the individual, behavioural and environmental (social and organizational contexts) dimensions, using our findings to improve CWB detection and prevention.

**Theoretical background.** Trust is the desired state between employers and their employees supported by the ‘psychological contract’ (Robinson, 1996). Where expectations are no longer met, trust can decline. Breaches reduce trust, leading to cynicism that extends to future employers (Pugh et al., 2003). Violations have important organizational implications reducing individuals’ performance (Orvis et al., 2008), increasing CWBs (Bordia et al., 2008), and creating progressive decline (Deng et al., 2018). However, the ‘distrusting organization’ has not been considered.

Distrust has been regarded as accidental or unintentional (Bijlsma-Frankema et al., 2015), yet it can be a deliberate organizational strategy (Pendergrast, 2013). Workplaces institutionalize distrust signaling it in different ways to protect and control (Siebert & Czarniawska, 2020). But it requires a delicate balance between staff hyper-vigilance or disengagement and effective protective security. Navigating these distrust signals add to employees’ cognitive labour, removing assumptions that things are as they appear (Schul et al., 2008). Additional labour depletes self-regulatory resources (Muraven et al., 1998), with implications for performance (Zyphur et al., 2007). Deliberately creating vigilance increases scrutiny of other’s negative intentions, motives and activities (Kramer, 1999). A distrusting disposition can be advantageous in high-risk contexts (McKnight et al., 2004), where a little paranoia is prudent (Kramer, 2002). However, overtime increased suspicion can create collective debilitating paranoia (Kramer, 1994); what happens where scrutiny focuses on the organization not staff?

Change can trigger re-examination of employment relationships, with employees’ treatment important in determining whether distrust replaces trust (Searle & Ball, 2004). How change is managed determines if trust can be preserved, with leaders’ strategic choices and their enactment critical (Gustafsson et al., 2021). What happens in a distrusting organization? What strategies are required to avoid tipping into CWBs?

**Methods.** Using qualitative thematic analyses of employee and manager interviews (n=16) concerning three CWB cases in the same organization, we explore psychological (cognitive), social and organizational facets of CWBs and their roles in threats (Fida et al., 2015; Nurse et al., 2014; Rice & Searle, 2022). We map and explore the organizational and social processes and their temporal, spatial dynamics regarding individual and social aspects of CWBs (Bandura, 2016).

**Results.** First, we outline the distrusting organisation’s clues and signals, specifically input vetting controls to reduce internal CWBs, discussing the predominant use of fear-based to externally regulate actions.

Second, we identify Human Resource Management policy changes (recruitment and selection; progression; recognition and reward (pension); organizational behaviours; and redundancy and exit) and their social exchange (Blau, 1964) and psychological contract (Deng et al., 2018) impacts. We explore sense-making and self-regulation, goal achievement and resource provisions concerns. Through mapping we explore CWB as a rational retaliation (Bordia et al., 2008), or regulatory capacity impairment (Deng et al., 2018; Thau & Mitchell, 2010). Additionally, we identify the significance of top leaders and their integrity (Kannan-Narasimhan & Lawrence, 2012) as a key tipping point. We show different outcomes for trusted and distrusted supervisors, and the impact of peer dynamics.

Using these findings, we propose prevention options. We outline the damage of breaking promises (Kiefer et al., 2022), and advocate for better review and anticipation of consequences for employee resources (Hobfoll, 1989), and accompanying strategic communication (Rice & Searle, 2022). We contend merit in segmenting employees recognizing differentiated impacts to identify those needing social and leader support. We challenge undertaking large-scale multi-psychological contract violation change in distrusting organisations given the potential to trigger deliberate retaliation (Bordia et al., 2008) and more insidious self-regulation decline (Deng et al., 2018).

Limitations. This study investigates changes in one organization with subsequent research required to test generalisability.

Conclusions – research and practical implications. The study has several practical implications. Including exploration of the paradox of distrusting organisations, and their ‘balancing acts’. We show the value of inputs and process attention, delineating individual and social processes. We reveal decline trajectories noting their individual, social and leadership dimensions to help ameliorate and prevent CWBs.

Relevance to the Congress Theme. Given the emergence of pervasive CWBs in organisations, this study identifies important triggers and pathways.

Originality/Value: The paper demonstrates the interconnectedness of events and cognitive, social and behavioural dimensions. It advances conservations of resources theory and socio-cognitive theory within a ‘distrusting organisation’ context.

*Keywords: counterproductive work behaviour , trust, thematic analyses*

### Paper 3

#### How and When Vicarious Interpersonal Deviance Influence Defensive Strategies

Muhammad Abdur Rahman Malik, Suleman Dawood School of Business, Lahore University of Management Sciences; Mamoon Arshad, Norwich Business School, University of East Anglia

**Research goals.** Interpersonal Deviance (ID) is defined as voluntary behaviors with the intent to harm a fellow employee (Robinson & Bennett, 1995). These behaviors threaten the well-being of organizational members. When an employee is not the direct target of ID, but witnesses or hears about such incidents from peers, the experience is termed as Vicarious Interpersonal Deviance. The aim of this research is to study the effects of such experiences on employees' behaviors. Using conservation of resources perspective, we highlight the defensive and aggressive-defensive strategies that employees use to minimize the negative effects of such experiences (Hobfoll et al., 2018). We also show that experiencing vicarious ID results in an increase in self-serving behaviors.

**Theoretical background.** Observing or hearing about ID is an uncomfortable event, which causes stress (Nesse et al., 2007) and hinders well-being (Gunia & Kim, 2016; Michalak et al., 2019; Wellen & Neale, 2006). Conservation of resources perspective terms such experiences as 'resource threatening', which motivates employees to build new resources (aggressive-defensive strategy) and / or to conserve their remaining resources (defensive strategy). While studying these strategies, most of previous research has studied behaviors targeted at others (such as helping or harming behaviors) which enable employees to protect existing and build new resources (Halbesleben & Bowler, 2007; Halbesleben & Wheeler, 2011, 2015). In the present study, we focus on self-directed behaviors that employees might use to deal with vicarious ID. We also identify an underlying mechanism that connects vicarious ID and self-directed behaviors. We suggest that employees who experience resource threatening events (i.e., vicarious ID) use communion striving as an aggressive-defensive strategy to build new resources. Communion striving is a motivational state marked with social connectivity, relationships building, and acceptance from peers (Barrick et al., 2002; Stewart & Barrick, 2004). Further, we argue that employees who experience VID are prone to exhibit self-serving behaviors as a defensive strategy to conserve their resources (Dubois et al., 2015). Finally, we propose that the effects of vicarious ID on self-serving behaviors are channeled through communion striving.

After outlining the direct and indirect effects of vicarious ID (on communion striving and self-serving behaviors, respectively), we use conservation of resources perspective to identify two important contextual factors that strengthen the effects of vicarious ID. First, we introduce relational identification as a boundary condition for the effects of vicarious ID. Relational identification signals a state of resourcefulness, based on relationship and identification with peers (Sluss & Ashforth, 2007). We hypothesize that low relational identification – a state of low resourcefulness - aggravates the resource threatening effects of vicarious ID. Thus, employees with low relational identification experience stronger effects of vicarious ID.

We also introduce emotional contagion – the awareness of and sensitivity to the emotions and feelings of others (Boyce & Parker, 1989) – as another factor that strengthens the effects of vicarious ID. Employees who have a high level of emotional contagion are sensitive towards others' emotions. When such employees witness or hear about interpersonal deviance directed towards peers, they experience much more pain, anxiety, and resource threat than employees who are low on emotion contagion (and hence less sensitive about others' emotions). Based on these arguments, we

hypothesize that low relational identification and high susceptibility to emotional contagion is expected to positively moderate the indirect relationship between vicarious ID and self-serving behaviors (through communion striving).

**Methods.** Using an interval of two weeks, we collected two-wave and two-source data from various organizations. Perceptual and attitudinal measures (such as experiencing vicarious ID, emotional contagion, communion striving etc.) were captured through self-reports, whereas behavioral measures (such as self-serving behaviors) were captured through supervisors' reported data. Of the 429 distributed surveys, 380 responses were received at T1 and 346 subordinate-supervisor pairs (74.3% male subordinates, 85.8% male supervisors), completed the surveys at T2.

**Results.** Data supported most of the hypotheses. The indirect effect of vicarious ID on self-serving behavior (through communion striving) was positive and significant. These indirect effects of vicarious ID on self-serving behavior were much stronger for employees with low relational identification (conditional indirect effect = .03, SE = .02, 95%CI=.03, .06) and employees with high susceptibility to emotional contagion (conditional indirect effect=.11, SE = .02, 95%CI=.01, .21). Thus, data supported that employees low on relational identification and high on emotional contagion exhibited high level of self-serving behaviors when they experience vicarious ID.

**Limitations.** Our sample was very heterogeneous – consisting of employees at different hierarchical levels, different sectors and industries, and from different functional backgrounds. While this helps to generalize the findings to the working population, we were unable to offer a more contextualized understanding of how vicarious ID functions within the specific sector or job type.

**Conclusions and Implications.** The results revealed that vicarious ID is a resource threatening experience which triggers communion striving, an aggressive-defensive strategy to build new resources, which in turn invokes self-serving behaviors, a defensive strategy to protect existing resources. These direct and indirect effects are strengthened when employees have low relational identification and high emotional contagion. Thus, managers can help employees in mitigating negative effects of vicarious ID by building relational identification and by providing them emotional support to deal with such experiences.

**Relevance to the Congress Theme:** Witnessing vicarious ID is a common experience at work. This paper provides insights about how employees are affected by the experiences of vicarious ID, what are the outcomes of such experiences, and the factors that strengthen/weaken the effects of such experiences.

*Keywords: interpersonal deviance , self-serving behaviour*

## Symposium S041

### Enhancing creativity: The effectiveness of creativity training and the impact of digital workplace on creativity

Ut Na Sio, University of Sheffield

science\_practice

What will be covered and why:

Creativity is often viewed as a foundational stage of the innovation process and is widely considered an essential skill to succeed in today and future workplaces (Bellanca & Brandt, 2010; IBM Corporation, 2010; World Economic Forum, 2018). It is also listed as a key skill in solving the sustainable development challenges outlined by the United Nations (UN General Assembly, 2015). Understandably, enhancing creativity is a prime concern for many organizations, educators, and policymakers.

A common way to enhance creativity is with creativity training programs. This approach is highly popular in organizations. According to the Eurostat's Community Innovation 2016 Survey, 44.6 % of the surveyed EU innovative enterprises engaged in innovation-related training activities. More broadly, in the countries surveyed in the UNESCO Institute for Statistics Innovation Data Collection Report (2017), the average proportion of innovative-active firms using innovation training was 44.7%. Given the popularity of creativity training, it is crucial to have an accurate picture of the effects that these programs have on creativity.

Another critical, and timely, objective in this field is to identify ways to facilitate creativity in remote work settings. As a result of the pandemic, many organizations have made a rapid and unprecedented shift to virtual work; changes that are likely to persist in the future. For example, 23% of businesses in the UK Business Insights and Conditions Survey (2022) reported using or intending to include homeworking as a permanent business. As such, understanding the impact of remote work on creativity has become an emerging research area in the field of creativity. The shift to virtual work has also greatly increased the need for technologies that enable effective group interaction — a context that facilitates idea generation, an important aspect of group creativity. According to McKinsey Global Business Executive Survey (2020), 85% of the 800 executives surveyed say they have accelerated the implementation of technologies that facilitate group interaction and communication since the start of the pandemic. Thus, to help organizations adapt to this new way of working, it is crucial to better understand the potential challenges that arise from virtual environments for creativity, as well as how technologies can be used to facilitate group creativity.

Through four presentations, this symposium will discuss different approaches to promoting creativity. The first presentation, Dr. Ut Na Sio (University of Sheffield, UK) will focus on the traditional approach—creativity training, presenting the results of a meta-analysis examining the effectiveness of creativity training and the robustness of this body of work. This will be followed by three presentations, focusing on the impact of digital platforms and technologies on group idea generation. In the second presentation, Prof. Dermot Breslin (Rennes School of Business, France) will present the result of an empirical study examining the impact of virtual teams on student group creativity and discusses how virtual and face-to-face environments can be combined to create a hybrid environment that facilitates creativity. In the third presentation, Dr. Jonali Baruah (Tarleton State University, US) will present the findings of two experimental studies comparing the effectiveness of video-based communication with electronic brainwriting and chat-based communications on group idea generation, selection and refinement. In the last presentation, Prof.

Jared Kenworthy (University of Texas at Arlington, US) will discuss the findings of a study exploring how machine learning can be employed to analyze group idea-generation process in real-time and provide real-time feedback for enhancing group creativity.

Relevance to the Congress Theme:

Given the importance of creativity for the future of work and the surge in remote work and the demand for supporting technologies, our symposium—which focuses on the impact of creativity training and digital workplace on creativity—will provide meaningful insights on how to create a better workplace of the future that facilitates creativity.

Research/practical implications:

The findings presented in this symposium will help organizations, educators, and policymakers make more informed decisions when selecting approaches to enhance creativity. Our symposium will also provide new directions for future research and hands-on strategies to promote creativity in various work environments. As such, this symposium will be of interest to both researchers and practitioners.

Overall conclusions:

All the presentations address the challenges of facilitating creativity and provide practical implications to design more effective training and work environments to enhance creativity.

*Keywords: Creativity Training, Idea Generation, Group Interaction*

## Paper 1

### Do creativity training programs enhance creative thinking?

Ut Na Sio, University of Sheffield; Hugues Lortie-Forgues, Loughborough University

#### Research goals and why the work was worth doing

Creativity is often considered one of the top skills necessary to succeed in today's world as well as in the future workplace (Bellance & Brandt, 2010; PISA, 2022; World Economic Forum, 2018). Understandingly, enhancing creativity is a prime concern for organisations, educators, and policymakers. Numerous training programs have been developed with the aim of enhancing creativity. We undertook a meta-analysis of studies evaluating these programs to estimate their impact on creative thinking, identify factors influencing their effectiveness, and evaluate how robust the evidence surrounding creativity training effectiveness is.

#### Theoretical Background

A number of meta-analyses have attempted to summarize the effectiveness of creativity training programs (e.g., Ma, 2006, Scott et al., 2004). Some of these meta-analyses have been highly influential. For example, at the time of writing, Scott et al. (2004)'s meta-analysis — one of the most comprehensive in the field — has been cited more than 1400 times. Importantly, however, existing meta-analyses present a number of limitations. One has to do with the time at which they were conducted. No exhaustive meta-analysis of the field has been conducted since Scott et al. (2004)'s meta-analysis, which raises the question of whether their findings are still representative of the field. Past meta-analyses are also limited in their analytical approaches. Most did not, for example, consider the potentially large publication bias in the field or accounted for the precision and dependency of effect sizes in their analyses, features that may have biased, perhaps substantially, their conclusions. We conducted a meta-analysis of creativity training programs aimed at providing a more accurate picture of the effects that these programs have on creativity.

#### Methodology

We focused on studies examining the effect of creativity training on creative thinking (total: 164 independent studies [813 effect sizes] conducted between 1970 and 2022). A substantial number of these were unpublished (46 independent studies, 260 effect sizes). We used robust variance estimation (RVE), a meta-analytic method that considers the uncertainty and dependency of the effect sizes (Hedges et al., 2010; Tanner-Smith & Tipton, 2014). We used a range of methods to detect and correct for publication bias and assess the robustness of existing evidence by examining the proportion of studies employing rigorous research designs.

#### Results

Our analyses indicated the overall effect size of creativity training was significant and positive (effect size unadjusted for publication bias = 0.52 SDs), which was similar to the estimates from previous meta-analyses (Ma, 2006: 0.77 SDs; Scott et al., 2004: 0.64 SDs). Critically, we found strong evidence of publication bias and correcting for this bias considerably reduced the effect size. We also observed a high prevalence of methodological shortcomings in creativity training studies, with little signs of improvement over time — a situation that greatly limits the usefulness of this body of work. Implications and recommendations for researchers and practitioners will be discussed during the presentation.

## Limitations

Although we used different methods to identify and correct for publication bias, these methods make untestable assumptions and none of them can quantify the extent of publication bias with certainty. However, it is important to emphasize that the methods we used provided converging results, supporting the robustness of our conclusions.

## Conclusions

The results of this meta-analysis, which differ substantially from past meta-analyses, provide guidance for researchers in the design of future studies evaluating the effectiveness of creativity training programs, as well as informing organisations, educators, and policymakers, about the potential impact creativity training programs can have on creative thinking.

## Relevance to the Congress Theme:

Given the importance of creativity for today and future workplace, and the prevalence of creativity training to achieve this aim, our meta-analysis of creativity training fits well with the congress theme “The future is now: the changing world of work”.

## Relevance UN SDGs

The findings will help researchers identify methodological gaps in the current literature and inform their effort to develop theories and effective training programs.

*Keywords: Creativity Training, Meta-Analysis, Publication Bias*

## Paper 2

### The Impact of Online Teaching on Student Group Creativity

Dermot Breslin, Rennes School of Business

#### Research goals and why the work was worth doing

The recent Covid crisis has had a profound impact on higher education, and the development of transferable skills and competences in university students. Some argue that creativity has been a principal victim, especially as it is largely carried out through team collaboration (Amabile and Khaire, 2008; Zhou and Hoever, 2014). This study aims to understand how the shift to online learning impacts student group creativity.

#### Theoretical background

Recent research has shown that the shift to online learning over the past few years has negatively impacted student learning, with for example students having increased difficulties in concentrating and higher levels of stress and anxiety (Flores et al., 2021; Ilieva et al., 2021). Other research has found that following the transition to online learning, students found courses less interesting, were less motivated and online courses instilled less learning with students holding their attention less (Garris and Fleck, 2020). It is unclear how the rapid shift to online teaching has impacted students' group learning experience, with few empirical studies looking group creative processes in virtual teams (Grözinger et al., 2020; Reiter-Palmon et al., 2021). To address this gap, an experimental study was carried out to compare the creative performance of student groups in face-to-face versus virtual environments.

#### Design

208 participants were randomly divided into 52 groups of 4 individuals each, split between face-to-face and virtual settings. All groups completed two tests for creative or divergent thinking, the Unusual Uses Task (UUT). In UUTs participants are asked to generate as many unusual uses as possible for a common object, such as a paper cup, within a set amount of time (Baird et al., 2012). The productivity and originality of ideas generated and selected are used as measures of creative thinking. Groups completed these two consecutive UUTs, interpolated with a task designed to stimulate the process of socialization within the two different settings (i.e. face-to-face and virtual environments).

#### Results

Findings show that the creative fluency of student groups is significantly lower in virtual compared to face-to-face environments. Furthermore, this difference becomes even more marked as individuals begin to socialize. The findings of this study show that by negatively impacting the fluency of the creative process in student groups, virtual interactions result in a less rich peer discussion with negative consequences for the depth of student learning within courses. Furthermore, students are constrained in their ability to develop the skills needed to be creative in group situations, with potential longer term consequences for team-working skills (Gibert et al., 2017; Lowden et al., 2011; Riebe et al., 2016). In other words, by failing to experience face-to-face teams, students cannot acquire and improve upon these important transferable skills. These deficiencies are even more pronounced when considering newly formed teams.

## Conclusions – research and or practical implications

Following the pandemic many institutions have adopted hybrid forms of learning, with combinations of both face-to-face and online learning. Drawing on the findings above, we can identify some important lessons for hybrid teaching. First, the richness of the virtual environment can be enhanced to improve interpersonal communications and interactions. However, despite the richness of platforms such as Microsoft Teams, the findings of this study nonetheless point to important differences relative to face-to-face interactions. Second, virtual environments have a more profound impact on newly formed teams, as it becomes difficult to establish trusting relationships between group members (Breuer et al., 2016; Reiter-Palmon et al., 2021). This effect was seen in the findings above, where creative fluency worsened in virtual teams after individuals began to socialize. In other words, socialization processes within newly formed virtual teams have a significant and negative impact on team performance (De Guinea et al., 2012; Mesmer-Magnus, et. al., 2011). Therefore, it is recommended that the early stages of team formation occur through face-to-face interactions. This gives students the opportunity to feel socially connected (Curseu et al., 2008; Reiter-Palmon et al., 2021), and therefore build trust with other members of their team (Breuer et al., 2016; Reiter-Palmon et al., 2021).

## Limitations

Future research could compare the impact of face-to-face, virtual, and hybrid teams on different types of creativity.

## Relevance to the Congress Theme

Given the emerging hybrid work norm, this presentation—examining the group creative processes in virtual teams—fits well with the theme “The future is now: the changing world of work”.

## Relevance UN SDGs

The findings presented would help create hybrid learning environments that enhance creativity.

*Keywords: Group Creativity, Group Interaction, Virtual Team*

### Paper 3

#### **Video-based team meeting as a technology for collaborative creativity: Is it better than text-based communications?**

Jonali Baruah, Tarleton State University

##### Research goals and rationale

Organizations are increasingly becoming virtual and diverse in terms of communication and task completion. The COVID-19 pandemic further ushered in a new era of remote work, amplifying barriers to such communications. The unequal talking time, turn-taking, and technical interruptions can cause complications in video-based meetings (VM) (Issacs & Tang, 1993; Oeppen et al., 2020) which can further affect collaborative creativity. Hence, the proposed research explores the effectiveness of video-based teams and compares such teams' creativity with teams engaged in text-based communication modalities across multiple stages of creativity.

##### Theoretical background

Collective attention to ideas and the exchange of knowledge is the key to the process of collaborative creativity (Harvey, 2014), which can become a challenge in VM teams. In a VM meeting, four pragmatic needs that must be fulfilled are: (1) to make contact (e.g., eye gaze), (2) to allocate turns at talk, (3) to monitor understanding and audience attention, and (4) to support deixis (shared visual artifacts, physical pointing) (Daly-Jones et al., 1998). Additionally, VM can cause evaluation apprehension (Raveendhran et al., 2020) reducing knowledge-sharing and integration. Knowledge integration is the key to the creative performance of diverse expertise groups (Tiwana & Mclean, 2014).

##### Design/Methodology/Approach

The current investigation examines the creativity of VM through two experiments. Experiment 1 compared the creativity of VM with Electronic brainwriting (EBW) modality. The EBW modality involves silently sharing ideas using "electronic post-it notes" on a common canvas (computer screen). It allows team members to view and generate ideas simultaneously. This paradigm should promote cognitive stimulation (mutual idea sharing, facilitating the generation of more ideas) due to enhanced attention to others' ideas (Paulus & Yang, 2000) resulting in enhanced knowledge integration from diverse groups. Hence EBW was predicted to demonstrate the highest creativity than VM groups under diverse expertise conditions.

Forty-two dyads and triads (N=133) collaborated to complete an idea-generation and selection task using either VM or EBW modality. Half of the groups were diverse in their academic majors (cognitively diverse), and the other half had all members from the same major.

The 2(EBW/VM) x 2(Diverse/homogeneous) x 2(generation/selection) ANOVA revealed that EBW groups selected the most original ideas [  $F(1,48)=4.91, p < .05, \eta^2=.09$ ]. In contrast, the VM groups selected significantly more feasible ideas than the EBW groups. Furthermore, the diverse group generated most original ideas in EBW condition [  $F(1, 48) = 4.99, p < .05, \eta^2 = .09$ ]. The enhanced effectiveness of the EBW could be due to undivided attention and possibly anonymity, which gave individuals free will to evaluate ideas ignoring social norms (Cooper et al., 1998; McLeod, 1997).

Experiment 2 tested whether VM groups were more creative than electronic brainstorming (EBS) groups across multiple stages of innovation: idea-generation, selection, and refinement (evaluation). The EBS allows sharing of ideas live using an online chat portal which can eliminate evaluation apprehension when anonymity is maintained because the source is not attached to the ideas (Cooper et al., 1998; Dennis et al., 2019).

Thirty small groups of three to four members (N = 92) completed idea generation, selection and refinement tasks in either EBS or VM meeting conditions.

A 2(EBS/VM) x 3(generation/selection/refinement) ANOVA revealed that EBS condition yielded more original ideas than the VM condition. The EBS condition generated the highest number of good-quality ideas and elaboration in the refinement stage of innovation  $F(2, 56) = 3.60, p < .05, \eta^2 = .11$ . Furthermore, participants' perceived attention partially mediated the relation between the quality of ideas in the generation and the refinement stage.

#### Discussion, conclusion, and implication

Experiments 1 and 2 revealed that the originality of ideas was higher in the chat-based paradigm than in the VM paradigm. Additionally, the cognitively diverse group performed better in EBW than in the VM paradigm. Finally, the EBS groups were most creative at the refinement stage of innovation, a stage that entails greater attention and deeper elaboration of ideas to make them more favorable for implementation (Baruah et al., 2021). Additionally, in both studies, anonymity possibly magnified the performance of these groups. Because anonymity can enhance attention to the task at hand (Connolly et al., 1990) and reduce inhibition (Siegel et al., 1986) and evaluation apprehension (Dennis et al., 2019) which were likely to enhance creativity in text-based communications. The findings will provide hints to practitioners to develop strategies and interventions to enhance the depth and breadth of collaborative creativity among VM groups.

#### Relevance to the Congress Theme

The present research seeks to address the question of the future of virtual work and how various virtual modalities can affect collaborative innovation.

*Keywords: Group Idea Generation, Group Interaction, Virtual Communication Modalities*

## **Paper 4**

### **Developing a computer-assisted real-time feedback system for enhancing group creativity**

Jared Kenworthy, University of Texas at Arlington

**Research goals :** We are working on the development a computer-assisted real-time feedback system for enhancing group creativity. This is important because of the difficulties of coding various idea dimensions in real-time and delivering feedback to team members.

**Theoretical background :** We use existing cognitive and social models of group creativity (e.g., Brown & Paulus, 2002; De Dreu et al., 2008; Nijstad & Stroebe, 2006; Paulus & Brown, 2007) to guide the development of this system.

**Methodology / Approach :** I will present the results of an ongoing collaboration between computer science and psychology researchers that employs Natural Language Processing (NLP) methods to examine the trajectory of semantic space used during group idea generation sessions. Specifically, we track and estimate the region of semantic space being used and the degree to which new ideas expand that space.

**Results :** We present a visualization of that space mapping endeavor and compare human ratings of creativity dimensions (i.e., novelty, task-relevance, and elaboration) to algorithm-based estimations of those same dimensions. A combination of algorithm-based idea novelty, relevance, and elaboration provides the best match to human-rated data.

**Limitations :** As yet, the sample size in the tested database is relatively limited; only about 400 ideas were tested, from a “big data” perspective, probably thousands of ideas would provide a better test of the system.

**Conclusions and implications :** The semantic space mapping and algorithm development projects can be used to deliver real-time feedback to human creative groups in order to optimize the collaborative creativity process. The overall goal of this research is to increase the “survival” of novel ideas and their elaboration in the collaborative ideation and subsequent decision processes.

**Relevance to the Congress Theme :** This work is relevant because our system is being designed for creative work teams of the future. More and more workplaces are using technology to connect people in teams and organizations. This technology would be another tool to help enhance and optimize creative processes and outputs in groups and teams.

**Relevant UN SDGs :** Good health and wellbeing; Quality education, Decent work and economic growth.

*Keywords: Group Idea Generation, Natural Language Processing, Semantic Space*

## **Symposium S042**

### **New Perspectives on Workplace Stressors**

Hadar Neshor Shoshan, University of Mannheim; Shani Pindek, University of Haifa

science\_practice

The goal of the current symposium is to demonstrate that by investigating understudied stressors and providing new perspectives to stress, the field can gain a better understanding of what is work-related stress and help in improving the well-being of all employees as well as organizational performance (Hart & Cooper, 2002). The symposium comprises four papers, each presenting a new perspective on workplace stressors. Research on work stress has been at the forefront of organizational research for several decades and there are some work-related stressors that have been the focus of designated meta-analyses, and that are relatively well-understood (Pindek et al., 2017). Nevertheless, there are nascent approaches to what we should consider, as well as new perspectives on how well-understood stressors affect employee well-being, that we will address with the current symposium.

Two papers use a diary study methodology and a general employee population. The first paper (Authors, blind for peer review as requested by EAWOP organizers) examines a well-studied outcome of stress, that of task performance, as an antecedent of employee strain (anxiety, well-being, and physical symptoms). This is a new perspective on underperformance that puts the employees' well-being, not their contribution to the bottom line, at the center of attention. The second paper (Authors) focuses on the process of stress sensitization. Specifically, exposure to workplace incivility resulted in heightened stress response patterns to stressors in the work and home domains.

Two additional papers focus on healthcare employees, who are exposed to unique circumstances in their work environment, and thus we can expect new conceptualizations of stressors to emerge from studies that focus on this population. The third paper in the symposium (Authors) focuses on emotional workload, which is a central element of healthcare work but has not yet been properly defined or measured. This set of two studies (qualitative and quantitative) creates a classification system for objective events that are indicators of emotional workload and demonstrates its distinctiveness from operational load and emotional labor. The final paper (Authors) is a conceptual paper that describes a stressor that is unique to surgery teams: micro-coordination conflict. In this theoretical development, micro-coordination conflict is theorized to induce irritation which in turn may trigger incivility from members of the team, particularly the surgeon.

Taken together, the papers provide conceptual and empirical illustration of understudied stressors and new perspectives on the stress process. Interestingly, such perspectives can interact with each other, moving toward more integrated approaches. For example, incivility is proposed to be triggered by micro coordination conflict by the fourth paper (Authors) and to trigger sensitization processes in the second paper (Authors) demonstrating opportunities for future integration.

Overall, this symposium contributes to our growing understanding of how stress affects employees. It is extremely relevant to the conference's theme of the changing world of work because the sustainability of organizational success is reliant upon the well-being of its employees. Therefore, as researchers, we must go beyond the known stressors and stress perspectives in order to gain a more comprehensive understanding of how we can help employees and organizations thrive. This symposium is likely to be of interest to a broad range of researchers and practitioners. Considering the diversity of methods and new conceptualization, it may help spark new research ideas.

Moreover, the symposium aligns well with the United Nations Sustainable Development Goals, specifically with those concerned with employees' well-being.

*Keywords: Stress, employee well-being, new perspectives*

## Paper 1

### Underperformance As a Stressor - An Empirical Examination

Keren Grinautsky, University of Haifa; Hadar Neshor Shoshan, University of Mannheim; Shani Pindek, University of Haifa

The effects of job stressors on employee performance are widely studied and acknowledged (Gilboa et al., 2013). However, little attention has been devoted to examining what happens to the well-being of the employees after the performance was appraised, or even self-appraised, as poor (Pindek, 2020). Therefore, the goal of this study is to demonstrate that underperformance is indeed experienced as a stressor for employees, resulting in strain experiences. We will also examine an exacerbating factor for the experience of episodic underperformance as a job stressor - that of person-level job insecurity.

When viewing underperformance as a stressor, it may lead to increased anxiety, negatively impact the sense of well-being among employees (Shockley et al., 2012) and cause physical symptoms (Merrill et al., 2013). Furthermore, we expect to see differences between working individuals in the extent to which underperformance will negatively affect their strain experiences. One important factor influencing this effect is job insecurity, because when employees feel insecure regarding their job, instances that signal that they might lose their employment, such as perceiving their own performance as poor, may have a stronger effect.

Previous research showed that individuals who experience job insecurity also experience reduced well-being and physical and mental health (Jiang & Lavaysse, 2018), and in the current study we aim to show that job insecurity affects these variables not only directly, but also makes employees more vulnerable to stressors, especially those that signal job insecurity.

We test our predictions as part of one comprehensive model whereby underperformance experienced during the first half of the workday (before noon) predicts three strain indicators (anxiety, well-being, and physical symptoms) during the second half of the workday. These effects are expected to be moderated by person-level job insecurity.

#### Methods

Participants were full-time employees working a standard office schedule in various jobs, recruited by seminar students in a Master' program in Israel. Of the 103 employees who agreed to participate in the 5-day diary study, 88 provided enough data to be included in the multi-level analysis, with an average of 3.5 days of data (two-time points each day) per participant.

The baseline survey included a job insecurity scale (Vander Elst et al., 2014). The midday survey (sent at noon) included a measure of underperformance referring to that morning at work. The scale was comprised of the 2-item performance scale (Xanthopoulou et al., 2008), and an additional item comprised for the current study: This morning my performance was poor. and the afternoon survey (sent at 4 pm) included measures of anxiety, well-being, and physical symptoms. All measures have been validated by previous research and had good reliabilities.

#### Results

The results show that at the within-person level, underperformance predicted all 3 outcomes in the expected direction. Furthermore, job insecurity exacerbated the effects on the negative valenced strains (anxiety and physical symptoms) but not on the positively valenced strain (well-being).

#### Discussion

The main tenets of underperformance as a stressor were supported by the data. Nevertheless, there were several limitations of this study, including the small sample size and the use of only two-time points within the day, making it harder to examine mediators.

In terms of conclusions and implications, as expected, job insecurity exacerbated the negative impact of underperformance on anxiety and physical symptoms. However, there was no moderating effect of job insecurity on the relationship between underperformance and well-being among employees. This might be explained by a stronger direct effect between underperformance and well-being, which means that underperformance negatively affects the well-being of all employees regardless of their levels of job insecurity.

This work is extremely relevant to the conference's theme of the changing world of work, which focuses on sustainability over short-term profits. In the past, underperformance would have been a variable monitored for selection and termination of employment but moving forward underperformance (at least episodic underperformance) can be seen as a problem that hurts both the employee and the employer. Remedying underperformance and its effects on employees is a sustainable solution for all involved. This is in line with the UN SDGs of good health and well-being and decent work and economic growth.

*Keywords: Underperformance, stress, job insecurity*

## Paper 2

### Daily Stress Sensitization Processes associated with Workplace Incivility

Miriam Schilbach, Leibniz Institute for Resilience Research; Hadar Neshet Shoshan, University of Mannheim; Thomas Rigotti, Leibniz Institute for Resilience Research & Johannes Gutenberg-University Mainz; Anja Baethge, Medical School Hamburg; Xenia Bolschakow, Johannes Gutenberg-University Mainz

The concept of stress sensitization suggests that repeated exposure to stressors elicits increasingly strong affective responses given future stress events. This stress-related hyperreactivity represents a vital risk factor for the development of psychopathology (Post, 1992). To date, stress sensitization processes have been mainly examined in the field of clinical psychology. With this study, we apply the concept of stress sensitization to the work psychology literature and examine if and how daily experiences of workplace incivility relate to affective responses toward future home- and work-related stressors. By doing so, we explore the possibility that workplace incivility may result in vulnerability that permeates across contexts and thus, likely inhibits health and functioning in the home and the work domain.

The sensitization process is characterized by dysphoric attention (i.e., focus on the negative) and a loss of personal resources (e.g., self-esteem). This resource loss will render individuals more vulnerable when confronted with future stress events and thus, likely elicits stress-related hyperreactivity. Researchers further outline that inherent to stress sensitization lies a permeability hypothesis whereby hyperreactivity occurs not only toward a specific but to many or all types of stressors across different contexts (e.g., at work and at home). Thus, combining the concept of stress sensitization with the stress as offense to self-theory (Semmer et al., 2019), we propose that workplace incivility will result in greater affective stress responses toward private (e.g., family conflict) and other work-related stressors (i.e., hindrance stressors such as role ambiguity) through negative work reflection (i.e., dysphoric attention) and a loss of self-esteem. Hence, we propose a serial mediation model. Moreover, we suggest that social support at work may prevent incivility-induced negative work reflection and thus, disrupt the sensitization process.

To examine the proposed relationship patterns, we invited office workers to participate in a daily diary study over the course of one workweek. Participants filled out two daily surveys: One right after work, and the other before going to bed. The final sample consisted of 503 employees ( $N_{\text{Level1}} = 2056$ ). We tested our hypotheses using multilevel moderated mediation analyses at the within-person level. Following procedures used by clinical psychology researchers and the definition of affective stress response as the tendency to react to stressors with an increase in negative affect, affective stress responses to private and work-related hindrance stressors were operationalized as negative affect under the control of the respective stressor levels.

Analyses showed that daily workplace incivility related to greater affective stress responses to private stressors in the evening via negative work reflection and lower levels of self-esteem ( $\beta = .004$ , 95% CI [.001, .007]). The same applied to affective stress responses toward hindrance stressors at the following workday ( $\beta = .002$ , 95% CI [.001, .003]). Social support had the potential to disrupt the daily sensitization process: On days when social support was high, the relationship between workplace incivility and negative work reflection was non-significant. Consequently, at high levels of social support, there was no indirect relationship between workplace incivility and affective stress responses.

Our study is mainly limited by the fact that we cannot draw any causal conclusions. This is especially the case for sensitization effects related to private stressors where we measured negative rumination, self-esteem and affective response to private stressors at the same time point (i.e., before participants went to bed).

Taken together our study supports the assumptions of stress sensitization and the stress as offense to self-theory. We showed that workplace incivility may trigger dysphoric attention and a loss of self-esteem which result in greater affective stress responses not only at work but also in the home domain. Such heightened stress response patterns have been identified as a central risk for psychopathology and hence, prevent sustainable and high levels of employee health and functioning. Accordingly, it is of vital importance to reduce workplace incivility (e.g., via raising awareness and training leaders). Moreover, on days when employees experience incivility, coworkers and supervisors should provide social support and/or employees should actively seek social support given that social support prevented stress sensitization processes to occur.

*Keywords: Stress sensitization, workplace incivility, self-esteem*

### Paper 3

#### **Explaining Situational Triggers of Incivility in Tightly Cooperating Teams: Towards a Theory of Micro-coordination Conflict**

Norbert K. Semmer, University of Bern; Franziska Tschan, Université de Neuchâtel; Guido Beldi, Bern University Hospital; Ashley E. Nixon, Willamette University; Sandra Keller, Bern University Hospital

A surgeon exclaiming, “If this were an exam, you would just have failed” (Keller et al., 2016) might well be classified as a ‘Difficult Surgeon’ (Hallock, 2015). Such low-intensity aggressive behavior represents workplace incivility (Anderson & Pearson, 1999) and has negative effects such as risk of patient harm and reduced satisfaction and well-being (e.g., Anderson & Pearson, 1999; 2015; Cortina et al., 2017; Hershcovis, 2011; 2016).

Understanding why these behaviors occur and how they can be reduced has driven several prominent research literatures. The nursing literature has focused on personality characteristics of physicians and the hierarchical nature of medical organizations (Hallock, 2015; Lingard et al, 2002). Meanwhile, the incivility literature has focused on felt injustice/reciprocity (Anderson & Pearson, 1999; Meier & Semmer, 2013) and stressful working conditions (e.g., Bechtoldt et al., 2014; Schilpzand et al., 2016; Zhou et al., 2014) in addition to personal characteristics and power differentials (Foulk et al., 2018; Sturm & Antonakis, 2015). While these literatures can help explain the general propensity to act in an uncivil way, they cannot explain when such behavior will occur. There is a need to better understand situational triggers of these uncivil behaviors (Cochran & Elder, 2014, Lingard et al.. 2002; Mitchell et al., 2011).

Incivility is an important element of conflict behavior (Raver, 2013; Semmer, 2019), which may illuminate these situational triggers. The conflict literature distinguishes between relationship and task-based conflicts (Pinkley, 1990), with task conflicts being divided into subcategories of task outcome conflict and task process conflict (Hartwick & Barki, 2004). However, most conflict research has focused on disagreements of opinion and tend to neglect behavioral interference (Barki & Hartwick, 2001), which has a critical role in conflict (Wall & Callister, 1995).

Precisely coordinated task execution is crucial in tightly cooperating teams (Mitchell et al., 2011), such as surgical teams. These teams are characterized by movements that may have to be coordinated at the same time, or in a clear sequence, in the same speed/rhythm, with high precision, within very short time frames, often within seconds. Thus, smooth coordination is important. In recent research, Keller and colleagues (2019) observed 137 surgeries and found that 21.2% of uncivil behaviors were task-related (including disagreements but also task difficulty or missing instruments), while 72.4% results from disrupted coordination. Only 1.2% were attributed to interpersonal conflict. Thus, surgical incivility was driven by task coordination or execution issues, which is not sufficiently in the focus of the current conflict literature.

To fill this gap, we propose the concept of micro-coordination conflict (MCC), which refers to tensions that arise from poorly coordinated execution of tasks that need to be carried out by two or more team members in a well synchronized way simultaneously or in tight sequence. Teams for which MCC would be typical include teams undertaking a surgery, concert, sporting event, or preparing food at a restaurant. These conflicts may be particularly irritating given that a team member must interrupt his or her ongoing activity, switch attention from the ongoing activity to the trigger of the interruption, keep the ongoing activity in working memory, and then return to original

task (e.g., Keller, Meier et al., 2019; Speier et al., 2003). Thus, there are three mechanisms through which MMCs are postulated to occur: goal obstruction, additional effort, and flow disruption.

With regard to goal obstruction, the interruption may make an activity more error prone (e.g., Sevdalis et al., 2009). Particularly in the case of surgeries, this could endanger progress or even the success of the surgery, and thus induce negative emotions given the threat to the professional identity of the surgeon (Gollwitzer et al., 2013; Semmer et al., 2007). Furthermore, while the goal may still be achievable, it likely requires additional effort (Weigl et al., 2012) and a significant change to coordination (Blickensderfer et al. 2010; Weber et al., 2018), which increases fatigue, depletes resources, and tends to become aversive (Meijman & Mulder, 1998). Finally, interrupted flow experiences are aversive even when the interruption is minor and not dangerous (Weigl et al., 2018).

The irritation suggested by these three mechanisms increases the likelihood of incivility, notably when regulatory resources are limited, and specific attributions are made. Stress, culture, hierarchy, and individual differences may limit regulatory resources (Fox & Spector, 1999). Further, Keller and colleagues (2019) found that surgeons responded with incivility when they perceived others as negligent rather than lacking experience. Future theoretical development and research is needed to better understand the role and impact of MCCs on a variety of tightly coordinating teams.

*Keywords: Incivility, conflict, team coordination*

## Symposium S043

### **Organizational Practices for Ageing at Work: Internationalization and Scientific Application of the Later Life Workplace Index**

Jürgen Deller, Institute for Management and Organization, Leuphana University of Lüneburg, Lüneburg, Germany; Anne Marit Wöhrmann, Federal Institute for Occupational Safety and Health (BAuA), Dortmund, Germany; Leuphana University of Lüneburg, Lüneburg, Germany

science

What will be covered and why?

Against the background of demographic change and rising regular retirement ages, it becomes increasingly important to provide work environments that enable motivated and healthy aging at work. To provide an overarching framework reflecting the characteristics of such a work environment, the Later Life Workplace Index (LLWI) was developed. Its nine dimensions include organizational climate, leadership, work design, health management, individual development, knowledge management, transition to retirement, continued employment, and health and retirement coverage. The 80-item instrument allows researchers and practitioners alike to assess the situation in organizations.

In this symposium, research findings of researchers collaborating internationally regarding the LLWI are presented. The studies are based on U.S.-American, German, Portuguese, and Israeli data. The symposium deals with validations of different language versions of the LLWI as well as the investigation of relationships of the LLWI with individual and organizational outcomes. In the first presentation, the validation of the English language version of the LLWI, which was originally developed in German language, is presented. In the second presentation, the author provides evidence for the Portuguese language version of the LLWI as well as relationships between LLWI dimensions and thriving at work. Then, insights on the associations of the LLWI dimensions with positive perceptions of older workers by managers in Israeli organizations are presented.

Finally, Beatrice van der Heijden, who has ample expertise in the field of sustainable careers, ageing and work, will reflect on the presented research in light of current developments as a discussant. She will discuss the presentations on the Later Life Workplace Index (LLWI) and reflect on the presented findings against the background of current developments within ageing and work research and practice as well as societal developments.

Relevance to the Congress Theme

The share of older workers in many OECD countries is increasing as is the share of people leaving the workforce to enter the retirement phase. Debates on expected increasing shortage of skilled labour and high pressures on social security systems has been going on for a while. Now, with the “baby boomers” in fact beginning to enter retirement, the future of the changing world of work is now. Thus, there is urgency to tackle the problems arising due to demographic change. Designing working conditions and providing a work environment that supports older workers to stay healthy and motivated is crucial to prolong working lives. The LLWI is an instrument for research and practice to assess organizational practices for older employees multidimensionally. It allows to study relationships of organizational realities for older workers with relevant outcomes on the individual and organizational level but also to directly derive recommendations for changes in specific work environments. Thus, research on the LLWI can contribute to the delivery of the desired changes in the context of “the future is now” regarding demographic change. Furthermore, with the

internationalization of the LLWI by developing different language versions and applying them in the regarding countries contributions are made to help lead the way towards the future.

#### Research and Practical Implications

The findings presented in this symposium have implications for research and practice alike. Amongst others, the provision of different language versions of the LLWI enables researchers from an increasing number of countries to use the LLWI or its subscales in their organizational psychological research. The LLWI covers a wide range of aspects of working conditions for older workers and with the organizational and not individual aspects being assessed it can be administered to different target groups on different levels in organizations.

The LLWI can be used by organizations to assess their current situation regarding organizational practices for older workers. Organizations can benchmark their results among peers and identify areas with need for action. Also, the findings give indications for organizations on how the provision of a work environment that is reflected by the LLWI is related to the perception of older workers in an organization by their managers. This indicates that the application of the LLWI in organizations can provide one component to create better work environments for older workers in organizations.

#### Overall conclusions

Overall, the presented findings underline the importance of international collaborations in the development of different language versions of instruments used in organizational research. Furthermore, they give insights into different possibilities of applications of the LLWI. Content wise, the findings emphasize the importance of well-designed work environments to beneficially enable aging at work.

Beatrice Van der Heijden

*Keywords: ageing workforce, later life workplace index, organizational practices*

## Paper 1

### The Later Life Workplace Index (LLWI) - practical perspective

Jürgen Deller , Leuphana University Lüneburg; Anne Wöhrmann , Federal Institute for Occupational Safety and Health (BAuA); Julia Finsel , Leuphana University Lüneburg; Max Wilckens , Wilckens Farben GmbH

Due to the demographic change the share of older workers among the European workforce increases rapidly. Better health status of older workers and the political ambition to relieve pension systems drive extended working lives. Consequently, organisations have to deal with increased age diversity and specific demands by older workers.

In order to summarize and describe appropriate organisational practices and working conditions for older workers nearing retirement age and beyond, we developed and operationalized the Later Life Workplace Index (LLWI). The index contains nine dimensions covering age-friendly organisational culture and leadership, as well as more specific age-friendly practices regarding work design, health management, individual development, knowledge management, transition to retirement, continued employment options and health and retirement coverage.

We operationalized and validated the index in multiple studies. The index can be assessed by 80 items in total, showing good to acceptable CFA model fit and reliabilities. The validation proofs sufficient independence from positive and negative affect, as well as discriminant validity among the index dimensions. Moreover, criterion validity proves effects on e.g. older workers' commitment towards the organisation, stress level and perceived health status. We continue the organisational study to validate the effects on organisational level outcomes as performance, illness absence and turnover.

From a practice perspective, the LLWI will allow organisations to access their own capabilities in terms of practices regarding the employment of older employees in a straightforward and low-effort manner. Organisations facing the challenge of an aging workforce either due to labour force shortages or political requirements may use the LLWI as a diagnostic tool to identify improvement opportunities for the management of older employees. By allowing for industry and regional benchmarks, the LLWI has the potential to raise awareness for later life work not only in business, but also in the political debate. Benchmark results can support the identification of best practices and thereby support the organisations' management in handling aging issues. Thereby the importance of each dimension within the entire index may differ from industry to industry, region to region, and country to country. Specific recommendations on effective practices will be the results. Within the proposed theoretical moderation model for the effect of workforce age on organisational outcomes, it is to be expected that different organisational circumstances will require certain combinations of index dimensions as moderating levers to be pulled in order to drive organisational outcomes. Individual dimensions of the index may serve researchers as a standardized and validated measure to evaluate interventions in specific research areas.

The presentation will also briefly touch upon the development of different language versions of the LLWI.

Just recently, a new standard ISO 25550 titled "Ageing societies — Guidelines for an age-inclusive workforce" has been published by the International Organization for Standardization (ISO), an independent, non-governmental international organisation with a membership of 165 national

standards bodies. The ISO 25550 standard describes guidelines for an age-inclusive workforce integrating several LLWI dimensions. Thus, successful management of an aging workforce as outlined by the LLWI will unfold internationally and develop lasting and sustainable effects.

*Keywords: Later Life Workplace Index, demographic change, scale development*

## Paper 2

### Generation management – there is more to generation management than the year of birth

Ellen-Denise Augustin, Sparkasse Harburg-Buxtehude

#### Research goals and why the work was worth doing

Three current trends – demographic change, digital transformation und shifting in values & needs – challenge organisations independently of industry or size. Only those organisations that review previous Human Resource approaches and adopt to the new work environment will remain successful.

#### Theoretical background

Twenty branches, about 660 employees and a balance sheet total of 4,6 billion Eu-ro make the Sparkasse Harburg-Buxtehude to one of the leading regional public savings bank in the South of Hamburg. As a financial institute the Sparkasse Harburg-Buxtehude provides every citizen in the region Süderelbe, the district Harburg as well as in the town Buxtehude with professional financial services. Since 2014 the percentage of employees older than 50 years rises permanently. Overall, about 47% of our employees are over the age of 50.

Given the trends, the Sparkasse Harburg-Buxtehude has started an initiative focusing on diversity management especially concentrating on the aspects “age”, “gender” and “values & needs”. The underlying assumption is that change can only be achieved and maintained if employees are right from the beginning part of the progress. Consequently, participation and open discussion at eye level are the key success factors – already symbolized in the name of the project “Wir.Sind.Sparkasse” (“We.Are.Sparkasse”).

Soon after the start of the project questions regarding older employees came up (e.g. access to training possibilities, special needs or restrictions due to age, employee satisfaction of employees older than 50 years).

Analyzing the available HR data did not show significant differences based on age. On the contrary, looking at the data of the latest employee survey older employees scored high on the categories “overall employee satisfaction”, “training & development” and “loyalty”.

Nevertheless, the - mainly subjective - assessment that older employees need more attention did not vanish looking at the obtained results. The hypothesis was formed that current instruments and data do not cover all of the relevant factors. It was decided to invest in a solid analysis before initiating measures.

Looking at best practices and scientific approaches regarding age diversity the LLWI was got to know. The top management as well as the works council decided that the LLWI should be used for getting a valid report about the status quo.

#### Design/Methodology/Approach/Intervention

The previously mentioned believe that participation and discussion at eye level are essential success factors were considered while implementing the LLWI. Therefore, as a first step, every employee was invited to join workshops informing about the effects of demographic change on society, industries and on the Sparkasse. A transparent and data-based presentation about the development of the age

structure of the Sparkasse demonstrated the need of action. The idea using the LLWI to get a solid basis before deciding about next steps was presented, discussed and agreed on.

As a next step, employees could apply to participate in the survey. Two groups were formed - one consisting of managers and employees of sales departments, the second including managers and employees who work in rather central units. Each group contained employees of different age groups. After putting together the final groups the survey started. The time the employees needed to respond to the inviting eMail was immediate. And the survey results were available in no time.

#### Limitations

At the moment the results of the LLWI are analyzed and compared to the results of the employee survey conducted in June 2022. Together with the employees who applied to work on that topic initiatives will be developed, implemented and evaluated. Current discussions showed that flexibility is key to maintain the employer of choice. A diverse workforce means on the one hand diverse skills and competencies – a great potential for organisational success. On the other hand, there are many different values & needs that had to be considered to realize the full potential of the employees and to retain them at the same time.

#### Research/Practical Implications

Therefore, first ideas about enlarging the scope of the LLWI – including employees of all ages – have been discussed with the Leuphana University.

#### Originality/Value

The final goal is to maintain the employer of choice for current and future employees in every phase of life by releasing the available potential as well as meeting individual needs and requirements – the solution to the current challenges of demographic change, digital transformation and shifting in values and needs.

*Keywords: Later Life Workplace Index, demographic change, research-practice collaboration*

## Paper 3

### Experience with the Later Life Workplace Index (LLWI) from a central bank's perspective

Werner Neumer, Deutsche Bundesbank

#### Research goals and why the work was worth doing

For about 10 years, the Bundesbank has been working very intensively on the question of how to cope with the challenges posed by our age structure and by demographic change in general (e.g., longer working life, retirement waves of the “baby boomers”, impending loss of knowledge, “war for talent” on the labour market). The LLWI has now made it possible to assess the effectiveness of the measures we have taken so far and provided suggestions for further improvement in some areas.

#### Theoretical background

The Deutsche Bundesbank, the central bank of the Federal Republic of Germany, has formed part of the Eurosystem since 1999, sharing responsibility with the other national central banks and the European Central Bank for the single currency, the Euro. It has a three-tiered organisational structure with 41 locations throughout Germany. A comprehensive restructuring process starting in 2002 has created significant differences in the age structure between the tiers of the organisation and individual locations. Overall, about 50% of our 11,200 employees are over the age of 50, whilst in our branches the percentage is even 70%.

#### Design/Methodology/Approach/Intervention

The LLWI is based on a sample employee online survey, which keeps the administrative workload manageable. The sample survey is sufficient, as the LLWI does not record each participant's individual situation but instead the general practices within the organisation. The provision of mean value results for all participants guarantees their anonymity. At the Bundesbank, eleven tandems (managers and employees 50+) from all three tiers of the organisation as well as Bundesbank's Demographics officer participated voluntarily in the LLWI survey.

#### Results obtained or expected (if not available, it must be made clear when they will be)

Overall, the LLWI showed good results for the Bundesbank, particularly with regard to the dimensions of age-friendly organisational climate, age-friendly leadership, health management and individual development. These are exactly the areas of activity on which many of our previous measures were focused. For other dimensions, such as work design, knowledge management, transition to retirement and continued employment in retirement age, the results showed room for improvement.

#### Limitations

A central bank is home to a broad spectrum of tasks and jobs, ranging from university-educated economists or researchers to blue-collar jobs such as cash processing machine operators at our branches. That is why there is no “one size fits all” solution with regard to organisational practices – cash processing, for instance, cannot be done from home. In addition, not all LLWI dimensions are equally applicable to all organisations. For example, health and retirement coverage for the public sector in Germany is regulated by law, which rules out the option of a company pension scheme at the Bundesbank.

### Research/Practical Implications

Benchmarking against other participating institutions and companies is very useful for any internal discussions with relevant stakeholders, like the Executive Board, the various business units affected, the staff representatives or the employees.

### Originality/Value

The LLWI follows a holistic approach and covers all areas of activity for the design of employment conditions for aging and age-diverse workforces.

*Keywords: Later Life Workplace Index, demographic change, research-practice collaboration*

## Paper 4

### **Nova.PE- systematic and risk-focused know-how transfer related to the Later Life Workplace Index**

Jürgen Büscher, Nova PE

#### Research goals and why the work was worth doing

The research goals are driven by two serious, overlapping social, respectively economic-technical changes.

From 2021 onwards, approximately one million people are going to retire in Germany each year. The huge number of future retirees results from the so-called “Baby-Boomers”. In the context of demographic change, companies must increasingly face the question of how they can secure the extensive experience and know-how of their employees.

The second change is based on the increasing speed at which digital transformation and agile work organisation are having an increasing impact.

The challenge is therefore to identify both, the experience-based, mostly tacit know-how that is critical to be successful, and to integrate the benefits in a working environment that is becoming more and more digital and agile.

#### Theoretical background

The Nova.PE knowledge-transfer refers directly one of the nine strategic fields of action analysed by the Later Life Workplace Index (LLWI) by Wilckens et al. (2020). The Nova.PE method is based on a concept, which was developed initially in cooperation with the Ruhr-University of Bochum to improve the demographic adaptability of companies and organisations. The main objective of this method is to identify, promote and transfer tacit knowledge of employees that are to be retired in the foreseen future

The evaluation of many hundreds of so-called knowledge transfer screening-interviews has shown that the main benefit of the transfer is based less on the classification of competencies, but in the specification of the risk relevance of the loss-critical know-how

#### Design/Methodology/Approach/Intervention

The systematic knowledge transfer process is built on 7 steps. The start is analysing and identifying the essential, indispensable competencies of older employees.

##### Step 1

In the screening interview the executive is going to assess the (risk-of lost) employee, within their business unit in terms of their competencies, which are relevant for knowledge transfer.

(high) expertise

exclusivity

strategic / future relevance

##### Step 2

Based on the results of the screening-interview the further temporal, methodological and organisational procedure is determined by the supervisor/ executive. He /she is the owner of the knowledge transfer, only if he expects a substantial impact, he will decide to invest resources in a transfer-process.

#### Step 3

In a semi-structured qualitative interview, the coach is working with the "knowledge-giver" on explication and analysis of transfer-relevant skills. The results are documented in the so-called "Tree of Know-how" and/ or "Job-Map". The appreciation for the retiree or leaving employee is a key aspect for motivation of the knowledge-giver.

#### Step 4

Based on step 1-3 the executive selects and prioritize the (main-)subjects for the knowledge-transfer, he nominates the single recipients/ team members, their expectations and needs are prompted.

#### Step 5

On each subject a detailed transfer-plan will be worked out (learning objective, receiver focussed & active & effective) transfer methods are appointed, transformation framework and goals are set, milestones will be scheduled and contact persons will be named

#### Step 6

A transfer plan will be implemented by the recipient and the sender („on the job“) when appropriate amendment/adaption of the transfer-plan. Progress will be documented by the recipient.

#### Step 7

In the reflection- resp. final discussion the actual operational capability („learning success“) will be captured; process reliability, operational capability, conscious risks will be reflected systematically.

Results obtained or expected (if not available, it must be made clear when they will be)

A systematic view on the risk of losing (individual-tied) know-how is a success-critical factor for specific current and future aspects of work. It helps the executive to manage the requirements-matching competencies and human resources. It also enables the recipient(s) a better understanding of the implicit and experience-based side of success-critical know-how as a basis for a sustainable transformation.

#### Limitations

Limitations are a typically much too late "competency" -planning of the retirements of know-how critically employees and a focus of "head-count" while neglecting the "know-how & competency-count".

#### Practical implications

In the evaluation of the screening interviews with executives showed us, that (depending on industry & size of company/ organisation) for a group of 5-10 percent of retirees the superiors assess a success-critically know-how and competency gap will be left, if no knowledge transfer is set.

#### Originality/Value

This is one of the very few methods to merge the experience-based knowledge management with sustainable transformation.

*Keywords: Later Life Workplace Index, demographic change, research-practice collaboration*

## Paper 5

### **The Portuguese Version of the Later Life Workplace Index (LLWI): Relationships Between Organizational Practices, OFTP, and Thriving at Work**

Eduardo André da Silva Oliveira, Faculty of Economics, Center for Economics and Finance at UPorto (cef.up), University of Porto, Porto, Portugal

#### Research goals and background

Workforces are ageing fast in most western economies (OECD, 2018) and the increasing proportion of older employees in today's workplaces raises several challenges. If the debate about organizational policies and practices for the aging workforce is to be moved forward, a better understanding of HR practices' effects needs to be developed.

Drawing on the HRM, socio-emotional selectivity theory, and thriving at work literatures, the aim of this study is twofold. First, we aim to examine the psychometric properties and validate a Portuguese version of the LLWI (Wilckens et al., 2020). The LLWI is a comprehensive set of organizational practices that encompasses nine distinct domains particularly relevant for the aging workforce. Against a context of ageing and age-diverse workforces, providing a valid, self-assessment and benchmark tool like LLWI may contribute to improve organizations' age management efforts. Second, given that age-inclusive HR practices were positively associated with both OFTP dimensions (i.e., focus on opportunities and remaining time), and with thriving at work (Oliveira, 2021), the present study intends to clarify if the organizational practices included in the LLWI have main effects on older employees OFTP, overall thriving experience, vitality levels, and learning process. Following recent calls for more investigation on the dimensionality of thriving at work (Kleine et al., 2019), it is important to understand if vitality and learning - the two dimensions of thriving at work - relate equally with contextual antecedents such as the LLWI domains. In so doing, this study hopes to increase our understanding about the extent to which organizational practices shape thriving at work from an older employees' perspective.

#### Design/methodology/approach

Following translation/back-translation and pilot testing procedures, cross-sectional online data was collected from a sample comprised of 329 employees aged 50 and older working at least 20 hours for one employer (with at least 30 employees) operating in Portugal. Discriminant (e.g., negative affect scale), convergent (e.g., age-inclusive HR practices), and criterion (e.g., turnover intentions scale) validity were examined following quality standards established for the translation and validation studies by the original LLWI development researchers. In addition to standard OLS regression analysis, we used Necessary Condition Analysis (NCA, Hauff et al., 2019) to disentangle which LLWI domains are sufficient and/or necessary conditions for an extended OFTP and thriving at work. Chronological age, gender, and organizational tenure were included as controls. Data analyses was performed in the R statistical computing environment.

#### Results

The Portuguese version of the LLWI showed good psychometric properties. LLWI domains are not necessary conditions for thriving at work, but six of them (e.g., organizational climate; knowledge management) seem to be sufficient conditions for employee thriving. Four LLWI domains (e.g., work design) can increase OFTP levels on average and all but leadership and health and retirement

coverage increase the focus on opportunities dimension of OFTP. Overall, performing NCA on the relationships between LLWI domains and both OFTP and thriving revealed a more comprehensive picture than standard regression analysis.

#### Limitations

Due to the cross-sectional design of the study and to the endogeneity problem, causal claims are open to debate. As such, we do not exclude that reverse/reciprocal effects may exist between, for example, LLWI domains and thriving at work, and that omitted variables might be driving the associations between constructs.

#### Conclusions & Implications

The current study aims to push forward the ongoing discussion about thriving at work dimensionality and to disentangle distinct relationships between focal variables (LLWI domains and thriving at work). In addition, this study will contribute to the HRM literature by showing the importance of organizational practices for the ageing workforce.

#### Relevance to the Congress Theme

With longer working lives becoming the norm, we expect our findings will contribute to advise organizations and HR managers to design practices that foster older employees' OFTP and thriving.

#### Relevant UN SDGs

This research is mainly focused, but not exclusively, on Sustainable Development Goal 3 (Ensure healthy lives and promote well-being for all at all ages) and on Sustainable Development Goal 8 (Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all).

*Keywords: OFTP, thriving at work, NCA*

## Paper 6

### **Cross-Cultural Validation of the Later Life Workplace Index (LLWI): Example of an English-Language Version**

Julia Finsel , Institute for Management and Organization, Leuphana University of Lüneburg, Lüneburg, Germany; Anne Marit Wöhrmann , Federal Institute for Occupational Safety and Health (BAuA), Dortmund, Germany; Leuphana University of Lüneburg, Lüneburg, Germany; Mo Wang , Department of Management, Warrington College of Business, University of Florida, Gainesville, FL, USA; Max R. Wilckens , Institute for Management and Organization, Leuphana University of Lüneburg, Lüneburg, Germany; Jürgen Deller , Institute for Management and Organization, Leuphana University of Lüneburg, Lüneburg, Germany

#### Research goals

Due to demographic change and its implications for workforces worldwide, research on organizational practices that foster older employees' health, motivation, and performance has increased tremendously. However, existing measures of these organizational practices tend to use unidimensional scales, apply single-item operationalizations, or focus on specific types of practices. Thus, Wöhrmann et al. (2018) developed the Later Life Workplace Index (LLWI) to provide a multidimensional model of organizational practices for older employees. Recently, a German 80-item measure for this model was developed (Wilckens et al., 2020). Despite being based on profound qualitative and quantitative research, the applicability of the measure in countries beyond Germany is yet to be determined. Hence, the measurement is currently being translated and validated in more than ten countries across the world. This presentation illustrates the standardized validation procedure using the development of the English-language version in the U.S. as an example.

#### Theoretical background

The LLWI comprises nine domains, namely organizational climate, leadership, work design, health management, individual development, knowledge management, transition to retirement, continued employment, and health and retirement coverage. Each of these domains is divided into two to four indicators.

#### Method

The German measure was translated using a back translation procedure. The U.S. sample (  $N = 279$  ) was collected via a panel provider to cover diverse organizational sizes and economic sectors. To examine measurement invariance, the U.S. sample was compared to a sample of 349 older German employees that had previously been utilized in the validation of the German version of the LLWI.

#### Results

The model fit of the factor structure proposed by the German measure was assessed on the domain level as well as for the overall nine-factor domain structure. For the English-language version of the LLWI, the domain-level model fit was (very) good or acceptable for all domains and showed superiority to alternative models. Internal consistency was acceptable to very good for all nine domains as well. The model fit of the overall nine-factor domain structure indicated some redundancy among the 80 items. Multigroup factor analyses comparing the U.S. sample to the German sample were conducted to further analyze the measurement invariance. For the English-language LLWI, the results confirmed configural and (partial) metric measurement invariance. The

analysis further includes the testing of convergent validity regarding conceptually similar scales, discriminant validity regarding affectivity, and criterion and incremental validity regarding individual work and health outcomes.

#### Limitations

The standardized validation procedure is designed cross-sectionally. Thus, we cannot infer causality regarding the observed relationships between organizational practices covered by the LLWI and older employees' outcomes. Additionally, the LLWI is a rather lengthy measure. Hence an international focus group is currently developing a short version of the LLWI.

#### Implications and value

So far, the LLWI provides a comprehensive German and English-language measure of organizational practices for older employees to advance research in the field of work and aging. Several other language versions are currently being validated to provide researchers from all over the world with a thorough measure. The LLWI can be used to examine the interrelations between the different domains of organizational practices and compare their relevance for older employees. Additionally, researchers can use the scales separately to focus on specific topics. Methodologically, the measure can be administered to human resource managers, (line) managers, or older employees. Thus, the LLWI measure facilitates research on a large variety of research directions and research designs.

Practitioners can use the LLWI to assess strengths and weaknesses regarding the organizational practices for their older employees. Based on the results, they can benchmark among peers and identify areas for improvement. Since the measure was developed independent of organizational size and industry, it can be utilized in a wide range of organizations.

#### Relevance to the Congress Theme

In light of the changing world of work and demographic change, researchers and practitioners can utilize the LLWI to formulate and implement recommendations on how to create better working conditions for an aging workforce.

#### Relevant UN SDGs

Based on these implications, our study also contributes to the SDG to develop decent working conditions to promote employment for everyone.

*Keywords: aging workforces, cross-cultural research, organizational practices*

## Symposium S045

### Self-regulation When Confronted with Competing and Changing Goals: Insights on Well-being and Performance

Tina C. Armasu, Anita C. Keller | University of Groningen

science

What will be covered and why: Employees aim to achieve goals across various work and non-work domains. During goal pursuit, they regulate their thoughts, emotions, and behaviors to ensure they are moving towards goal achievement. The beneficial role of self-regulation for employee performance and well-being has been widely acknowledged. Self-regulation is a dynamic process involving cognitive, affective, and motivational aspects. Ensuring its success is a somewhat complex endeavor considering that between (e.g., work design, personal attributes) and within-person (e.g., disruptions, competing goals) factors may prevent workers from efficiently self-regulating to achieve their goals. Employee self-regulation may be further complicated through the unpredictable and ever-changing contextual challenges (e.g., changes due to COVID-19, competing work and non-work demands). Given that work and organizations undergo major changes frequently, it is essential to understand how employees self-regulate when faced with changing and competing goals. We argue that examining deliberate and automatic self-regulation can offer more insight into how employees navigate such challenging times. Research suggests that deliberate self-regulation plays an important role when dealing with changes in the work environment as employees invest valuable resources to modify their behaviors to maintain goal pursuit despite contextual challenges. Conversely, automatic self-regulation can occur effectively without the need for deliberate effort. The role of automatic self-regulation – particularly in an ever-changing environment – has been empirically overlooked but may also offer insight into (un)successful employee self-regulation as these processes may help employees save resources to manage other more demanding goals. This symposium aims to uncover processes underlying employee deliberate and automatic self-regulation to explore the between and within-person factors that impact deliberate and automatic self-regulation, offer insight into how employee self-regulation affects well-being and performance, and investigate employee self-regulatory experiences using quantitative and qualitative designs. In the first presentation, Roe, Shantz, and Rivkin explore how disruption to automatic self-regulation (i.e., routines) due to COVID-19 affects shifts in work meaningfulness towards other life domains in a qualitative interview study aiming to reveal and compare participants' experiences during the lockdown. This study highlights the role of disruption as a within-person hindering factor for employee self-regulation and work meaningfulness. In the second contribution, Keller, Liu, and Parker investigate the benefits of automatic self-regulation (i.e., morning routines) for performance and emotional exhaustion in a daily diary study. The study reveals that automatic self-regulation through routines is subject to gender differences as men tend to benefit more from engaging in routines. In the third contribution, Armasu and colleagues explore the relationship between deliberate and automatic self-regulation when dealing with disruptions and investigate the effect of employee automatic self-regulation (i.e., work routines) on performance at work using latent curve modelling. This study highlights the benefits of automatic self-regulation for work performance during uncertain circumstances. In the fourth contribution, Koch, Völker, and Sonnentag investigate the interaction between work and health self-regulatory goal behaviors to predict emotional states in a daily diary study. This study emphasizes employees' need to self-regulate across domains and showcases employees' challenge to navigate and pursue competing goals. Last, Chu-Hsiang (Daisy) Chang will discuss how work-related changes influence automatic and deliberate self-regulation and what practical steps can help employees deal with these challenges.

Relevance to the Congress Theme: We illustrate how changing and competing goals at work influence self-regulation and how these effects influence employee performance and well-being.

Research/Practical Implications: This symposium offers new insights into employee self-regulation in an ever-changing world of work. We contribute to the literature on self-regulation at work to unveil the effects of automatic self-regulation through routines as functional behaviors that help employees deal with disruptions. The symposium advances our understanding regarding employee self-regulation across domains by uncovering the challenges that come with striving to simultaneously manage and pursue goals in work and non-work domains. By addressing these questions using quantitative and qualitative designs, we explore the complexity behind employee self-regulation to provide theoretical and practical directions for understanding what contributes to effective self-regulation and ultimately helping employees engage in successful self-regulation at work and beyond.

discussant: Chu-Hsiang (Daisy) Chang, Michigan State University

*Keywords: self-regulation, well-being, work performance*

## Paper 1

### **“I don’t feel like it’s the be-all and end-all anymore”: How do disruptions to self-regulatory processes affect work meaningfulness?**

Amanda Roe & Wlad Rivkin | Trinity College Dublin; Amanda Shantz, University St. Gallen

**Research goals and why the work was worth doing:** We used the COVID-19 pandemic to explore how disruptions break self-regulatory processes and affect work meaningfulness. Accordingly, this research expands our understanding of the following research questions: How do disruptions break self-regulatory processes and thus lose work meaningfulness? Further, what happens when employees lose work meaningfulness? These are important questions because they may change how employees view their job, disrupting their performance, motivation, and commitment at work.

**Theoretical background:** Over the past two decades, research has provided significant insight into self-regulation (Baumeister & Heatherton, 1996; Lord et al., 2010). Self-regulation is the ability to develop, implement, and flexibly maintain planned behaviour to achieve one’s goals (Carey et al., 2004). In addition, it affects individuals' ability to control their thoughts, emotions, and actions (Heatherton and Tice, 1994). Employees use self-regulatory processes to achieve work meaningfulness. Work meaningfulness refers to employees’ beliefs that their work has at least one distinct purpose that they consider personally significant” (Robertson et al., 2020). Research has provided insight into how employees experience work meaningfulness and how organizations cultivate it (Lysova et al., 2019; Allan et al., 2019). However, we do not know what happens when disruptions break self-regulatory processes and the impact on work meaningfulness.

**Design/Methodology/Approach/Intervention:** To answer these questions, we interviewed 50 employees working from home in 2020 because of the lockdown. To explore these processes and build theory, we engaged in thematic analysis (Braun & Clarke, 2006) and case comparison methods (Kaarbo & Beasley, 1999) to unveil the similarities, differences, and patterns across the participants’ experiences.

**Results obtained:** We draw on the meaning maintenance model to understand how disruptions break self-regulatory processes (Heine et al., 2006). Specifically, we focus on the premise that employees have a “need for meaning.” According to the model, when an individual’s sense of meaning is threatened, humans have an innate drive to compensate for this (Heine et al., 2006), known as the “fluid compensation” principle. Our findings support this principle. We found that the COVID-19 lockdowns disrupted employees’ self-regulated processes related to work meaningfulness, that is, one or more disruptions to (a) unity with others (i.e., a sense of belonging); (b) serving others (i.e., a sense of contributing to others); (c) expressing full potential (i.e., experience a sense of achievement); and (d) developing and becoming self (i.e., a sense of being true to one’s self) (Lips-Wiersma et al., 2009). For example, employees could not achieve future career accomplishments due to the changing nature of their work, disrupting their self-regulatory processes. When unable to achieve their goal of doing well at work (Carey et al., 2004), it affects their thoughts on work meaningfulness. As a result, employees began to look for meaningfulness outside the work domain, for example, by building non-work relationships.

**Limitations:** A limitation is that data were collected at one point in time. Follow-up interviews would be beneficial to determine the long-lasting impact of the disruption on self-regulatory processes on work meaningfulness.

Conclusions: Our study highlights employees' need for meaningfulness and applies fluid compensation to compensate for this loss. Furthermore, we introduce reflection as a key characteristic of how employees cope with disruptions that break self-regulatory processes. We found that reflection offered employees “moments of realization” (Rummel et al., 2019) that prompted individuals to take stock of their lives. Reflection came in two forms, negative backward-looking work reflection and positive forward-life reflection. Negative backward-looking reflection involves employees reviewing their choices about work. For example, employees questioned their commitment to work at the expense of other areas of their lives. This negative backward reflection initiated the loss of work meaningfulness. This highlighted employees’ “need for meaning” and instigated positive forward-life reflection. In addition, we found that employees thought about new life aspirations, which prompted shifts in meaningfulness to other life domains. Reflection aligns with research on cognitive appraisal theory (Lazarus & Folkman, 1984) because reflecting on one’s job and future life aspirations served as a cognitive re-appraisal of work meaningfulness (Lazarus & Folkman, 1984), which resulted in a reprioritization of values and beliefs around work meaningfulness.

Relevance to the Congress Theme: The prevalence of disruptions has increased threefold in the last 40 years (Wordsworth & Nilakant, 2021). For example, the 2008 Global Economic Crisis, the COVID-19 pandemic, the war in Ukraine, and the cost-of-living crisis (Wu et al., 2021). These disruptions shape the future of work because they disrupt and break self-regulation and impact work meaningfulness. This is theoretically important and has practical implications as work changes in the coming decades.

Relevant UN SDGs: This study is relevant to the UN SDGs as self-regulatory processes enhance individual growth, development, and well-being.

*Keywords: disruptions, self-regulation, work meaningfulness*

## Paper 2

### **Are Morning Work Routines Relevant for Employee Well-being and Performance? A Gender Role Perspective**

Anita C. Keller, University of Groningen; Sharon K. Parker, Curtin University; Yukun Liu, Zhejiang University

**Research goals and why the work was worth doing:** The COVID-19 pandemic has forced some workers to work remotely almost overnight, without preparation. This shift created a sudden disruption to employees' day to day work routines that usually help them to regulate how they switch from a private role to their work role. People create boundaries around different life domains and role to organize themselves and direct their attention and effort to the salient role. To easily move between different roles, employees create routines. For example, employees use the time during which they prepare their lunch for the day, commute to the office, and start their computer to emotionally and cognitively reconnect to their work and the tasks that lie ahead of them. During the early stages of the pandemic, employees tried to figure out how to be efficient at home while simultaneously learn to perform their tasks using new technology and dealing with distractions from people living in the same household.

**Theoretical background:** We argue that re-enacting morning work routines helps employees to transition from a private role to their work role and, as a consequence, be beneficial for well-being and performance. According to self-regulation and routine theory, routines activate relevant work goals, give a sense of direction and purpose, and can be performed without effort. As such, employees feel more energetic and engaged and as a result are more productive and satisfied with their workday. However, performing routines in the home setting may not be as effortless for everybody and might become effortful in and of itself with the various challenges presented in the working from home context. Based on social role theory, which suggests that women identify more strongly with the family role than men, we contend that gender acts as a moderator, resulting in routines being more beneficial for men than women.

**Design/Methodology/Approach/Intervention:** We conducted a two-week daily diary study with three assessments per day. One hundred and three remote workers in the Netherlands participated during the lockdown period in May 2020. We developed four items to capture morning work routines (e.g., "got dressed in 'work' clothes (that is, in clothes that are distinct from evening/weekend clothes)") and relied on widely used measures to assess work engagement, emotional exhaustion, task proficiency, and job satisfaction.

**Results obtained:** Multilevel analyses revealed that engaging in routine behaviors is positively associated with daily work engagement which in turn resulted in higher task proficiency and job satisfaction. Morning work routines were also positively associated with daily emotional exhaustion. Cross-level moderation analyses further showed that the effects of morning work routines on emotional exhaustion are contingent on gender such that for men, morning work routines significantly reduced their emotional exhaustion; whereas for women, morning work routines increased their emotional exhaustion.

**Limitations:** Although the study has some strengths such as capturing employees during a time they tried to navigate substantial changes in their work and private life, there are also some limitations. For example, the study relied on a selected list of potentially relevant routine behaviors but did not

include an exhaustive list. In addition, the study cannot speak to differences between employees with or without children.

**Conclusions:** Our results suggest that morning work routines support employees to reap performance benefits, however, during massive change processes, re-establishment of routines may be costly and drain resources, at least for women. Although men were able to leverage performance and energy benefits of routines, women only benefitted in terms of performance; showcasing a complex pattern of how employees try to balance their different roles.

**Relevance to the Congress Theme:** The presentation contributes to the understanding of automatic self-regulation and its boundary conditions when employees are faced with changes in their environment.

**Relevant UN SDGs:** The paper also provides insights relevant to the UN Sustainable Development Goal of promoting employee well-being and health and understanding factors hindering or fostering gender equality.

*Keywords: morning routine, automatic self-regulation, gender differences,*

### Paper 3

#### **What Makes or Breaks Routines when Working from Home: Insights into Work Routines, Self-regulation, and Task Performance**

Tina C. Armasu, University of Groningen; Sharon K. Parker & Caroline Knight | Curtin University; Barbara Wisse & Anita C. Keller | University of Groningen

Research goals and why the work was worth doing: Lockdowns caused by the COVID-19 pandemic forced employees to work from home with little prior experience but also prompted workers to adjust to various degrees of restrictions. Despite increasing knowledge on employees' adjustment to home office, little is known about employee self-regulation at the end of the lockdown when they transitioned from a restrictive lifestyle to having more freedom. Research investigating self-regulation mostly focused on deliberate self-regulation (e.g., planning) and overlooked automatic self-regulation (e.g., routines), but insight into both processes may be essential for explaining how employees adapt to disruptive contextual changes such as lockdowns. This study investigates the relationship between deliberate and automatic self-regulation and examines the role of automatic self-regulation through routines for individual task performance among employees working from home.

Theoretical background: We argue that beside deliberate self-regulation, employees engage in automatic self-regulation to manage lockdown-related changes. While deliberate self-regulation requires effortful behavioural adjustment that favours goal pursuit, automatic self-regulation – in the form of routines (i.e., automatic sets of consecutive actions) – is enacted without the need for awareness, thus saving precious resources. Research suggests that routines benefit employees' energy at work, stimulate their work engagement and are especially relevant during uncertain times, as they give individuals a sense of predictability and control. Thus, having routines can be beneficial which may explain why employees form routines in the first place. In this study, we explore the relationship between deliberate and automatic self-regulation (i.e., planning and routines respectively), examine the role of routines for individual task performance and investigate boundary conditions that influence the effect of routines on task performance in a sample of employees working from home during the pandemic. We argue that automatic and deliberate self-regulation go hand in hand. More specifically we suggest that with increased routine formation, the need for planning is decreased as routines becomes automatic. Conversely, as routines are disrupted due to contextual changes (i.e., easing of the lockdown), planning may increase to help workers re-establish their routines. Furthermore, we argue that due to their automaticity, and thus their efficiency, work routines can boost individual task performance as they are efficient ways to self-regulate in pursuit of goals. Finally, we consider boundary conditions that can influence routine formation namely scheduling autonomy, and distractions. More specifically, we suggest that when employees have the freedom to structure their day as they please, they can create routines that fit their lifestyle, thus increasing routine strength. We also argue that home- or work-related distractions hamper routine strength as they prevent individuals from adhering to their routines, undermining building up of routine strength.

Design/Methodology/Approach/Intervention: We used data from 182 German employees who were working from home full-time. In this longitudinal study, work from home routine strength, planning, task performance, scheduling autonomy, and distractions were measured at 6 time points resulting in 6 monthly questionnaires administered between January 2021 and June 2021. This timespan allowed us to capture effects prior and after the end of lockdown.

Results obtained: Results from latent curve analyses show that routines are disrupted when lockdown measures are relaxed, and this disruption is accompanied by increased planning. We found a significant positive effect of routine strength and of the increase in routine strength increase prior and after end of lockdown on task performance. Supporting our hypotheses, we found that scheduling autonomy benefits routine strength prior to end of lockdown and boosts the increase in routine strength before and after end of lockdown. Conversely, distractions hamper routine strength prior to end of lockdown and decrease new routine formation after lockdown.

Limitations: While we asked participants to reflect on daily routines, we measured routines monthly. Since routines are enacted daily, a daily diary design might have provided more information on within-person disruptions of routines. Moreover, our sample size was quite small for a robust latent growth model, thus a larger sample might yield more statistical power.

Conclusions: First, we advance theory on employee self-regulation by focusing on the relationship between deliberate and automatic self-regulation. Second, we explicate conditions under which self-regulation is improved or hindered by studying the effect of scheduling autonomy and distractions. Third, our spotlight on employee self-regulation after end of lockdown emphasises employees' need to also adapt to changes as they transition towards more permissive circumstances.

Relevance to the Congress Theme: Our results highlight the role of employee automatic self-regulation through routines for performance during ever-changing work circumstances.

Relevant UN SDGs: Our study contributes to the UN Sustainable Development Goal of good health and well-being by highlighting routines as self-regulatory behaviours which employees can use to optimize their resources and reach their work-related goals.

*Keywords: work routine, automatic self-regulation, task performance*

## Paper 4

### Healthy and Successful: How Health-Behaviour Goal Progress and Work-Task Progress Interact in Predicting Affective States

Theresa J. S. Koch, Sabine Sonnentag & Jette Völker | University of Mannheim

Research goals and why the work was worth doing: Health behaviours such as physical activity and healthy eating can be an essential part of everyday work life (Postema et al., 2021; Sonnentag et al., 2017) and have important consequences for employees' affective states (e.g., Calderwood, 2021; Conner et al., 2017; Reed & Buck, 2009). Hence, many worksite interventions have been developed to promote health behaviour at work (Abraham & Graham-Rowe, 2009; Maes et al., 2012). Such interventions often address self-regulatory processes – including goal striving as an essential behaviour change technique (Malik et al., 2014). However, interventions focusing on health-behaviour goal striving at work tend to overlook that making health-behaviour goal progress necessarily takes place while work tasks need to be accomplished simultaneously. Considering the resulting overlap of striving for health-behaviour goals and pursuing work-task progress, we aim to advance the understanding of their interplay in predicting affective states. These insights should help integrate health behaviour in daily work life in view of both physical (i.e., health behaviour) as well as psychological (i.e., affective states) outcomes.

Theoretical background: We build our research on the self-concordance theory (Sheldon & Elliot, 1999) by suggesting that the evaluation of one's health-behaviour goal as important predicts successful health-behaviour goal progress during the workday. Health-behaviour goal progress, in turn, should predict favourable affective states (i.e., high pride, low shame) at the end of the workday (cf., Weiss & Cropanzano, 1996). Integrating multiple-goals research (e.g., Hirschi et al., 2019; Vancouver et al., 2010), we further argue that work-task progress moderates the relation between health-behaviour goal progress and subsequent affective states.

Design/Methodology/Approach/Intervention: To test our hypotheses, we analysed daily diary data from 205 employees (1,399 days). Based on the concept of implementation intentions (Gollwitzer, 1999), participants in our sample received a daily instruction to set health-behaviour goals (i.e., increase of physical activity and decrease of unhealthy snacking behaviour). For example, a physical-activity goal could imply to take at least 10,000 steps during the workday and a healthy-eating goal could imply to eat at least three fruits when snacking at work. Our study measures (e.g., health-behaviour goal progress) referred to these day-specific health-behaviour goals.

Results obtained: Multi-level path analysis (Preacher et al., 2010) showed that goal importance positively predicted health-behaviour goal progress. Health-behaviour goal progress, in turn, positively predicted pride and negatively predicted shame at the end of the workday. We also found significant indirect relations between goal importance and pride as well as shame via health-behaviour goal progress. Moreover, the negative relation between health-behaviour goal progress and shame was stronger on days with low work-task progress. This pattern was also reflected in the conditional indirect effect between goal importance and shame via health-behaviour goal progress. However, work-task progress did not moderate the relation between health-behaviour goal progress and pride.

Limitations: Our research results are, however, subject to limitations. Specifically, we only included self-report measures, which raises concerns of common-method bias (Podsakoff et al., 2003). We

encourage future research to employ objective assessment of health-behaviour goal progress (e.g., activity trackers, photographic eating diaries) or leader ratings for work-task progress. Furthermore, as our data collection took place during the COVID-19 pandemic, we call for replications during other time periods to increase generalisability.

**Conclusions:** Nevertheless, our research contributes to literature on goal striving in health-behaviour at work by demonstrating the interplay of health-behaviour goal progress and work-task progress in predicting employees' affective states. Specifically, employees' main purpose at work belongs to their work tasks, so that feelings of shame following health-behaviour goal progress were even stronger when work-task progress was also low. Therefore, integrating multiple goals research can be a promising avenue for future research on health-behaviour goal striving at work. Practitioners can learn from our study that referring to personally important goals when instructing day-specific goal striving interventions promotes favourable affective states that emerge with goal progress. Importantly, health-behaviour goal progress at work thus has implications beyond increasing health behaviour, but with respect to how employees feel when leaving the workplace.

**Relevance to the Congress Theme:** Our research addresses the EAWOP congress theme of the changing world of work by focusing on the relevance of health behaviour in daily work life to sustain both health and well-being.

**Relevant UN SDGs:** Integrating health-behaviour goal progress and work-task progress further relates to the UN Sustainable Development Goal of promoting good health and well-being.

*Keywords: healthy goal behaviors, affective states, work-task progress*

## Symposium S046

### **the future is now: how to enhance sustainable employability and leadership to match the changing world of work**

Martine Coun & Tinka van Vuuren | Open Universiteit (The Netherlands)

science\_practice

Our symposium will focus on interventions at work to enhance sustainable employability in order to be fit for the future both from both a leader and employee perspective. This subject is important because of :

**Urgency :** The world of work is changing due to demographic changes, the pandemic, Ukraine war and climate change.

**Contribution :** New digital literacy and collaboration skills of employee and leaders in the hybrid and changing work context are needed. This disruptive times might require a different kind of leadership in order to enhance sustainable employability.

**Delivery :** Changes in knowledge and skills, motivation, health of employees and leaders and work context are essential. We need to be fit for the future. The aim of this symposium is to get a better integration between science and practice to enhance sustainable employability. The concept of sustainability is introduced by The United Nation's Brundtland Commission (WCED, 1987) in which the importance of retaining the world's natural resources for future generations. Sustainable employability focusses on the importance of preserving employees' own resources for their future, and concerns the extent to which employees are able and willing to carry out their current and future work (Van Vuuren, 2012; Ybema, Van Vuuren & Van Dam, 2017). Sustainable employability is measured for instance with work ability, work engagement and employability. In addition, this employability assumes proactive workplace behavior on behalf of the employees and leadership definitely has to play a role in this. (Coun, 2021)

Work and organizational psychology offers many evidence-based insights about the antecedents of sustainable employability. In this symposium we want to bridge the gap from research to practice and use these insights to explore and tests interventions. It includes four presentations and an interactive discussion lead by a discussant. First, we focus on the changing role of empowering leadership on performance in hybrid work conditions and the role of professional isolation (1). Second, we present an intervention study which examines how a job crafting intervention in a municipality influence participants' willingness to continue working (2). Third, an intervention study is presented to improve the health and vitality of employees in the health care sector (3). Fourth, a study about how employers can effectively communicate the opportunity for employees to voluntarily participate in interventions is presented (4). Finally, our discussant will highlights and integrates the contributions of the four speakers. She will use her expertise as practioner to provide a general commentary on the four individual papers and will explore how the papers (in relation to each other) help to Integrate science & practice both from a leadership and employee perspective on sustainable employability interventions (5).

In this symposium we will share our research and professional experiences about this topic. We challenge work and organizational psychologists to develop interventions to enhance sustainable employability or to make people fit for the future.

Intended audience: both Academic and Practitioner

discussant: Diana Rus, Creative Peas & University of Groningen

*Keywords: sustainable employability, interventions, leadership*

## Paper 1

### **The Dual Effect of Empowering Leadership on Adaptive Performance and Professional Isolation in Hybrid Work : Leads for Management interventions**

Pascale Peters, Nyenrode Business Universiteit (The Netherlands), Inland Norway University of Applied Sciences; Martine Coun, Open Universiteit (The Netherlands); Maikel Nijmeyer & Rob Blomme | Nyenrode Business Universiteit, Open Universiteit (The Netherlands)

#### Research goals and why the work was worth doing

Organizations increasingly rely on workers' ability to adapt to fast changing conditions to enhance their sustainable performance. However, empowering leadership intended to support employees' adaptive performance is said potentially to be both enabling (via enhanced self-efficacy) and burdening (via enhanced job-induced tension). To put this dual process to the test, the research question of this study, conducted during the COVID-19 pandemic which enforced remote work and enhanced professional isolation, was as follows: 'To what extent is the relationship between empowering leadership and adaptive performance mediated by self-efficacy and job-induced tension and to what extent are these relationships moderated by professional isolation?'

#### Theoretical background

In this study, we built on the leadership and telework literature and focusing on the enabling and burdening process approach of empowering leadership to shed light on the underlying dual mechanism that can explain how empowering leadership relates to employees' adaptability, particularly in remote work contexts to perform sustainably. We acknowledge that the focus of work performance has shifted over the past 40 years from work roles with predefined tasks to a broader understanding of work roles within dynamic, hybrid organizational contexts. More specifically, particularly in these contexts, we consider adaptivity, reflecting employees' potential to deal with and anticipate task-related, situational, and ongoing demands, as a relevant outcome to sustain performance. The cognitive component involves recognizing changes and the mental ability to pay attention to changes. The affective component involves regulating emotions and processing negative emotions regarding changes. The behavioral component concerns the underlying behavioral repertoire and the behavioral tendencies that help the employee to proactively deal with change situations. More specifically, based on our literature synthesis, we expected the relationship between empowering leadership and adaptive performance to be positively mediated by self-efficacy and negatively by job-induced tension. Moreover, we expected professional isolation to weaken the enabling process and strengthen the burdening process.

#### Design/Methodology/Approach/Intervention

The study is based on survey data collected among 465 workers via social media during the COVID-19 pandemic.

#### Results

Preliminary analyses indicated that the enabling process is stronger than the burdening process, and that particularly the enabling process was impacted by professional isolation.

#### Limitations

The cross-sectional nature of the study implies that causal relationships between the variables could not be demonstrated. Moreover, this study focused on adaptive performance. However, it would be interesting to simultaneously include proficiency and proactivity as relevant outcomes of empowering leadership in future dynamic, hybrid work contexts.

Conclusions – research and or practical implications

The study provides leads for management interventions to sustain performance, particularly in hybrid and remote work contexts in which the perceived distance between employee and supervisor increases and the risk of professional isolation is high.

*Keywords: empowering leadership, professional isolation and job-induced tension, sustainable performance*

## Paper 2

### **Job crafting & willingness to work longer: A longitudinal intervention study**

Jeroen de Jong, Mark Tomassen & Emile van Nassau | Municipal Government of Lingewaard (The Netherlands); Hiske den Boer, Open Universiteit (The Netherlands)

#### Research goals and why the work was worth doing

In a job crafting intervention, employees are taught to make small adjustments in their work to accomplish better work outcomes. This study examined the impact of a job crafting intervention and proposed that a job crafting training would positively influence participants' job core dimensions and job resources and therefore have a positive impact on their willingness to continue working. In addition, it was hypothesized that job satisfaction would mediate this relationship.

#### Theoretical background

This intervention study was based on the Job Characteristics Model (JCM), the Job Demands-Resources (JD-R) theory, and used Wrzesniewski and Dutton's (2001) job crafting techniques.

#### Design/Methodology/Approach/Intervention

The study used a quasi-experimental design with a control group at a Dutch municipal organization. Older employees (N=245) participated in a job crafting training, an evaluation and completed three surveys (before the training, 1 month after and 6 months after).

#### Results

The results showed that the intervention had a significant increase in job resources and significant impact on participants' willingness to continue working both at time 2 and time 3. This relationship was fully mediated by job satisfaction. In addition, the results showed a significant difference between participants in managerial, professional and operational jobs.

#### Limitations

All participants in the job crafting intervention worked for the same local government organization, but employees from three different job categories were included to increase the generalizability of findings. In addition, only the self-assessments of the participants were measured.

#### Conclusions – research and or practical implications

This job crafting intervention study showed that it is possible to stimulate older employees' motivation to continue working through teaching them how to make changes to their job resources.

*Keywords: job crafting interventions , satisfaction, sustainable employability*

### Paper 3

#### **Time for Vitality: An empirical study into interventions at enhancing the amount of self-management among workers and their sustainable employability**

Tinka van Vuuren & Judith Semeijn | Open Universiteit (The Netherlands); Beatrice van der Heijden, Radboud University (The Netherlands); Jan-Fekke Ybema, Universiteit Utrecht (The Netherlands)

##### Research goals and why the work was worth doing

In this study, the use and effect of 17 interventions aimed at enhancing the amount of workers' self-management is tested, and through this, the consequent effects on their sustainable employability.

##### Theoretical background

It is important that employees know why they have to self-manage their own health and vitality, and also want and dare to do so (Ajzen, 1991; Van den Broeck et al., 2009; Van Scheppingen, 2014). This requires an attitude and culture from the employer that facilitates, informs and invites workers to manage themselves i.e. take control (Van Vuuren, Lub, & Marcelissen, 2016). We expect that employees who show more self-management on health and vitality, will be more sustainable employable as a result.

##### Intervention / Research method

Workers from a health care institution participated on voluntary basis in this research project (N = 997). Participants were assigned to a control group or to an intervention group. In the intervention group, participants were offered to participate in 17 different interventions. These interventions included activities aimed at, amongst others, preventing burnout, taking charge of one's career, yoga, and heart-rhythm-coherence feedback training. The control group participants were not offered these activities. Data were collected at the start (T1), in between (T2), and at the finish (T3) of the project, which took place over one year. There was substantial attrition: 191 participants filled out all three measurements, including 127 in the intervention group and 64 in the control group. To measure health and vitality, questions were asked about workers' health (BMI and general health) and about one's sustainable employability (engagement, burnout, work ability, employability and work performance). We investigated to what extent the interventions contributed to improving the participants' self-management of health and vitality. Specifically, we looked at both whether the participant was in the intervention or control group (intention to treat), and the relationship between the number of interventions that the worker was involved in and the outcome variables (dose-response relation). This was analysed by means of linear regression analysis.

##### Results

Results showed that the larger the number of interventions between the first and the last measurement, the higher the workers' self-management of their health and vitality in the last measurement. Furthermore, participants in the intervention group experienced slight improvements in sustainable employability i.e. general health, work ability and employability between the first and the last measurement, compared to a deterioration of these outcomes in the control group (after controlling for these outcome variables at the first measurement). These differences could only partly be explained by differences in age or educational level. However we found that participants in the intervention group on average were younger and higher educated than those in the control group. Moreover, those in the intervention group were more likely to have a poor health situation on

the first measurement, but experienced higher employability than those in the control group ( $p < .05$ ). Classification in the intervention group appeared to not be significantly related to a higher self-management score ( $p = 0.61$ ).

#### Limitations

Possibly, self-selection in assignment to the intervention or control group has played a role. We should be careful in drawing conclusions about the effects of the interventions, especially because the case organisation is in health care, which makes workers possibly also more conscious about their own health and vitality. Nevertheless, the relationship found between intervention and the change in variables under study between the first and last measurement gives an indication that these kind of interventions may contribute to improving health and vitality.

#### Practical implications

Interventions aimed at enhancing self-management seem to be helpful for improving the health and vitality of health care workers.

#### Relevance to the Congress Theme (The future is now: The changing world of work")

In addressing that people can enhance their self-management of their health and vitality with interventions at the workplace, and testing the effects on indicators of sustainable employability, we contribute to knowledge on how the world of work can be changed in a more desirable direction. With this study we also show that while workers have to deal with a changing world of work, enhancing self-management in health and vitality is possible, with outcomes that might again help in dealing with change more easily.

*Keywords: Health and vitality, sustainable employability, self-management and interventions*

## Paper 4

### How to stimulate employees to participate in vitality programs?

Pauline van Dorssen-Boog, Intrinzis (The Netherlands)

#### Research goals and why the work was worth doing

Vitality intervention programs can help employees to improve their well-being at work. However, this especially counts for those who participate on voluntary basis (Van Dorssen-Boog et al., 2022). This implicates that employers need to secure that intervention programs suit to employees' needs, and that employees are well informed about the opportunities to participate in interventions within their organization. This study analyses how employers can effectively communicate the opportunity for employees to voluntarily participate in a vitality intervention program.

#### Theoretical background

The effectiveness of vitality programs is not only a result of the content of the program, but also of the motivation of participants to develop themselves in the specific theme. If people are autonomously motivated for an intervention they will put more effort in achieving their goals (Van Dorssen-Boog, 2021). In contrast, if employers would push all employees to participate in a vitality program, this can lead to less active involvements in intervention activities, resulting in lower impacts (Deci, Olafsen & Ryan, 2017). Hence, employees need to be well informed about the opportunity to participate in vitality programs, and feel free to actually sign up (Van Vuuren, Lub & Marcelissen, 2016). This challenges employers to build a communication strategy which encourages employees to sign up for an intervention program (Nielsen & Randall, 2013). For this, insights from social marketing may be helpful. The ultimate goal of social marketing is not to increase the financial benefits of the corporate, but the (sustainable) benefits for the individual or group, such as improving health and vitality (Lee & Kotler, 2016). Social marketing uses a mix of general marketing principles and techniques, such as making a good fit between the needs of the target audience on the one hand, and the product, price and place on the other hand. Moreover, the promotion of the product needs to be sufficient: a) the message should emphasize the problem and highlight the benefits of the program; b) the messenger needs to be recognized by the target audience; c) the promotion should have creative elements; d) a mix of communication channels should be used. Insights from social marketing may help employers to build an effective communication strategy for encouraging employees to participate in interventions. Such a communication strategy would be effective if employees a) sign up for interventions and b) feel that their needs for development are satisfied by the intervention.

#### Methodology

For this research a mix of quantitative and qualitative data was used from an intervention study in 14 Dutch healthcare organizations. Employees could voluntarily participate in a vitality event, an individual vitality check with a survey, a coaching interview, and a training self-leadership. The quantitative analysis is focused on the participation rate of interventions, and evaluation of the interventions by participants. The qualitative analysis is based on semi-structural interviews with 14 project managers who were involved with the implementation of the intervention.

#### Results

Most used intervention was the self-leadership training, and less used the coaching interview. Participants of all types of interventions felt that their expectation concerning the intervention was satisfied sufficiently. Travel distance influenced the decision to participate in the event or training. Price was not a threshold, since all interventions were free of charge.

The content of the promotion message was about the same for all organizations, since they got sample texts which they could use. Effective messengers were team managers and trainers via an introductory workshop. Later in the project, participants were acting as messengers by expressing their enthusiasm about the intervention. Creativity in communication through colourful postcards or a printed menu in the restaurant with the offered interventions seemed to be effective. Communication via intranet, magazines, and posters were experienced as less effective methods.

#### Limitations

Future research could evaluate the effectiveness of the communication strategy by asking employees how they got informed, what made them decide to participate, and whether the communication was appropriate as compared to what they priorly thought to be the benefits of the program.

#### Conclusions

In order to encourage employees to voluntarily participate in vitality intervention programs employers need to build a communication strategy. They need to make sure that interventions suit to the needs of employees in terms of content, price and distance, pay attention to how the message is formulated and creatively presented, as well as who brings the message.

#### Relevance to congress theme

#### Decision-making and control

#### Evaluation of Training

*Keywords: Intervention in participation and communication, Health and vitality, sustainable employability, self-management*

## Symposium S047

### Challenge Stressors at Work: A Critical View at Stressor Classifications, Boundary Conditions, and Mechanisms

Bettina Kubicek & Roman Prem | University of Graz, Graz, Austria

science

#### State of the Art

The challenge stressor–hindrance stressor framework builds upon the idea that some work stressors, despite requiring effort and being associated with strain, hold the potential to promote employees' motivation and growth (Cavanaugh et al., 1998, 2000). Meta-analyses have shown that these so-called challenge stressors share, for example, positive associations with indicators of motivation, engagement, and performance (LePine et al., 2005; Crawford et al., 2010). However, in recent years it has been called into question, whether challenge stressors actually facilitate favourable work outcomes (e.g., Mazzola & Disselhorst, 2019).

#### New Perspectives/Contributions

This symposium focusses on challenge stressors at work. It takes a critical view on the classification of specific stressors and also investigates boundary conditions and mechanisms that could help explain, why favourable effects of challenge stressors have not been consistently found in previous research. Kubicek, Uhlig et al. show in a meta-analysis that two typical challenge stressors might have to be reclassified. Both, workload and cognitive demands, did not show the expected associations with strain, motivation, and learning. Moreover, the results suggested that many of the associations of challenge stressors with work outcomes might be moderated. Ohly and Menkhaus investigated proactive personality as a potential moderator. Using scenarios, they show that proactive personality enhances the appraisal of time pressure as challenging. This suggests that time pressure may not hold the potential for favourable effects for all but only for some employees. Baethge et al. also take a closer look at effects of time pressure and simultaneously investigate motivating and demotivating paths in a semi-longitudinal study. They show that time pressure is related to work engagement via two antagonistic mechanisms. Time pressure and work engagement are positively associated via meaning of work but also negative associated via loss of time control. Kern et al. turn the focus to interruptions and question their categorization as a typical hindrance stressor. They show that interruptions by work-related online messages can be functional. Using a diary study, they show that such interruptions are associated with employees' experienced prosocial success and that goal autonomy and goal commitment are important boundary conditions for these favourable effects of interruptions. The discussant, Norbert Semmer, will reflect and discuss these findings and take a critical view at the concept of challenge stressors at work.

#### Relevance to the Congress Theme

Today's changing world of work puts many challenges on employees. Typical challenge stressors such as workload and time pressure can intensify (e.g., Kubicek et al., 2014) and a more flexible organization of work can bring along cognitive demands (e.g., Prem et al., 2021). New information and communication technologies can also produce work stressors that not only promote strain but also motivation (e.g., Cascio & Montealegre, 2016). Taking a critical view at challenge stressors may help to understand how, in our changing world of work, work stressors can affect employees not only now, but also in the future.

### Research/Practical Implications

The presented results further our understanding about the favourable effects of challenge stressors at work and also challenge the classification of typical challenge stressors and hindrance stressors. Practitioners should be aware of this and also keep the strenuous effects of work stressors in mind.

### Overall Conclusions

The symposium will contribute to our knowledge of which work stressors hold the potential for promoting favourable work outcomes, and what boundary conditions and mechanisms play a role in these favourable effects of work stressors.

discussant: Norbert Semmer, University of Bern, Bern, Swit

*Keywords: challenge stressors, favourable effects, critical view*

## Paper 1

### **Are All Challenge Stressors Beneficial for Learning? A Meta-Analytical Assessment of Differential Effects of Workload and Cognitive Demands**

Bettina Kubicek & Roman Prem | University of Graz, Austria; Christian Korunka, University of Vienna, Austria; Ute Hülshager, University of Maastricht, The Netherlands; Lars Uhlig, University of Vienna, Austria

#### Research Goals

Previous meta-analyses showed that challenge stressors are, though stressful, also motivating. However, their hypothesized gains related to learning are less well understood and the role of challenge stressors for learning remains controversial. Therefore, the aim of the study was to meta-analytically analyse the associations of two challenge stressors, namely workload and cognitive demands, with learning and to additionally examine the relations of these two challenge stressors with motivation and strain, to test whether they indeed show concurrent beneficial and detrimental effects.

#### Theoretical Background

According to the challenge–hindrance stressor framework, all challenge stressors – though being stressful – are associated with learning and motivation. In contrast to this assumption, action regulation theory posits that only cognitive demands, but not workload, are conducive to learning. Therefore, in the present meta-analysis we investigated which of the two theoretical assumptions is supported by empirical data. Furthermore, we tested whether job control, the level of a stressor, and the type of occupation may moderate the effects of these two challenge stressors on learning, motivation, and strain.

#### Methodology

Based on 417 independent samples collectively including 319,306 individuals, this meta-analysis tested the associations of workload and cognitive demands with learning, motivation, and strain and examined potential moderation effects.

#### Results

Results of a meta-analytical path model revealed that workload was negatively related to learning and motivation and positively related to strain. Cognitive demands were positively related to learning and motivation and negatively related to strain. Most of the associations of stressors with outcomes showed considerable heterogeneity, suggesting the presence of moderator variables. The detrimental effects of workload were more pronounced for care and social worker and for measures of overload. No moderations were found for country-level job control.

#### Limitations

Most of the studies considered in this meta-analysis had cross-sectional designs and used self-reported data, meaning that no conclusions about causality and the directions of effects can be drawn and additional concerns about common method bias may arise.

#### Conclusions

Taken together, the results cast doubts on whether stressors can actually be simultaneously detrimental and beneficial, as neither workload nor cognitive demands were found to have such a pattern of effects. However, the results underscore the importance of cognitive demands for good work design, as they are motivating and conducive to learning.

#### Relevance to the Congress Theme

The study contributes to the congress theme by providing clear evidence for the detrimental effects of workload and the importance of cognitive demands for designing jobs that help build a workforce able to deal with increasingly complex work.

*Keywords: challenge stressors, learning, meta-analysis*

## Paper 2

### **Proactive Personality as a Personal Resource When Meeting Challenge and Hinderance Stressors**

Sandra Ohly, University of Kassel, Germany; Carina Menkhaus, Köster GmbH, Osnabrück, Germany

#### Research Goals

Although proactive personality can be regarded as a personal resource, little is known about how this resource affects the appraisal of stressors, and ultimately individuals' wellbeing. Moreover, although stressors can be classified as hindering vs. challenging, recent research has questioned this classification, as individual appraisal might deviate. Proactive personality can be one factor explaining the appraisal and thereby this deviation.

#### Theoretical Background

Proactive personality refers to a dispositional individual difference in people's proclivity to take personal initiative in acting to influence their environments in a broad range of activities and situations (Bateman & Crant, 1993). People with a strong proactive personality recognize opportunities, take proactive coping strategy and action toward highly demanding environmental challenges. Challenge stressors are "work-related demands or circumstances that, although potentially stressful, have associated potential gains for individuals" (Cavanaugh et al., 2000, p. 68), whereas hindering stressors do not have this potential for gain. We expect that proactive personality acts as a personal resource in secondary appraisal which will lead to higher challenge and lower hinderance appraisal.

#### Methodology

Hypotheses were tested in a controlled setting using scenarios manipulating the type of stressor (time pressure, role ambiguity, none) in an online sample using snowball recruitment.

#### Results

Results of a pilot study (N = 72) showed the stressor scenarios to be equivalent in terms of level of stressor and situational characteristics. Results of the main study (N = 297) showed that role ambiguity was appraised as more hindering overall (M = 2.90, SD = 0.87) than time pressure (M = 1.98, SD = 0.75) and the control condition (M = 1.99, SD = 0.77). In contrast to expectations, the challenge condition was not appraised as more challenging (M = 3.74, SD = 0.80) compared to the other conditions (M = 3.71, SD = 0.81 for control condition; M = 3.53, SD = 0.80 for role ambiguity). Proactive personality enhances the appraisal of time pressure as challenging, as expected.

#### Limitations

Although carefully constructed, the reliance on scenarios limits the external validity of findings.

#### Conclusions

The study supports the view that proactive personality is a personal resource that shapes the experience of stressful working conditions. Our suggest appraisal as mechanism how proactive individuals experience higher wellbeing. As practical implication, proactive personality which might be integrated more systematically in selection and recruitment efforts.

#### Relevance to the Congress Theme

Proactive individuals create changes in the work setting, and they might be better able to deal with future work stressors.

*Keywords: challenge appraisal, time pressure, proactive personality*

### Paper 3

#### **Two Sides of the Same Coin: Motivating and Demotivating Mediation Paths of Time Pressure and Their Relationship With Strain**

Anja Baethge, Medical School Hamburg, Germany; Yannick Frontzkowski, Helmut-Schmidt-University, Hamburg, Germany; Ann-Kristin Menhardt, University of Bamberg, Germany; Miriam Schilbach, Leibniz Institute for Resilience Research, Mainz, Germany

#### Research Goals

Time pressure is commonly categorized as a challenge stressor. Accordingly, time pressure should positively relate to strain as well as motivational outcomes. However, empirical research yields heterogeneous findings regarding the motivational effect of time pressure and studies reported positive, non-significant or even negative relationships between time pressure and for example, work engagement. Previous research mostly gave quantitative explanations (i.e., referring to the level of time pressure or the duration of exposure) for these heterogeneous findings. What remains underexamined is a qualitative explanation of why time pressure (de)motivates employees. We want to take a first step in clarifying this question and offer two contradicting mediators, which may explain why time pressure consistently and positively relates to strain and simultaneously exerts motivating and demotivating effects.

#### Theoretical Background

Drawing on the challenge-hindrance framework, we introduce two explanatory mechanisms (i.e., a loss of time control and an increase of meaning in work) which may explain both, the consistent findings related to strain (here operationalized as irritation) as well as the diverse findings related to work engagement.

#### Methodology

In a prospective semi-longitudinal study with a two-week time lag we examined the mediating effect of time control and meaning between time pressure and work engagement on the one side and irritation (as a typical short/medium-term) strain indicator on the other side. The final sample consisted of 232 participants. To test our hypotheses, we used structured equation modelling.

#### Results

Time pressure negatively and positively related to work engagement through loss of time control and meaning in work, respectively. Further, only loss of time control mediated the time pressure-irritation relationship. Time pressure positively related to meaning in work, yet meaning in work was unrelated to employees' irritation.

#### Limitations

Data collection took place during the COVID-19 pandemic. Even though the first Lockdown in Germany had already phased out there still were social restrictions and companies were called to enable homebased telework. Thus, our study is mainly based on a sample working at home and this situation was new for most participants. We do not know whether our results can be generalized to quitter times.

#### Conclusions

Results demonstrate that time pressure likely acts motivating and demotivating at the same time, only through different paths. Hence, our study provides an explanation for the heterogeneous findings regarding the relationship between time pressure and work engagement which targets qualitative mechanisms.

#### Relevance to the Congress Theme

Time pressure and work engagement are known as very sensitive variables in situations of change (in situations of change usually time pressure increases, but employers wish to prevent a decrease in work engagement) and thus it is important to better understand their relationship.

*Keywords: time pressure, antagonistic mediation paths*

## Paper 4

### **When Interruptions by Work-Related Online Messages Can Be Functional, Albeit Stressful: The Role of Goal Autonomy and Organizational Goal Commitment**

Marcel Kern, Ruhr University Bochum, Germany; Dieter Zapf, Goethe University Frankfurt, Germany; Sandra Ohly, University of Kassel, Germany

#### Research Goals

We challenge the view that interruptions by work-related online messages are exclusively detrimental. Consistent with the challenge-hindrane stressor framework, we propose that interruptions involve both challenging and hindering aspects, and thus can exert positive effects on performance-related variables, while being positively associated with strain. We hypothesize that these interruptions may promote goal achievement and prosocial success, but only or especially when employees have high goal autonomy and organizational goal commitment.

#### Theoretical Background

Following the challenge-hindrane stressor concept, work interruptions are usually considered a hindrance stressor because they hamper the progress of work tasks (Jett & George, 2003). Research has shown that interruptions lead to a loss of concentration, as they often come at unexpected times (Mark et al., 2012). Employees are required to activate compensatory effort to process the incoming information and then resume original task performance. Thus, it is hardly surprising that research has consistently supported the strain effects of interruptions (Baethge & Rigotti, 2013). However, this view ignores the fact that interruptions by online messages may relate to important work objectives beyond a specific task. Employees need to achieve various primary and secondary goals at the same time at work and interruptions by online messages may be linked to one of these goals, e.g., a missing important information for an unfinished work task is provided. Moreover, interruptions by online messages may also serve team-related social goals (typically a secondary goal). Therefore, we believe that interruptions by online messages may be positively associated with goal accomplishment and prosocial success, but these effects should be highly dependent on one's control over goals. First, employees must have high goal autonomy to adequately respond to the interruptions. Otherwise, there will be no or negative effects on goal achievement and on prosocial success. Second, commitment to organizational goals should be high, otherwise employees will place less value on achieving the goals and thus will not benefit from coping with the interruptions, as postulated for challenge stressors. For exhaustion, we do not expect moderation effects because interruptions tax individual resources regardless.

#### Methodology

We conducted a ten-day diary study. Goal autonomy (Mulder et al., 2015) and organizational goal commitment (Brunstein, 1995) were each assessed with three items in a general survey. In an after-work survey at 5:00 p.m., we measured perceived interruptions using the same items as Sonnentag et al. (2016). At 8:30 p.m., goal achievement and prosocial success were assessed with an adapted version of the Grebner et al. (2010) scales and exhaustion with three items from the MBI (Büssing & Glaser, 1998). A total of 36 individuals reporting 306 days participated in the study. Hypotheses were tested using multilevel structural equation modelling. Cross-level moderations were analysed with the LMS method (Klein & Moosbrugger, 2000, see also Preacher et al., 2016).

## Results

Results showed that employees experienced more prosocial success on days when they reported more interruptions. However, there was no significant relationship with goal achievement. As expected, interruptions were positively associated with exhaustion, confirming that they are stressful. Significant moderations were found for the relationship between interruptions and prosocial success by both goal autonomy and goal commitment. Contrary to expectations, however, we found no moderation effects for goal achievement. On an exploratory basis, we also tested moderations for strain and found that the positive relationship was stronger when goal autonomy and goal commitment were high.

## Limitations

Despite the multilevel design with two daily surveys, we were unable to test causality. In addition, all variables were assessed using self-reports, which is known to artificially amplify relationships. However, cross-level moderation effects cannot be attributed to common-method bias (Siemens et al., 2010). Finally, the sample size so far is somewhat smaller than would be desirable. However, despite the low statistical power, we were able to demonstrate significant results, as expected.

## Conclusions

Apart from their straining effect, online messages interruptions can be associated with gains, as postulated for challenge stressors. However, these gains are dependent on access to resources, as shown by the moderating effects of goal autonomy.

## Relevance to the Congress Theme

Information and communication technology messaging interruptions are becoming more common, as an increasing number of employees use mobile devices for work. Therefore, we need to know more about their functional use while preventing their negative effects.

*Keywords: work interruptions, goal accomplishment, challenge stressors*

## Symposium S048

### Interpersonal Emotion Regulation in Leadership and Teamwork

Cristian Vasquez, University of Sheffield

science

What will be covered and why (including the contribution of any discussant)

Interpersonal emotion regulation (IER) has been defined as the deliberate process of attempting to influence someone else's feelings (Niven, 2017). Although the topic of IER has only been introduced into organizational literature in around the past fifteen years (Niven et al., 2009), there is a good amount of empirical evidence showing that IER is an essential predictor of work-related outcomes, such as employees' social relationships, customer service satisfaction, and employee well-being (Troth et al., 2018). Concerning leadership and teamwork, prior empirical studies have shown that, for example, leaders who use IER build a more robust social exchange, trust and collaborative behaviour (Little et al., 2016; Madrid et al., 2018), and leaders' prosocial or egocentric motives to regulate followers' emotions also play a role in explaining leader effectiveness (Vasquez et al., 2021). However, although the existing evidence on IER indicates the relevance of this process to organizational life, several aspects of this phenomenon regarding leadership and teamwork remain obscured. For instance, we currently know little about the effects of leader IER on the compliance of their followers and on specific team processes, how team members appraise their leader's efforts to manage their feelings, or how team members' attempts to influence each other's emotions affect teamwork.

This symposium presents a collection of advanced studies seeking to understand the function of IER in leadership and teamwork. First, Naughton and colleagues explore the role of IER by distal leaders in crisis communications during the COVID-19 pandemic. Three studies (N=1197) show that distal leader affect-improving IER but not affect-worsening IER strategies influences citizens' intentions to comply with public health orders via perceived leader trustworthiness. The second and third presentations apply leader IER to teamwork. Madrid and Vasquez's results, based on a field multi-source design (N = 759 employees and 149 teams), show that leader affect-improving and -worsening IER strategies were positive and negatively related to team psychological safety, respectively, which in turn, was positively associated with team proactivity. Also in a team setting, the experimental study of Niven and colleagues seeks to shed light on the role of leader group prototypicality in shaping the impact of their IER behaviour, by influencing how team members appraise the motives of the leader. The final presentation also focuses on team members, but regarding their behaviours to regulate other members' emotions. Specifically, Vasquez and colleagues' results, based on a sample of 309 complete teams (1750 members), show that the relationship between team-level antecedent IER strategies and team relationship conflict depends on the level of disagreement between members (within-team IER variation), which in turn is associated with team performance.

Relevance to the Congress Theme

Leadership and teamwork are central topics regarding the changing world of work. As these changes occur, we need to understand better the contextual, social and interpersonal dynamics underlying these concepts. This symposium contributes to this direction by showing that IER used by leaders and team members can affect the collective behaviour of people (e.g., in terms of citizens or team members) by affecting social processes (e.g., public compliance, team psychological safety and interpersonal conflict). Furthermore, we show the role of critical contextual factors, e.g., leader

group prototypicality, in shaping the effects of IER. We strongly believe that having a nuanced knowledge of emotions' role and interpersonal regulation can be essential to understanding new leadership and teamwork configurations in this changing world.

#### Research/Practical Implications and Overall conclusions

The studies included in this symposium contribute to the interpersonal emotion regulation literature applied to organizations in various ways. First, they highlight the importance of IER strategies for leaders in motivating behavioral intentions in crisis communications. Second, they extend the team processes, emergent states and outcomes known to be affected by IER. Third, they provide insight into the contextual factors that shape IER. In practical terms, IER strategies represent behaviours that can be potentially modified by learning and training. Therefore, organizations and practitioners should consider IER as another intervention route to foster leader and team effectiveness. We trust that the work and discussion generated in this symposium will contribute to the emergent research on interpersonal emotion regulation at work.

*Keywords: Interpersonal emotion regulation, Leadership, Teamwork*

## Paper 1

### Investigating the role of Leader Interpersonal Emotion Regulation during a Global Pandemic

Bernadette Naughton, Technological University of the Shannon: Midlands Midwest; Finian Buckley, Dublin City University; Lisa van der Werff, Dublin City University; Deirdre O'Shea, University of Limerick

#### Research goals and why the work was worth doing

During crises like the COVID-19 pandemic, political leaders needed to influence citizens to comply with public health measures and restrictions. These health measures (e.g., physical distancing, staying at home) had substantial negative effects on individuals' lives and thus were sometimes met with defensive, non-cooperative responses. To influence citizens' compliance with public health guidance and nationally imposed restrictions, political leaders needed to effectively motivate them through their public communications. We argue that whilst negative emotions may have discouraged citizens from deviating from public health restrictions, other factors such as citizens' trust in political leaders played a role as well. We investigated whether the interpersonal emotion regulation (IER) strategies used by government leaders in ministerial briefings impacted citizens' compliance intentions via either negative affect or perceived trustworthiness.

#### Design & Method

Across three studies based in Western Europe, we investigated the effectiveness of IER strategies in motivating compliance with COVID-19 national restrictions amongst citizens in real ministerial speeches.

#### Study 1 :

The first study experimentally manipulated exposure to a single IER strategy (either affect-improving or affect-worsening) used in a real ministerial briefing to investigate its influence on participants' perceptions of leaders' trustworthiness, negative affect, and compliance intentions during COVID-19. The first author content analysed a ministerial briefing from the Taoiseach (Prime Minister) of Ireland which was broadcast on 17 th March 2020, announcing intentions to 'lock-down' the country for the first time due to rising COVID-19 cases. The first author parsed this speech into audio clips of six IER strategies, using the taxonomy developed by Niven et al. (2009). The six IER strategies identified included five affect-improving strategies, of which two were examples of positive engagement strategies (problem-focused engagement and cognitive engagement), and three were relationship-oriented strategies (validation, valuing, and distracting). One affect-worsening strategy (fear) was used.

Participants were restricted to UK residents to reduce a priori opinions regarding the leader which may have influenced responses. Participants (n=622) recruited through Prolific were randomly assigned to one of six conditions reflecting each of the six IER strategies. They were instructed to listen to an edited audio recording prefaced by a generic introduction by the Taoiseach, contextualizing COVID-19 as a pandemic, followed by a clip with one of the six IER strategies used in the ministerial briefing. After listening to the clip, participants were asked to complete a survey capturing their affective reactions to the audio clip, perceptions of the trustworthiness of the leader, and their intention to comply with the COVID-19 restrictions as a result of the audio clip.

#### Study 2 :

Study 2 extended Study 1 by additionally examining the simultaneous influence of affect-improving versus affect-worsening strategies in real time. We conducted a real time survey of Irish citizens' reactions to a national ministerial briefing by the Taoiseach of Ireland announcing a further two-week extension of national COVID-19 restrictions. An invitation to participate was distributed via social network platforms, e-mail to university alumni listservs, and to those indicating they were Irish residents on Prolific (n=272). Directly after the broadcast ended, participants who had signed up for the study were sent a link to the survey via email and text message, in addition to posting the survey on Prolific.

Study 3 :

In study 3, we replicated our second study but with a different government leader and with citizens of a different country (the UK). In the same manner as study 2, we focused on the impact of a full ministerial briefing broadcast and participants perceptions of the IER strategies utilized in this briefing (n=303).

Results

We consistently found that a leader's affect-improving IER strategies increased compliance intentions via perceived trustworthiness but not via reduced negative affect. Affect-worsening IER strategies demonstrated either no effect or an indirect worsening effect on compliance intentions of citizens.

Limitations

This study was limited to two nations in Western Europe.

Conclusions - Research/ Practical Implications

Our findings highlight the importance of IER strategies in ministerial briefings and perceived trustworthiness of political leaders in motivating citizens to comply with public health restrictions during a pandemic. Our studies are among the first to investigate the impact of leader extrinsic IER strategies in a distal relationship in a crisis, and the key mechanisms through which leader IER can impact follower's behavioral intentions

Relevance to the Congress Theme

The ability of national leaders to influence compliance was a pressing issue over the last few years. Although these studies specifically examined the COVID pandemic, other crises (e.g., climate change) will require similar skills from national leaders to influence citizens to change their behavior. Thus, our study is relevant for the future also.

Relevant UN SDG

Goal 16 Peace, Justice, and Strong Institutions

*Keywords: Leader, Trust, Interpersonal emotion regulation*

## Paper 2

### Leader Interpersonal Emotion Regulation, Psychological Safety and Proactivity in Teams

Hector Madrid, Universidad Adolfo Ibáñez; Cristian Vasquez, University of Sheffield

#### Research goals and why the work was worth doing

Interpersonal emotion regulation (IER), namely, the strategies to elicit or change the emotional experience of interaction partners, has become a central research topic in recent years (Troth et al., 2018). Accordingly, various studies have shown that IER could benefit, or dampen, the sense of work-related well-being and job performance (Vasquez et al., 2020). Notwithstanding, most studies in this field have concentrated on the employee level of analysis, paying less attention to whether IER plays a role in collective situations, such as the case of teamwork (Madrid et al., 2019). This is a significant omission, considering that working in teams is common practice in today's organizations (Mathieu et al., 2019). Thus, in this study, we expand this body of knowledge by arguing and testing how leader IER is related to psychological safety and proactivity in teams.

#### Theoretical background

Niven et al.'s (2009) theoretical model proposes that IER strategies are classified into affect-improving or affect-worsening behaviors. In the first case, IER involves behaviors directed to produce positive feelings in interaction partners, for example, when discussing their positive characteristics or giving them helpful advice. In contrast, affect-worsening IER entails actions that make interaction partners experience negative feelings, such as when talking about their shortcomings or showing unfriendly toward them. We propose that when exerted by team leaders, these IER strategies should be related to team psychological safety, namely, a context described by team members' confidence in being themselves in the team environment (Edmondson, 1999). Leaders are a potent source of influence in the workplace (van Knippenberg & van Kleef, 2016), such that their motives, attitudes, goals, and behavior tend to shape team processes (Madrid et al., 2016). Based on this premise, leaders' affect-improving IER strategies would be positively related to team psychological safety because these behaviors signal interpersonal orientations that reinforce a sense of affiliation within teams. The opposite should apply to leader affect-worsening IER, which would be negatively related to team psychological safety. The latter, in turn, would be positively associated with team proactivity, which is defined as team members taking charge of making changes and improvements in the team environment (Harris & Kirkman, 2017; Parker & Collins, 2010). Team psychological safety should help express proactivity because it leads to embracing risk-taking (Frazier et al., 2017), which is necessary to challenge the teamwork status quo with new ways of doing things and face the possible resistance to change (Parker et al., 2010). Based on the above, two mediational processes are hypothesized: Leader affect-improving IER will be positively related to team proactivity by means of team psychological safety (H1), whereas leader affect-worsening emotion regulation will be negatively related to team proactivity through team psychological safety (H2).

#### Design & Methods

To test our hypotheses, we conducted a multisource survey study with a sample of teams of a bank organization. In this, team members provided information about the frequency of their leaders' IER behaviors and ratings of their team's psychological safety perceptions. In an independent survey, team leaders offered ratings of team-level proactive behavior within the team. Participants were 759 employees, part of 149 professional teams in the organization.

## Results

Structural equation modeling analysis supported the two mediation processes proposed. Leader affect-improving IER was positively related to team psychological safety, which in turn was positively associated with team proactivity. In contrast, leader affect-worsening IER was negatively related to psychological safety, which in turn was positively related to team proactivity.

## Limitations

The cross-sectional design leads to proposing and inferring causality between the variables in the model only in theoretical terms, and issues about common method variance, even controlled by using a multisource design, may be present in the model estimation.

## Conclusions - Research/ Practical Implications

This study expands the literature about IER in the workplace by showing that emotion regulation plays an important role in the context of leaders and teamwork. Practitioners should bear in mind that leader IER is another intervention route to foster team effectiveness.

## Relevance to the Congress Theme

In organizations, many transformations promising desirable outcomes occur in the social context of teams based on the active initiative of their members. Accordingly, our research provides meaningful knowledge of how to promote positive change in teams and organizations.

## Relevant UN SDGs

This research is relevant to promote team effectiveness and, therefore, work-related well-being.

*Keywords: Leadership, Interpersonal emotion regulation, Psychological safety*

### Paper 3

#### **Leader Interpersonal Emotion Regulation and Group Prototypicality: A Social Identity Perspective**

Karen Niven, University of Sheffield; David Holman, University of Manchester; Anna Topakas, University of Sheffield; Ashlea Troth, Griffith University

#### Research goals and why the work was worth doing

Leaders must manage the emotions of their team members to enhance group morale, instill motivation, calm anxieties that could distract from the team's work, and reduce simmering tensions. Hence it has been argued that effective leadership involves the deliberate influence of others' feelings (Troth et al., 2018), a process termed 'interpersonal emotion regulation' (Niven, 2017). Studies have shown that leaders' use of interpersonal emotion regulation is associated with high quality relationships with team members, team member well-being, and team citizenship and innovation behaviors (e.g., Little et al., 2016; Madrid et al., 2019; Vasquez et al., 2019).

While existing research identifies general patterns in terms of the impact of leader interpersonal emotion regulation, there has been little appreciation of whether context could shape how regulation is interpreted by team members. This omission is important because how regulation is appraised by others is likely to be the proximate driver of how effective interpersonal emotion regulation attempts are. The goal of this research is to shed light on a key set of socio-relational factors that shape the effects of leaders' attempts to manage the feelings of their team members, pertaining to leaders' group prototypicality.

#### Theoretical background

Our study draws on theory about the motives that drive interpersonal emotion regulation (Niven, 2016), in which a major distinction is posited between behaviors motivated by benefitting others ('prosocial') versus the person who enacted the behavior ('egoistic'). An important insight afforded by the nascent research on leader interpersonal emotion regulation is that whether leaders' motives are perceived by team members to be prosocial or egoistic is a key determinant of whether an attempt to influence others' feelings will have a positive or negative impact (Niven et al., 2019; Vasquez et al., 2021).

We further apply Hogg's (2001) social identity theory of leadership to understand how socio-relational factors influence team members' appraisals of their leader's motives. According to this theory, group prototypicality represents the extent to which a given individual is normative of the group as a whole. When a leader is highly group prototypical, group members will interpret their motives in positive terms (e.g., as serving the interests of the group), regardless of the nature of their behavior. For leaders with low group prototypicality, appraisals of their motives will conversely be dependent on the behavior itself (Platow & Van Knippenberg, 2001; Van Knippenberg & Van Knippenberg, 2005).

#### Design & Methods

Our study uses an experimental design, in which participants watch videos from an ostensible leader. Leader interpersonal emotion regulation behavior (affect-improving versus affect-worsening) and leader group prototypicality (high versus low) are manipulated using standardized text interspersed between the videos. Perceptions of the leader's motives, LMX and affect are captured

using validated scales. A task-based measure is used to capture effects on quality and persistence of performance.

#### Results expected

We will collect data by February 2023. We expect to observe an interaction between interpersonal emotion regulation behavior and leader group prototypicality. When leaders are low in group prototypicality, group members will appraise prosocial motives when leaders try to improve group emotions (e.g., using behaviors like praise, listening and positive comparisons) but egoistic motives when leaders try to worsen group feelings (e.g., using behaviors like criticism, ignoring and negative comparisons). Conversely, when leaders are high in group prototypicality, group members will appraise prosocial motives regardless of the leader's regulation behavior. In turn, appraisals of leader motives will have downstream consequences for leader-member relationships, group member affect and performance.

#### Limitations

Experimental research can lack in ecological validity. We will enhance the realism of our study using videos of a leader (rather than simply presenting participants with text) and by including a real performance task rather than relying on self-reported data.

#### Conclusions – research and/or practical implications

Greater insight into the contextual factors that shape leader interpersonal emotion regulation and how it is received by team members will provide a more nuanced understanding that is more readily applicable in practical terms for organizations and their leaders.

#### Relevance to congress theme

Organizational psychology is an applied discipline, but many of the insights we generate are decontextualized. We believe that the future of our discipline needs to take greater notice of the socio-relational factors that shape the processes we study, in order to be able to provide sound practical advice that allows us to change how people work for the better. The people best positioned to make a positive change for the future are leaders, and our research has implications for how they can adapt their actions in order to generate positive outcomes.

#### Relevant UN SDGs

Good health and wellbeing

*Keywords: Leadership, Interpersonal emotion regulation, Group prototypicality*

## Paper 4

### **Interpersonal Emotion Regulation and its Diversity in Teams: Understanding its Effect on Team Relationship Conflict and Team Performance**

Cristian Vasquez, University of Sheffield; Robin Martin & David Holman | University of Manchester

#### Research goals and why the work was worth doing

Interpersonal emotion regulation (i.e., the intentional regulation of others' affect) has been recognized as central to understanding affect dynamics in organizations (Troth et al., 2018). In the work team context, research on interpersonal emotion regulation (IER) has largely focused on its use by leaders to manage followers' emotions (Little et al., 2016; Vasquez et al., 2020). However, no previous study has investigated IER among team members (Marks, Mathieu, Zaccaro, 2001). As each member may engage in particular strategies to regulate colleagues' emotions, it is likely that they are heterogeneously distributed within a team. Thus, the main objective of this study is to explore IER diversity in teams and its effects on team relationship conflict and performance.

#### Theoretical background

Research on team diversity has shown the importance of conceptualizing team member variation to have a more comprehensive understanding of the impact of team phenomena on team outcomes (van Knippenberg and Mell, 2016). Grounded on the work of DeRue et al. (2010) on distributions of team self-efficacy, this research describes four general forms of team-diversity IER (i.e. shared, minority belief, bimodal, and fragmented). These team IER configurations represent different patterns of team-level agreement and disagreement which may impact the relationship of team IER and team conflict and performance.

In this study, we propose a moderated mediation model in which team IER interacts with the team IER configurations. Specifically, each configuration will show a differential effect on conflict when the average team IER is high versus low. In turn, these effects on conflict are translated into team performance. Specifically, based on Group Identity Theory (Tanis & Postmes, 2005), we argued that this effect might be particularly noticeable in the shared team IER configuration (e.g., high-level within-team agreement). When team members share their vision regarding the team, a unique social identity for the whole team is very likely (Lewis, 2011). Thus, the negative relationship between team IER and conflict will be stronger in the shared team IER configuration than in teams with non-uniform distributions, and this effect on team relationship conflict will, in turn, impact the level of team performance.

#### Design & Methods

The sample of 1,750 employees in 309 complete teams (i.e., teams with a hundred-percent response rate), of a multinational Latin American financial company. The average team size was 5.67 members (SD = 3.30). Using a field cross-sectional design, data were collected from two different sources. Team members reported the extent to which they engaged in IER within their teams and the perceived levels of relationship conflict. One week after, team leaders reported the levels of team performance.

#### Results

Results supported five Team IER configurations: shared, bimodal, solo-status low, solo-status-high, and two fragmented distributions. Moderated mediation results partially support the expected effects (using difference tests Edwards and Lambert, 2007) by showing that the mediation of team relationship conflict in the relationship between team IER and team performance was stronger in teams with the shared team IER configuration compared to the bimodal team IER configuration, and not significantly different when compared with the other non-uniform configurations (e.g., solo-status low, solo-status high, and fragmented team IER configurations).

#### Limitations

Although we use a multi-source strategy in which leaders provide measures of team performance, this research is limited by the use of cross-sectional design. Thus, it is not possible to infer causality between the variables.

#### Conclusions - Research/ Practical Implications

This contributes to having a more comprehensive understanding of the role of IER in teams, complementing the findings of prior research on leader IER (e.g., Little et al., 2016). In addition, this research contributes to the diversity literature by providing an empirical examination of diversity in a team. In practical terms, team member strategies to regulate colleagues' emotions represent behaviors that can be potentially modified by learning and training. Therefore, organizations must foster them.

#### Relevance to congress theme

Current transformations in work include changes in teamwork. This research provides meaningful knowledge of how to promote positive team dynamics by showing the effect of team member affect management and the role of team member diversity. This knowledge can be applied to new forms of teamwork, for example, hybrid and virtual teams.

#### Relevant UN SDGs

Good health and wellbeing

*Keywords: Interpersonal emotion regulation, Teamwork, Team conflict*

## Symposium S049

### Leadership and employee well-being

Roy Sijbom & Hanneke Grutterink | University of Amsterdam

science

#### 1. What will be covered and why

Leader behavior has a significant impact on the well-being of their employees (e.g., Montano et al., 2017). Yet, until recently the leadership literature has largely neglected research on employee health and well-being in favor of employee performance (Grant et al., 2007). This is surprising, because leaders play an important role in shaping the work environment and their behaviors are often associated with their subordinates' well-being (Arnold, 2017). The aim of this symposium is to bring together state-of-the-art insights on the role that leaders fulfil in promoting and maintaining employee well-being in the workplace.

Recent reviews and meta-analyses have identified a number of shortcomings in existing knowledge on leadership and employee well-being that limits our current understanding (Inceoglu et al., 2018; Montano et al., 2017). First, studies have predominantly focused on hedonic (usually job satisfaction), rather than eudaimonic (e.g., work engagement, thriving) and negative forms of well-being (e.g., stress, burn-out and exhaustion). Second, even though positive and negative forms of leadership differentially impact followers' well-being, we know relatively little about effects of negative forms of leadership (e.g., destructive, passive, abusive, overly critical). Third, the mechanisms underlying the relationship between specific leadership behaviors and employee well-being, as well as their boundary conditions have been underexamined. Finally, even though leaders affect employees at multiple levels of analysis (cf. Mawritz et al. 2012), few authors adopt a multi-level perspective. This symposium addresses these challenges by bringing together five studies investigating the role of leaders when it comes to creating a 'healthy' work environment.

#### 2. Relevance to the Congress Theme

This symposium fits seamlessly within the theme of "Good health and wellbeing", one of the UN SDGs that EAWOP wishes to promote. It is vital to gain more insights into how leaders at all organizational levels can contribute to a healthy workforce. Together, the five studies presented in our symposium provide an integrative overview of current research on this topic and spark further research on the role of leadership in maintaining and developing employee health and well-being as stipulated in the UN SDGs.

#### 3. Research/Practical Implications

In the first presentation, Jan Pletzer from the Erasmus University Rotterdam will present a meta-analysis on the relations between constructive and destructive leadership and follower well-being. In the second presentation, Svenja Sievers from Kiel University will contrast the causal effects of several forms of constructive leadership (charismatic, considerate, and directive) and mildly destructive (hypercritical or passive) leadership on follower well-being - using self-report, physiological measurements and emotion recognition software. In the third presentation, Rita Berger from Universitat de Barcelona will explain the mechanisms through which positive and negative leadership affect positive and negative forms of well-being. In the fourth presentation, Ilke Inceoglu from University of Exeter Business School will focus on critical leadership incidents and how these incidents are associated with followers' well-being. Finally, Roy Sijbom from the University of

Amsterdam will present a multi-level study about participative leadership and team commitment as psychological resources for employee well-being.

This symposium provides insights on the relationships between different types of leadership (constructive and destructive leadership styles/behaviors) and different well-being outcomes (i.e., work engagement, burnout, physiological distress and emotional reactions). Furthermore, this symposium includes a broad range of complementary methodologies each with its own strengths (meta-analysis, critical incident technique, lab experiment, and a multi-level field study). Finally, this symposium advances insight in the underlying mechanisms (i.e., including motivational, social-cognitive, relational and identification-related) and boundary conditions (i.e. team commitment, ambiguous and uncertain working conditions, group development, economic threat) of the relation between leader behavior and employee well-being.

#### 4. Overall conclusions

Together these five studies signal the importance of leadership for employee health and well-being. Whereas active, positive forms of leadership such as constructive and participative leadership may function as psychological resources for well-being, work engagement and job satisfaction and reduce stress and burnout among employees, passive and negative forms of leadership are harmful for well-being. This symposium extends and integrates knowledge about these effects and offers insights into the mechanisms underlying the relationship between specific leadership behaviors and employee well-being, as well as their boundary conditions.

*Keywords: leadership behavior; employee health and well-being;*

## Paper 1

### The Relations of Constructive and Destructive Leadership with Follower Work Engagement and Burnout: A Pre-Registered Meta-Analysis

Jan Pletzer, Arnold Bakker & Kimberley Breevaart | Erasmus University Rotterdam

Research goals and theoretical background.

In organizational hierarchies, leaders often hold power over their followers (Krackhardt, 1990), meaning that followers are reliant on their leaders and leaders are able to enforce their will upon followers (Sturm & Antonakis, 2015). As such, leaders play a critical role in followers' work-related wellbeing (Skakon et al., 2010) and performance at work (Montano et al., 2017). One of the main aims of the current meta-analysis is to provide structure to the overwhelming leadership literature (Yukl, 2013) by testing the relations between leadership and employee wellbeing through the lens of Job Demands-Resources (JD-R) theory (Crawford et al., 2010; Demerouti et al., 2001). That is, we examine the motivational effects of constructive leadership and the health-impairing effects of destructive leadership on followers' work engagement and burnout, arguing that constructive leadership acts as a valuable job resource and destructive leadership as a hindrance job demand to followers. We also examine whether leadership relates to followers' performance via increased work engagement and decreased burnout, and provide meta-analytic effect size estimates for individual leadership styles as well as for the subcomponents of work engagement and burnout.

Methodology.

We conducted a systematic and pre-registered meta-analysis on several scientific databases, and relied on expert ratings to categorize leadership styles as either constructive or destructive. Data were coded by two individuals, resulting in agreement exceeding 95%. All discrepancies were resolved after revisiting the respective article and discussing the coding.

Results.

Based on more than 400 included studies, we find that constructive leadership behaviors relate positively to followers' work engagement ( $r = .446$ ,  $k = 253$ ) and negatively to followers' burnout ( $r = -.289$ ,  $k = 179$ ), whereas destructive leadership behaviors relate negatively to followers' work engagement ( $r = -.241$ ,  $k = 21$ ) and positively to followers' burnout ( $r = .364$ ,  $k = 62$ ). These findings demonstrate that constructive leadership behaviors have a motivating effect on followers, whereas destructive leadership behaviors have a health-impairing effect on followers. They also demonstrate that constructive leadership relates more strongly to followers' work engagement and destructive leadership more strongly to followers' burnout, both compared to the other leadership behavior and compared to the other indicator of followers' well-being. Relations were generally similar across individual constructive or destructive leadership styles, and also across the subcomponents of work engagement (i.e., vigor, dedication, and absorption). However, constructive leadership exhibited differential relations with the burnout sub-components cynicism ( $r = -.299$ ), emotional exhaustion ( $r = -.253$ ), and reduced accomplishment ( $r = -.202$ ), and destructive leadership correlated most strongly with emotional exhaustion ( $r = .357$ ), but significantly weaker with cynicism ( $r = .197$ ) and did not even correlate significantly with reduced accomplishment ( $r = .040$ ). We furthermore demonstrate that followers' work engagement partially mediates the relation of both constructive and destructive leadership with followers' job performance, whereas followers' burnout only mediates the relation of constructive, but not of destructive leadership with followers' job performance. Evidence for the

mediating role of followers' burnout is therefore substantially weaker than evidence for the mediating effect of followers' work engagement, and this finding holds across different performance outcomes (e.g., task performance, counterproductive work behavior, creativity and innovation).

Limitations.

Our findings need to be interpreted in light of the limitation that all but two of the included studies were based on correlational study designs, although we only find inconsistent evidence for the idea that effect sizes are stronger in cross-sectional compared to longitudinal or diary studies. Future research should nevertheless rely on more rigorous experimental control to alleviate endogeneity concerns. Further theoretical and practical implications as well as limitations and ideas for future research will be discussed.

Conclusion and Practical implications.

Taken together, the current results provide meta-analytic evidence for most of the core tenets of the JD-R theory in a leadership context and provide one of the first theoretically-driven overviews of the overwhelming literature on leadership in relation to follower's well-being. Organizations trying to foster employee work engagement could invest in leadership trainings based on constructive leadership behaviors, whereas organizations interested in reducing burnout and stress levels among followers should primarily focus on reducing the occurrence of destructive leadership behaviors.

Relevance to the Congress Theme.

Leadership plays a crucial role in shaping the present and future world of work, especially by relating to followers' motivation and well-being.

*Keywords: Leadership; work engagement; burnout*

## Paper 2

### **How do leadership styles influence employee wellbeing under uncertain, ambiguous conditions in group setting?**

Rita Berger & Paula Zamora | University of Barcelona

#### Research goals/why the work was worth doing

Due to volatility, uncertainty, complexity, and ambiguity in today's work environment, employees face increasing demands: new situations, unclarities and ambiguities that affect wellbeing (Reuveni & Vashdi, 2015). For achieving innovation organizations promote teamwork (Ramírez Heller et al., 2014) that can be a challenge leading to stress (Navarro et al., 2011) or be a resource for wellbeing (Di Fabio, 2017) and performance (Leuteritz et al., 2017). Leadership influences employees' wellbeing (Arnold, 2017), specifically under ambiguous conditions (Berger et al., 2019). Reviews on leadership and wellbeing call for analyzing complex mechanisms for positive and negative leadership, demands and resources, positive and negative wellbeing (Inceoglu et al., 2018). The study's goal, using the Job-Demands Resources model (JD-R) (Bakker & Demerouti, 2007), is to analyze under ambiguous and uncertain working conditions and group setting how positive and negative leadership influence wellbeing. Combining the diverse mediating working conditions uncertainty and ambiguity based on a cognitive-motivational approach and group development (GD) based on a relational and identification approach, we add information on how positive and less-researched negative leadership style increase or decrease demands and resources and wellbeing. We contribute by first, increasing the combination of mediator types including motivational, social-cognitive, relational, and identification-related mediators of leadership style and wellbeing when analyzing the working conditions, role ambiguity, unclear goals, new situations and GD. Secondly, we increase information on the seldomly analyzed identification-related mediator GD. Thirdly, we add knowledge on group level mediators that is nearly not analyzed (Inceoglu et al., 2018). Finally, using a positive and a scare researched negative leadership style (Barling & Frone, 2017) in the same model we contrast leaders' behavior on wellbeing.

#### Theoretical background

Using the JD-R model we combine demands and resources and examine their effect on employee wellbeing. We integrate leadership as a predictor affecting demands and resources (Schaufeli, 2015). Based on social environment model (Katz & Kahn, 1978), leaders shape employees' social environment, their perception of working conditions and their identification and relation with a team (Ashford et al., 2016) which can positively or negatively impact in followers' wellbeing. We use transformational (TFL) and the contrasting passive-avoidant leadership (PAL) (Hetland et al., 2011) of the Full Range Leadership model (Bass, 1985). The positive TFL was found to provide individual and team resources and to reduce demands (Diebig et al., 2016; Hentrich et al., 2017). Increased resources such as GD can mediate the relationship between TFL and positive outcomes such as team effectiveness (Leuteritz et al., 2017) and increase wellbeing on individual (Arnold, 2017; Inceoglu et al., 2018) and group level (Wang et al., 2011). The negative PAL is characterized by avoiding decisions (Harold & Holtz, 2015) and not providing resources (Chênevert et al., 2013). PAL is associated with perceptions of unclear guidelines (Hetland et al., 2011), creating mediators such as uncertainty and ambiguity (Skogstad et al., 2014) which as increased job demands might impair employees' wellbeing (Barling & Frone, 2017) and reduce team performance (Boies et al., 2010). Since negative forms of wellbeing have been less explored (Inceoglu et al., 2018), we analyze anxiety, a key indicator of

psychological wellbeing in occupational stress research (Nielsen et al., 2019), that previously showed a negative association with TFL and a positive one with PAL, both mediated by role ambiguity (Berger et al., 2019). Building on the JD-R we study how current job demands (new situations, unclarity of goals, role ambiguity) and team resources (GD) mediate the relationship between leadership styles (TFL, PAL) and positive and negative outcomes (team effectiveness, anxiety).

### Methodology

An online survey collected data of 493 knowledge workers on TFL, PAL, new situations, unclarity of goals, role ambiguity, GD, anxiety, and team effectiveness. A multiple mediation model is proposed and tested through structural equation modelling using MPlus.

### Results

The relations between TFL and PAL, anxiety and team effectiveness are partially mediated by unclear goals, role ambiguity, new situations, and GD.

### Limitations

Mainly the cross-sectional data with one single questionnaire not allowing to interpret causal chains of relationships.

### Conclusions

Results confirm our proposed model and extend the comprehension of the complex mechanisms between positive and negative leadership, employee wellbeing and team effectiveness. TFL reduces the analyzed demands and resulting anxiety and increases the resource GD and finally team effectiveness. PAL indicates the contrary by increasing demanding, unclear conditions and decreasing wellbeing and team effectiveness.

### Relevance to the Congress Theme

These results can be used for leadership and team training to reduce unclear, ambiguous demands and to develop group resources for wellbeing and effectiveness.

*Keywords: Leadership, wellbeing, Job demands-resources model*

### Paper 3

#### **Participative leadership as a multilevel resource for employee well-being: A cross-level examination**

Roy Sijbom & Hanneke Grutterink | University of Amsterdam

##### Research goals and why the work was worth doing

Accumulative evidence suggests that participative leadership behaviors are beneficial for employee well-being. Yet, two aspects have received little attention, with the risk of painting an incomplete and oversimplified picture. First, the influence of participative leadership on employee well-being has been primarily examined from an individual employee's perspective without taking the fundamental multilevel nature of participative leadership into account. We argue that beyond individual-level (within-group) differences in participative leadership perceptions, also variability between groups emerge over time. We refer to the latter as shared participative leadership perceptions - i.e. the average degree to which employees within a group perceive their direct leaders engage in participative leadership behaviors. Our study examines both individual-level participative leadership perceptions and shared participative leadership perceptions, to fully grasp its relationship with employees' well-being (i.e., job satisfaction and burnout). Second, group-level characteristics increasingly shape employees' work context. Accordingly, we examine workgroup commitment as a contextual characteristic that may function as a substitute for participative leadership in its relationship with employee well-being.

##### Theoretical background

Participative leadership is defined as joint decision-making or at least shared influence in decision-making by superiors and their employees. Drawing on conservation of resources theory and in line with earlier research, we suggest that participative leadership may function as a social resource for employees, thereby enhancing their well-being. Besides being a resource at the individual-level, we argue that participative leadership may also form a group-level resource by establishing a group norm that input of followers is appreciated, and that sharing information is psychologically safe. We propose that a groups' shared participative leadership perceptions increase followers' well-being beyond individual perceptions of participative leadership. Additionally, based on substitutes for leadership theory, we expect that workgroup commitment might moderate the relationship between individual perceptions of participative leadership and employee well-being, such that participative leadership will only add to employee well-being in groups with low levels of workgroup commitment.

##### Methodology

We tested our ideas in two survey studies with measurements spaced 3 months apart to minimize potential common method effects. Study 1 consisted of 155 employees of 48 workgroups. Study 2 consisted of 201 employees of 53 workgroups. In both studies, we tested the main effects of participative leadership (T1) (i.e., individual's perceptions of participative leadership (Level-1) and shared perceptions of participative leadership (Level-2)) on employee well-being (T2). Moreover, we tested the cross-level interaction (i.e., individual's participative leadership perceptions (Level-1) x workgroup commitment (Level 2)) on employee well-being.

##### Results

Common statistical benchmarks (ICC[1]; ICC[2] and  $r_{wg}$ ) showed that aggregation of individual participative leadership perceptions to shared participative leadership perceptions was empirically justified. Moreover, the important amount of variance between and within workgroups, underlined the multi-level nature of participative leadership.

Our results indicated significant relationships in the predicted directions between individuals' participative leadership perceptions (Level-1) and job satisfaction (Study 1:  $\gamma_{10} = .23$ ,  $p = .041$ ; Study 2:  $\gamma_{10} = .40$ ,  $p < .001$ ) and burnout (Study 1:  $\gamma_{10} = -.20$ ,  $p = .063$ ; Study 2:  $\gamma_{10} = -.32$ ,  $p < .001$ ). Furthermore, results showed significant positive relationships between shared participative leadership perceptions (Level-2) and both job satisfaction (Study 1:  $\gamma_{01} = .65$ ,  $p < .001$ ; Study 2:  $\gamma_{01} = .44$ ,  $p = .004$ ) and burnout (Study 1:  $\gamma_{01} = -.46$ ,  $p = .004$ ; Study 2:  $\gamma_{01} = -.39$ ,  $p = .012$ ). Finally, in both studies we showed that the interaction between individuals' participative leadership perceptions and workgroup commitment (Level 1 x Level 2) was significant and in line with our predictions for both job satisfaction and burnout.

#### Limitations

We used employee self-report measures. Individual-level participative leadership–employee well-being relationships are likely to be susceptible to mono-method bias and inflated correlations. However, this is less likely for cross-level main and interaction effects.

#### Conclusions and implications

First, our findings suggest that when it comes to employee well-being, using participative leadership behaviors is beneficial. However, in some situations, for example when workgroup commitment is relatively high, participative leadership behaviors are less beneficial compared to workgroups with low levels of commitment. Whereas organizations mainly divert to individual coaching or development trajectories to improve employee well-being, our findings point to alternative fruitful intervention routes such as team building or leadership development programs.

#### Relevance to the Congress Theme

Leadership plays a crucial role in shaping the present and future world of work, especially by relating to followers' motivation and well-being. As suitable leader behaviors can be trained (i.e., participative leadership behaviors), our research can make a lasting contribution to improving employee well-being (enhancing job satisfaction and reducing burnout) among employees.

#### Relevant UN SDGs

This research is relevant for the UN SDG Good health and wellbeing.

*Keywords: participative leadership; multilevel; employee well-being*

## Paper 4

### **The Causal Role of Leadership in Follower Well-Being: An Experimental Investigation**

Svenja Sievers, Kiel University; Silja Bellingrath, University of Duisburg-Essen; Diana Boer, University of Koblenz-Landau; Deanne Den Hartog, University of Amsterdam; Claudia Buengeler, Kiel University

Research goals and why the work was worth doing.

Diminished employee well-being has unfavorable consequences for organizations and employees alike, and the Covid-19 pandemic has further accelerated this trend. Leadership has been put forward as an important determinant of employee well-being, as it can be both a strain and a resource. Yet there is a lack of knowledge concerning causality because correlational designs dominate the body of research on leadership and employee well-being. In addition, research has been selective regarding which leader behaviors and well-being outcomes are studied. As a result, it remains in the dark what the effects of various forms of constructive and destructive leadership on various indicators of well-being are. Does leadership causally affect follower well-being, and is constructive or destructive leadership more impactful? And are psychological and physical well-being affected similarly by leadership? This experimental laboratory study serves to investigate the causal effect of leadership on follower well-being, considering constructive and destructive forms of leading and both psychological and physical well-being.

Theoretical background. Leadership is likely to influence well-being of followers. Leaders can shape the way employees experience their social environment and appraise their own capabilities and the opportunity to gain resources. Leadership also increases or reduces resources and demands directly. Finally, leadership may be seen as an affective event at work and thereby shape well-being. When leaders employ constructive leadership such as being considerate, offering guidance or communicating an inspiring vision, this should therefore increase follower well-being (e.g., by increasing resources). In contrast, when leaders are actively destructive or passive, this should lower employee well-being by adding demands and withdrawing resources as employees need to cope with these behaviors.

Design/ Methodology/ Approach/ Intervention.

In a fully controlled computer-mediated laboratory study, we will randomly assign 647 participants to either one out of five treatment groups or a control condition. The treatments involve a series of video sequences of an actor presenting constructive (charismatic, considerate, and directive) or mildly destructive (hypercritical or passive) leadership during a mentally challenging task. We assess follower well-being before and after the treatment using survey-based measures and combine this data with continuous physiological measurements throughout the experiment. Finally, we examine followers' emotional reactions by means of automatic emotion recognition software during the task.

Results obtained or expected (if not available, it must be made clear when they will be).

We expect differences among constructive and destructive leadership behaviors in their effect on various forms of well-being. Data will be collected between October and December 2022. Results will be available at the time of the conference.

Limitations.

The standardized and validated leadership manipulation ensures high internal validity but also constrains the generalizability of the results given the virtuality and lack of actual leader-follower interactions.

Conclusions – research and or practical implications.

This study adds to prior research by illuminating the causal effect of different leader behaviors and offering insights into mechanisms underlying employee well-being consequences of different leader behaviors. By examining the whole range of leadership from constructive via passive to active destructive leadership and looking into affective, cognitive, and physical well-being, our systematic account of causal leadership effects on well-being fills blind spots and has the potential to raise awareness among practitioners regarding the well-being consequences of leadership.

Relevance to the Congress Theme.

The findings help to design effective interventions such as organizational stress and health management and leader development interventions. Our research thereby contributes to the Delivery aspect of the EAWOP Congress Theme.

Relevant UN SDGs (United Nations Sustainable Development Goals).

Employee well-being is a key aspect of sustainability (SDG3). Our research sheds light on the bright and the dark side of leadership for employee well-being and thereby demonstrates that additional strategies for sustainable people management in organizations are needed. As suitable leader behaviors can be trained, our research can make a lasting contribution to reducing sick leave and increasing the competitiveness of organizations through increasing the well-being of their workforces.

*Keywords: leadership, psychological and physical well-being, causality*

## Symposium S050

### **Burnout Assessment Tool (BAT) advancements I: The dynamics within the BAT and its clinical validation**

Jari Hakanen, Finnish Institute of Occupational Health, Finland; Angelique de Rijk, Maastricht University, The Netherlands

science

What will be covered and why?

Recently, a new burnout questionnaire has been developed to support better understanding of burnout in research and practice: the Burnout Assessment Tool (BAT; Schaufeli, Desart & De Witte, 2020). According to the BAT, burnout is a syndrome that includes four core dimensions (exhaustion, mental distancing and cognitive and emotional impairment), as well as secondary symptoms (e.g., irritability, sleeping problems, and tension headaches). An international consortium is currently using the BAT as the instrument of choice to measure burnout.

This two-part symposium presents advancements regarding I) the dynamics within the BAT and its clinical validation and II) the dynamics of burnout measured with the BAT and using longitudinal designs. This first symposium on the Burnout Assessment Tool (BAT), a recently developed instrument to assess burnout comprises five presentations from different countries focusing on temporal dynamics and predictive and clinical validity of the BAT. First, De Beer and his colleagues tested temporal relationships between the four components of burnout. Second, Popescu and Maricutoiu similarly tested temporal relationships between burnout components including also the two secondary symptoms (psychological distress and somatic symptoms). Third, Kolachec and Osin using latent state-trait models investigated to what extent burnout is stable vs. time-varying. Fourth, de Rijk and van Iperen will compare predictive validity of BAT-23, BAT-12 and their subscales for future sickness absence duration. Fifth, Schaufeli and his colleagues studied, whether the BAT is able to discriminate between those suffering and not suffering from burnout and whether similar cut-off points can be used across three European countries.

Relevance to the Congress theme

Burnout with its heavy human and economic cost is a persistent challenge for organizations in the changing world of work. These studies support the view that the BAT can provide valuable scientific and practical tool to tackle the burnout problem and in its part help to build sustainable future of work.

Research/practical implications

Insights into the dynamics of burnout components and clinical validation of the BAT instrument support better monitoring practices and will promote intervention development for preventing burnout.

Overall conclusions

Recently developed new measure to study and identify burnout, both longer (23 items) and shorter (12 items) version of the BAT, has shown to be valid instrument. These studies take a step further and shed light on the dynamics how burnout may develop over time. Moreover, the present studies also suggest that the BAT can be highly valuable practical tool in identifying different levels of risks to burnout and in predicting future sickness absenteeism.

*Keywords: Burnout Assessment Tool (BAT); longitudinal designs; clinical validation*

## Paper 1

### **Investigating the causal dynamics between the core components of the Burnout Assessment Tool with longitudinal mediation models**

Leon T. De Beer, Norwegian University of Science and Technology, Norway; North-West University, South Africa; Wilmar B. Schaufeli, Utrecht University, The Netherlands; KU Leuven, Belgium; Hans De Witte, KU Leuven, Belgium

#### Research goals and why the work was worth doing

The research goal was to investigate the temporal relationships between the components of the Burnout Assessment Tool (BAT) to gain potential insights into how burnout may develop over time. This knowledge may broaden insight into the development of burnout in employees over time and may inform future intervention studies.

#### Theoretical background

Burnout is continued public health concern. The World Health Organisation has also not only recognised burnout as a work-related phenomenon but as a syndrome. The BAT is a novel instrument to identify burnout risks among employees (2020) but has already amassed a large body of psychometric literature which attests to its robust properties. Specifically, the BAT addresses many shortcomings of burnout instruments, especially the MBI which remains the gold standard. However, the longitudinal evidence for the BAT is still lacking and this study aims to contribute to not only the longitudinal evidence in the BAT project but also to the burnout literature by identifying causal pathways in which burnout may develop across time, in line with the suggested model of Schaufeli et al. (2020). Specifically, this model indicates that exhaustion leads to cognitive and emotional impairments and that this then leads to mental distance. Therefore, this study is not exploratory in nature, but follows the proposed theoretical process supposed by the BAT.

#### Methodology

For this study the 12-item version BAT-12 was used. Mplus 8.8 was used to test three cross-lagged panel models (CLPM) in a general sample of 1035 employees (Age M = 40.40 years; SD = 10.5; Male = 47.60%) in Belgium (Flanders). The first model was in line with our theoretical expectation that exhaustion time 1 will predict emotional and cognitive impairments at time 2 and that these will in turn predict mental distance at time 3. The second model was the reversed model, where mental distance time 1 predicts the two impairments at time two and then these exhaustion at time 3. Finally, a reciprocal model was tested where both models 1 and model 2 were combined into one. To consider the best-fitting model we considered the sample-size adjusted Bayesian information criterion (SABIC). We also used 10,000 bootstrap replications to estimate lower and upper 95% confidence intervals for the indirect effects.

#### Results

The results revealed that all three of the models had adequate fit to the data, that is: CFI and TLI > 0.90; RMSEA < 0.08. However, considering the SABIC values it was clear that the second (reversed) model was the worst model of the three (55327.48) and the first model the best-fitting model (55276.61). However, the third reciprocal model (55279.15) differed by only 2.54 points indicating that the evidence is positive against model 3 (>2) in favour of model 1 but not strong (>6).

In both model 1 and model 3 the stability paths over time were significant and positive, as would be expected. In line with our initial expectations, exhaustion time 1 significantly predicted both cognitive ( $\beta = 0.31$ ) and emotional impairment ( $\beta = 0.42$ ) at time 2, but only cognitive impairment time 2 (not emotional impairment time 2 [ $p = .220$ ]) significantly predicted mental distance at time 3 ( $\beta = 0.12$ ). Similarly, the indirect effects showed cognitive impairment time 2 to be a mediator between exhaustion time 1 and mental distance time 3 ( $\beta = 0.04$ , 95%CI[0.01, 0.08]), but this was not the case for emotional impairment time 2 ( $\beta = 0.03$ , 95%CI[-0.02, 0.07]). In the reciprocal model the only new insight was the significant path from cognitive impairment T2 to exhaustion T3, potentially revealing a feedback loop ( $\beta = 0.13$ ).

#### Limitations

Even though a strength of this study was its longitudinal nature, the sample was not representative of the Belgium population and therefore careless generalisation of the results are discouraged. However, the evidence from this data did support the underlying theoretical rationale.

#### Conclusions – research and or practical implications

The results of this study show that the dynamics of burnout development are in line with the expectation that exhaustion leads to cognitive and emotional impairment (types of exhaustion) and that cognitive impairment leads to mental distance. These results may have important implications for the identification and intervention in burnout research.

#### Relevance to the Congress Theme

Burnout remains an important aspect of employee well-being in the changing world of work.

#### Relevant UN SDGs

3 - Good health and well-being

8 - Decent work and economic growth

*Keywords: Burnout; Longitudinal; Prevention*

## Paper 2

### Temporal relationships between components the burnout syndrome: A longitudinal perspective in the case of university students

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**Research goals.** While most research studies approached burnout as a homogeneous phenomenon that needs to be explained by variables that are external to it, little is known regarding the temporal relationships between various burnout components.

**Theoretical background.** In the present contribution, we argue that burnout is a phenomenon that can be triggered by contextual factors (e.g., high workload, high time pressure), but it can be also self-sustained. Some burnout components contribute to the evolution of other burnout components, generating loss spirals that lead to increased burnout independent of the contextual factors. Early ideas suggested that burnout components develop in stages. For example, Leiter (1988) stated that emotional exhaustion leads to cynicism, which in turn leads to low personal accomplishment, while Lebowski (1989) argued that emotional exhaustion is the end-result of experiencing cynicism and low personal accomplishment. Although both perspectives assumed that some components of burnout contribute to the development of other burnout components, the empirical evidence to support such statements is still scarce.

In this contribution, we investigated the temporal relationships between burnout components, which we defined as the temporal relationships that can be found between burnout components (e.g., between exhaustion and mental distancing). Furthermore, to gain a more in-depth perspective, in the present contribution we used a new conceptualization of burnout (i.e., the perspective of the Burnout Assessment Tool – Schaufeli, Desart, & DeWitt, 2020). This conceptualization enlarges the operationalization of burnout, by investigating both primary burnout components (i.e., exhaustion, mental distancing, emotional impairment, cognitive impairment) and secondary burnout components (i.e., psychological distress and psychosomatic complaints).

**Methodology .** Participants were 354 undergraduate students (61.9% female, 57.60% studied Psychology and 42.40% studied Computer Sciences) that completed the BAT-23 weekly, for at least three out of five measurement moments (308 students had full datasets). We computed scores for the six BAT scales in the five measurement moments, and we analyzed the data using cross-lagged panel analysis. Missing data was assumed to be missing at random. Because we had four pairs of measurement moments that yielded slightly different estimations of similar relationships (e.g., the autoregressive relationships between exhaustion at different moments had different, albeit similar, values in different pairs of measurement moments). Therefore, we estimated an average parameter by constraining all relationships to be equal from one pair to another. This allowed us to focus our attention on significant relationships that were replicated in all four pairs of measurement moments.

**Results .** The overall cross-lagged panel model had adequate fit (CFI = .923, SRMR = .052), while the constrained model had similar values (CFI = .920, SRMR = .055). While controlling for the autoregressive effects we found numerous significant cross-lagged relationships. Some of the significant relationships were reciprocal: past exhaustion predicted future cognitive impairment ( $B = .082$ ,  $SE = .026$ ,  $p = .002$ ), and simultaneously past cognitive impairment predicted future exhaustion ( $B = .067$ ,  $SE = .023$ ,  $p = .004$ ). We found similar reciprocal relationships between exhaustion and psychosomatic complaints. Interestingly, mental distance had reciprocal relationships with the two

forms of impairment (i.e., cognitive impairment and emotional impairment) but did not have any significant cross-lagged relationship with exhaustion or with the secondary burnout components. Finally, we found unidirectional relationships between past exhaustion and future psychological distress ( $B = .098$ ,  $SE = .025$ ,  $p < .001$ ), and between past somatic complaints and both future forms of impairment.

**Limitations.** The present study has some limitations, as follows. Firstly, because the study investigated undergraduate students, its findings can be specific to this occupational group. Secondly, the study used short time lags between measurement moment (i.e., one week), and different relationships can be found by studies that use different time lags (e.g., months, or even years).

**Conclusions .** In conclusion, the present study found consistent evidence that supported the existence of temporal relationships between burnout components. Based on our results, we found two loss spirals that are characterized by reciprocal temporal relationships between groups of burnout components: exhaustion had reciprocal relationships with cognitive impairment and with psychosomatic complaints, while mental distancing had reciprocal relationships with both form of impairment.

**Relevance to the Congress Theme:** Burnout is a relevant well-being risk not only in paid jobs but also studying consists of structured, goal-oriented activities that may cause burnout and provide poor starting point for transfer to work-life.

Relevant UN SDGs:

3 - Good health and well-being

8 - Decent work and economic growth

*Keywords: Burnout development; Diary study; Undergraduate students*

### Paper 3

#### **Sickness absence duration of employees diagnosed with burnout in the Netherlands: predictive validity of the Burnout Assessment Tool (BAT)**

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#### Research goals and why the work was worth doing

The Burnout Assessment Tool (BAT) indicates severity of burnout. In the Netherlands, occupational physicians (OPs) can officially diagnose burnout and have to offer return-to-work (RTW) guidance to employees on sick leave. In earlier research, concurrent validity of BAT-23 was found for the employee's RTW expectation. However, the predictive validity of BAT-23 for sickness absence duration (i.e., RTW) has not been studied, and understanding which subscales are most predictive could help to improve burnout treatment. Similarly, the predictive validity of the shorter BAT-12 and its subscales also requires evaluation, all the more due to its higher feasibility in practice. Therefore, this research aimed to test the predictive validity for sickness absence duration of the BAT-23 and BAT-12 and their respective four subscales. Possible confounders such as socio-demographic, job and treatment characteristics are taken into account.

#### Theoretical background

Theoretically, the BAT represents three aspects that are characteristic for burnout. First, the energetic aspect that is expressed in the inability to carry out one's work properly because of chronic fatigue (Exhaustion scale). Second, the motivational aspect that is expressed by the unwillingness to perform because of mental distance towards one's job (Mental distance scale). Thirdly, the impaired functional capacity to regulate one's emotional processes (Emotional Impairment scale) and cognitive processes (Cognitive Impairment scale), expressed in sudden bursts of anger and in poor concentration respectively.

Earlier research with other burnout measures has confirmed the relation between severity of burnout and sickness absence duration. The few studies on specific burnout dimensions in relation to sickness absence duration are inconclusive. Regarding the four BAT subscales, we expect that more exhaustion requires a longer recovery period, and that strong emotional and cognitive impairments cause barriers to RTW. In comparison, mental distance is expected to show a weaker link with sickness absence duration. The relations between burnout (subscales) and sickness absence duration might depend on gender, age, type of treatment and job and organization characteristics.

#### Design/Methodology/Approach/Intervention

All 511 employees (47.6% male, 41.2 (10.8) years of age on average) diagnosed with a burnout at one occupational health service during February 2020-February 2021 were included and followed up until February 2023. Three sources of data were included: (1) Register data (gender, age (years), education, organization size), (2) self-reported data (date of first sickness absence day; BAT-23; job characteristics); (3) data added by the OP after each consultation (type of treatment, sickness absence percentage, RTW date). The relationship between BAT-23, BAT-12 and their subscales on the one hand and sickness absence duration on the other hand will be tested with multiple regression analysis and Cox regression analysis.

Results obtained or expected (if not available, it must be made clear when they will be)

Complete follow-up data of sickness absence is available in February 2023 (under Dutch law, a maximum of 2 years of sickness absence is possible).

#### Limitations

The quality of diagnosing burnout by OPs is not clear, and also employees still in the process of developing a burnout might be included. Only 21.3% of the employees reported a duration of the burnout complaints of 6 months or longer, which is one of the diagnostic criteria according to the Dutch guideline for burnout.

#### Conclusion research/practical implications

The research might confirm the validity of the measurement instrument. The practical implications can be large. If BAT total score predicts sickness absence duration, an employee's BAT score offer the employee, occupational physician and employer an indication of the sickness absence duration. This can be helpful for choices, e.g. regarding replacement. If there is no difference between BAT-23 and BAT-12, then this research offers additional support in favour of BAT-12. If the subscales predict sickness absence duration differently, this implies that individual scores on the subscales can be used to tailor burnout treatment and RTW guidance.

#### Relevance to the Congress Theme

To the best of our knowledge, the relationship between BAT and sickness absence duration has not been studied yet. There is a need for improving the diagnosis and treatment of burnout by OPs and other professionals. Knowledge about the predictive validity of BAT for sickness absence duration is needed to improve diagnosis and treatment of burnout.

#### Relevant UN SDGs

Knowledge on the predictive validity of BAT links to the SDG 'Good health and wellbeing'.

*Keywords: Burnout, validation, sickness absence*

## Paper 4

### **Are international clinical cut-off scores for the Burnout Assessment Tool (BAT) feasible?**

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**Research goal and theoretical background** . Clinical cut-off scores that allow to discriminate between healthy employees and those suffering from burnout are crucial for the practical use of any burnout questionnaire. To the best of our knowledge, such cut-offs are only available for the Dutch version of the MBI. However, they are outdated, dating back more than two decades. The recently developed Burnout Assessment Tool (BAT) can only make a difference in practice when validated, clinical cut-offs are available that are based on a sample of employees that suffer from severe burnout, as independently assessed by an occupational physician or psychologist. These professionals should use officially sanctioned criteria to assess severe burnout using a diagnostic interview. It is a crucial question whether these cut-offs are country specific or that different cut-offs emerge in different countries. The former would mean that similar clinical BAT cut-offs can be used across different countries, whereas the latter would mean that clinical cut-offs should be established for each country separately. This paper seeks to answer this most relevant question.

**Method** . Three patient samples including physician/psychologist assessed employees with severe burnout were analyzed from The Netherlands (N=334), Flanders (N=158) and Finland (N=50). Receiver Operating Characteristics (ROC)-analyses were carried out for the pooled county data as well as for each country separately. For the ROC-analyses three national representative samples of 'healthy' employees not suffering from burnout were used as reference groups: The Netherlands (N=1370), Flanders (N=1403) and Finland (N=1372). Similar analyses were carried out for the four subscales (i.e., Exhaustion, Mental Distance, Emotional Impairment and Cognitive Impairment) and the total-score of the BAT-23, the shortened BAT-12, and the ultra-short BAT-4. Two different cut-off scores were computed: (a) 'orange' for those at risk for burnout; (b) 'red' for those most likely suffering from it. Based on the clinical cut-offs that emerged from the ROC-analyses, the burnout prevalence for all three countries were estimated.

**Results** . Generally speaking, the area under the curve (AUC), a statistic that indicates the accuracy of the BAT, ranged between .81 and .96. Only the Mental Distance scale in the Dutch sample did not meet the criterion (> .75). This means that all versions of the BAT (including its subscales) are able to distinguish between healthy employees and employees suffering from burnout. Despite minor changes between countries, similar 'orange' and 'red' cut-offs with appropriate specificity and sensitivity could be established for all three national samples. The prevalence of burnout differs somewhat depending on the BAT-version, but estimates are in a similar range. In the Netherlands, Flanders and Finland about 15%, 10%, and 13% are at risk for burnout, whereas 12%, 8% and 7% are likely to suffer from burnout disorder, respectively.

**Limitation** . Although the occupational physicians and psychologists who classified employees as suffering from burnout used specific diagnostic guidelines, it was not possible to test the inter-rater reliability of their classification.

Conclusion. The BAT is able to discriminate between those suffering and not suffering from burnout. Similar cut-off scores can be used across countries to identify those at risk for burnout and those who most likely suffer from burnout disorder. The fact that similar cut-offs can be produced clearly adds to the practical use of the BAT internationally. The 'red' cut-offs of the BAT-23 (including its subscales) can be best used to identify the most severe cases in a clinical treatment setting, whereas the 'orange' cut-offs of the BAT-12 (or BAT-4) can be best use for screening employees in organizations who are at risk for burnout.

Relevance to the congress theme . Undoubtably, burnout will remain an important issue in todays and tomorrow's changing world of work because job demands will continue to increase as a result of globalization, flexibilization, 24/7 economy, and shortage of labor. Hence, clinically valid cut-offs are crucially important to identify those who are at risk for burnout or suffering from it in order to implement targeted interventions to prevent and reduce burnout

UN SDG. The topic of burnout ties in with goals #3 'good health and well-being' and #8 'decent work and economic growth'.

*Keywords: Burnout; Clinical validation; Prevention*

## **Symposium S051**

### **Shock around the clock: Examining career shocks across career stages**

Jos Akkermans, Vrije Universiteit Amsterdam; Annabelle Hofer, University of Cologne; Daniel Spurk; Karen Pak, Tilburg University

science

What will be covered and why?

This symposium focuses on advancing the scholarly knowledge of career shocks, disruptive events that trigger deliberate career reflection (Akkermans et al., 2018). Research in this area has gained significant momentum in light of ongoing societal developments, such as the COVID-19 pandemic and #thegreatresignation (see, e.g., Akkermans et al., 2020), which have shown that careers are far from predictable. Indeed, emerging empirical findings show that career shocks play a critical role in people's work, such as person-job fit (Pak et al., 2021) and thriving (Mansur & Felix, 2021), and career, such as career transitions (Seibert et al., 2013; Wordsworth et al., 2021) and outcomes (Hofer et al., 2021; Kraimer et al., 2020). However, research is still developing, and further insights are needed to advance our knowledge in this area. More specifically, Akkermans et al. (2021) argued that, among others, we need a valid measurement instrument and more empirical insights into the role of career stages and contextual factors. In reply, this symposium presents four studies that start offering such insights.

The four studies all contribute to advancing methodological and contextual insights into the role of career shocks across different career stages. The first study showcases a quantitative study on medical students' stress and career decisions. Focusing on COVID-19 as a career shock, the study shows that career shocks can already impact career decisions at an early stage in people's careers. The second study focuses on how career shocks influence people's work and career experiences. They also examine the pivotal role of social support in dealing with such shocks. The third study zooms in on yet another career stage as it looks at the role of work-life career shocks and parents' return to work after having their first child. Finally, the fourth study presents the development and validation of a measurement instrument for assessing career shocks. The study could offer a concrete tool for future research in the area of career shocks. After the four presentations, an expert discussant will reflect on the four studies in this symposium, specifically paying attention to their novel contributions to the existing literature. The discussant has been an influential scholar in career shocks research.

Relevance to the congress theme

EAWOP 2023 focuses on the changing world of work. Our symposium fits this theme excellently, as career shocks are becoming more prominent and important for people navigating their work and careers. Indeed, given the increasing complexity and ambiguity of careers, people likely encounter more sudden disruptions now than ever. As such, understanding how disruptive events impact people's work and career processes and outcomes is timely and relevant.

Research and practical implications

Akkermans et al. (2021) called for more empirical research in the area of career shocks to ensure methodological rigor and a better understanding of mechanisms and boundary conditions. Our symposium contributes to answering this call by presenting a set of empirical studies uncovering several critical mechanisms and boundary conditions, such as stress appraisals (Study 1), social

support at work (Study 2), and identity processes (Study 3). Moreover, the symposium presents the validation of a measurement instrument (Study 4) that can trigger more research in this area. A valid measurement tool and more accurate insights into mechanisms and boundary conditions also contribute to practice. For example, educators, HR professionals, and career counselors can gain tailored insights into the specific factors they need to intervene on to help workers deal with career shocks.

#### Overall conclusions

This symposium shows that, across career stages, career shocks impact work and career outcomes. Moreover, the studies show how individual appraisals and contextual support mechanisms are pivotal in dealing with such shocks. In all, the symposium helps advance empirical knowledge of career shocks.

discussant: Scott Seibert, Rutgers University

*Keywords: Career shocks, career stages, career development*

## Paper 1

### **Challenge or threat? Investigating the impact of the COVID-19 pandemic on medical students' career development through the lens of transactional stress**

Daan Fris, University of Amsterdam; Anne De Pagter & Matthijs De Hoog | Erasmus Medical Center Rotterdam; Annelies Van Vianen & Edwin Van Hooft | University of Amsterdam

#### Research goals

Career shocks can trigger career transitions, influence career decisions, and cause stress (Akkermans et al., 2020; Akkermans et al., 2018). The COVID-19 pandemic is such a career shock which might have impacted the career decision-making process of medical students. Although the pandemic can be regarded as a negative career shock (generally resulting in negative outcomes), Akkermans et al. (2020) suggest that negative career shocks might have favorable effects on career outcomes as well. The present study aims to uncover when and why the pandemic as a career shock may have positive or negative consequences for students' career decision-making process. We propose an Appraisal-Coping Career Shock Model (ACCSM) to specify the cognitive and behavioral mechanisms that ultimately lead to positive or negative career outcomes.

#### Theoretical background

Transactional Stress Theory (Lazarus & Folkman, 1984) argues that people appraise events that have consequences for their interests and goals as challenging or threatening. These challenge and threat appraisals inspire, respectively, more or less effective ways of coping with the event, which subsequently affect levels of stress. Our ACCSM proposes that depending on their core self-evaluations (CSE), students appraise the pandemic as threatening to or as challenging for their career, which determines whether they engage in proactive or avoidant career behaviors. We specifically expect that challenge appraisals are associated with proactive career behaviors (PCB; e.g., networking), while threat appraisals are associated with avoidant career behaviors (ACB; e.g., procrastination). In this study, we apply our model to career decision-making stress (CDMS) as a career outcome and propose that PCB and ACB relate negatively and positively to CDMS, respectively.

#### Methods

In June 2021, medical master's students (N = 2293) were invited to fill in a first questionnaire, of which 507 responded. This T1 questionnaire included the CSE scale and control variables (i.e., age, gender, and CDMS). Eight months later 279 students responded to the second questionnaire. This T2 questionnaire included the appraisal scales, the career behaviors scales, and the CDMS scale.

#### Results

Hypotheses were tested using path modeling. We controlled for CDMS (T1) in our analyses. Results showed that CSE and threat appraisal are negatively related. In turn, threat appraisal is positively related to ACB which are positively related to CDMS. Explorative analyses suggested that the positive relation between threat appraisal and CDMS is fully mediated by ACB. Results did not support relations between CSE, challenge appraisal, PCB, and CDMS.

#### Limitations

A limitation of this study is that the appraisal, career behaviors, and CDMS scales were measured at the same time point. This limits the extent to which we can draw conclusions about the directionality of the relationships. It should be noted though, that the two-wave survey design allowed us to control for prior CDMS, strengthening our conclusions.

#### Conclusion

We found evidence for the ACB-path but not for the PCB-path. The pandemic might have caused uncertainty about the future causing proactive career behaviors to be ineffective in reducing career decision-making stress. Besides, PCB might aid in identifying possible career obstacles resulting in increased CDMS.

#### Relevance to the Congress theme

The pandemic has severely impacted the health and careers of medical students as well as healthcare workers in general. To ensure a healthy workforce in the future, it is of critical importance that medical students make a career choice fitting with their personal interests, values, and competencies.

#### Relevant UN SDGs

This study contributes to the third and fourth SDGs from the UN. Optimizing students' career choices not only keeps them healthy but contributes to the quality of healthcare as well. Besides, part of high-quality education is providing adequate career guidance. This study offers several suggestions for medical schools to provide career guidance in the event of career shocks.

*Keywords: transactional stress theory, career shocks, appraisal*

## Paper 2

### **Social support, career meaning, and its outcomes in the context of the COVID-19 pandemic: Examining the role of career shocks**

Janine Bosak; Sergio Madero, Tecnológico De Monterrey; Sushanta Mishra , Indian Institute of Management; Martina Gianecchini, University of Padova; Silvia Bagdadli , Bocconi University; Mami Taniguchi , Waseda University; Richard Cotton, University of Victoria; Evgenia Lysova, Vrije Universiteit Amsterdam; Émilie Lapointe, BI Norwegian Business School; Pamela Suzanne, Universidad de San Andres; Eric Michel, Northern Illinois University; Jon Briscoe, Northern Illinois University

#### Research goals and theoretical background

Employees' work and careers have in many cases been turned inside out during the Covid-19 pandemic as work shifted from the office to the home. The collective impact is comprised of multiple career shocks (Akkermans et al., 2018; Seibert et al., 2013), that have implications for the future of work. Consistent with the Job-Demands Resources (JD-R) model (Bakker et al., 2003), we investigate how work-related career shocks experienced during the COVID-19 pandemic serve as a boundary condition of the social support-career meaning relationship. In times of change, research suggests social support in the workplace is a key resource which helps employees adapt (Jolly et al., 2020).

One way that social support in the workplace can assist employees is through the construction of career meaning. Career meaning combines work experience, career goals, and social interaction into purpose (Shuck & Rose, 2013). Employees develop work meaning when others recognize the value of their work (Wrzesniewski et al., 2003). Consistent with the JD-R model (Bakker et al., 2003), we anticipate that during the aforementioned work-related career shocks in the COVID-19 pandemic which serve as job demands, people would seek meaning and that work relationships would be one key resource for developing such meaning. What's more, as a result of experiencing meaning, people may have a lower degree of burnout, experience increased well-being, career optimism, and employability. Therefore:

H1: The relationship between coworker career support and career meaning is moderated by work-related career shocks such that the relationship is stronger for employees who experienced more work-related career shocks during the COVID-19 pandemic.

H2: The relationship between coworker psychosocial support and career meaning is moderated by work-related career shocks such that the relationship is stronger for employees who experienced more work-related career shocks during the COVID-19 pandemic.

H3: The relationship between perceived supervisor support and career meaning is moderated by work-related career shocks such that the relationship is stronger for employees who experienced more work-related career shocks during the COVID-19 pandemic.

H4a-d : Career meaning is positively associated with (H4a) burnout, (H4b) well-being, (H4c) career optimism, and (H4d) perceived employability.

#### Design and methodology

We tested the hypotheses utilizing data drawn from 2,832 respondents resided in 18 countries worldwide and working full-time in managerial and professional occupations from the 2020-2021 5C

Career Barometer survey. We measured three types of social support (i.e., co-worker career support (three-items; Higgins, 2004), co-worker psychosocial support (four-items; Higgins, 2004), perceived supervisor support (four-items; Eisenberger et al., 1986)). Employees also reported on work-related career shocks experienced during the COVID-19 pandemic (Burton et al., 2010), career meaning (four-items from Steger et al., 2012), burnout (five-items from Maslach & Jackson, 1986), wellbeing (five-items; Topp et al., 2015), career optimism (three-items; McIlveen et al., 2013), and perceived employability (four-items; De Cuyper et al., 2014).

## Results

Using Mplus 8.6 (Muthen & Muthen, 2021), CFA results suggested that the eight-factor model fits the data well ( $\chi^2 = 9,029.24$ ,  $df = 953$ ,  $p < .01$ ,  $CFI = .95$ ,  $TLI = .95$ ,  $SRMR = .04$ ,  $RMSEA = .04$ ). Results supported H1 ( $\beta = .15$ ,  $p < .05$ ). H2 was not supported ( $\beta = -.09$ , n.s.). Conversely, H3 was supported ( $\beta = -.18$ ,  $p < .01$ ). Finally, our results suggest career meaning decreases burnout (H4a:  $\beta = -.44$ ,  $p < .01$ ) and leads to increased wellbeing (H4b:  $\beta = .46$ ,  $p < .01$ ), career optimism (H4c:  $\beta = .47$ ,  $p < .01$ ), and perceived employability (H4d:  $\beta = .28$ ,  $p < .01$ ), supporting Hypotheses 4a-4d.

## Limitations

One of the limitations of the study is its cross-sectional data.

## Conclusions and implications

Our results extend research studying the role of social context in shaping individual career-related and well-being outcomes (e.g. Allen et al., 2004; McArdle et al., 2007; Spurk et al., 2015). We find that receiving support from coworkers alone may not be enough for employees to experience career meaning and have other benefits in such contexts as the Covid-19 pandemic. Rather disrupting events (i.e. career shocks) are needed to stimulate the process of meaning creation in this context (Akkermans et al., 2020). Moreover, the results extend research on career shocks (e.g. Akkermans et al., 2018). We show that work-related career shocks serve as important boundary conditions shaping the effect of social support variables on career meaning.

## Relevance to the conference theme and the UN SDGs

The paper addresses the future of work by studying career-related implications of COVID-19 and SDGs #3 and #8.

*Keywords: Social support, career meaning, career shocks*

### Paper 3

#### **Back to work after our first baby: How disruptive identity transformation affects dual earners' perceptions of the return to work**

Paulien D'Huyvetter; Jos Akkermans, Vrije Universiteit Amsterdam; Marijke Verbruggen & Elisabeth Abraham | KU Leuven

#### Research goals

The transition to parenthood has received considerable research attention and is viewed as a major life event for couples. Less is known about how dual-earner parents experience the return to work after a first child. Going back to work may be a complex, disruptive event for new dual-earner parents, not only because it involves identity transformations and adaptation to changed roles (Lee et al., 2005), but also because the experiences of mothers and fathers are likely to be different and intertwined at the same time. With this study, we aim to gain more insight into these challenges by exploring the return to work as a potential career shock (Akkermans et al., 2018) for new dual-earner parents.

#### Theoretical background

Research addressing the impact of return to work after childbirth has mostly looked at labor market reentry for mothers. Overall, this research suggests that having children may function as a career shock for women associated with, for instance, career penalties (e.g., lower income), adjustment challenges (e.g., identity and efficacy challenges; Ladge & Greenberg, 2015), and adverse effects on mothers' well-being (Grether & Wiese, 2016). Although this research offers us valuable insights into the impact of reentry for mothers, it only depicts part of the reality for dual-earner couples. One shortcoming is that research insufficiently addresses the impact of reentry for men, who may face specific challenges in navigating their identities as new fathers and employees (Humberd et al., 2015). Another shortcoming is the limited understanding of how partners influence each other after an important event like the return to work. In line with this criticism, a recent framework by Crawford et al. (2019) calls for more research on dual-earner couples' responses to career and life shock events. This framework proposes that partners' individual sensemaking of a shock shapes intensity perceptions between partners, a process characterized by complex dyadic negotiations and identity processes.

Building on Crawford et al. (2019), this study explores how identity derailment – i.e., the feeling that one's identity has been disrupted by becoming a working parent – affects shock intensity perceptions regarding the return to work. As presented in Figure 1, we expect that each partner's identity derailment will impact their own and their partner's shock intensity perceptions. Moreover, we expect that perceived work-related partner support will moderate the individual effects. Finally, we explore gender differences in these relationships because identity transformations, shock intensities, and the need for partner support may substantially differ between mothers and fathers.

#### Methodology

In December 2019 and January 2020, we collected data via a standardized questionnaire amongst 212 Flemish first-time parents, i.e., 106 dual-earner couples. Data will be analyzed using the Actor-

Partner-Interdependence Model, which allows for the estimation of both individual and partner effects (Cook & Kenny, 2005). Results have not yet been obtained but are expected in January 2023.

#### Limitations

Our study relies on cross-sectional data. Therefore, we cannot make inferences about the direction of potential causal effects. In addition, we used retrospective measurements for identity derailment and shock intensity perceptions, which may be sensitive to recall bias.

#### Conclusions: Implications and relevance for the future of work

This study extends existing research by concentrating on a subpart of the transition to parenthood, which is typically studied as a phase of the transition rather than a potential shock event for parents. Moreover, in OECD countries dual-earner couples are the most common household type today, many as full-time earners with children, and their prevalence could still increase in the future (OECD Family Database, 2022). With an eye on ensuring decent work and gender equality, our research may stimulate organizations to pay attention to the complexities of the return to work for an important group in society, e.g., by providing adapted support, mentoring, or flexibility during resocialization at work. Moreover, an in-depth understanding of gender differences and the interlinkage between dual-earner partners may guide policymaking on parental leave, flexible work arrangements, and more.

#### Relevant UN SDGs

This research contributes to several SDGs. Most notably, it connects with decent work and gender equality. To a somewhat lesser extent, the study also connects with good health and well-being.

*Keywords: Return to work, dual earners, career shocks*

## Paper 4

### Development and validation of the Career Shocks Questionnaire

Jos Akkermans, Vrije Universiteit Amsterdam; Daniel Spurk, University of Bern; Andreas Hirschi, University of Bern; Annabelle Hofer, University of Cologne

#### Research goals and theoretical background

Career shocks are disruptive events that trigger deliberate career reflection (Akkermans et al., 2018). Although research on career shocks is on the rise (see Akkermans et al., 2021), a validated measurement instrument still lacks. The emerging empirical research confirms that these shocks play a pivotal role in people's career decisions (e.g., Seibert et al., 2013), career transitions (e.g., Rummel et al., 2021), and work and career outcomes (e.g., Blokker et al., 2019; Hofer et al., 2021; Kraimer et al., 2019). However, quantitative research has thus far mainly used Seibert et al.'s (2013) scale. While this is a good starting point, this measure conflates the shock event with its career impact and refers to specific pre-defined shocks (see Akkermans et al., 2021). Therefore, the field needs a more valid measurement instrument that can be used independently from specific shocks. Our project aims to do this by developing and validating the Career Shocks Questionnaire.

#### Design and methodology

We carefully reviewed the available conceptual and empirical work on career shocks in the first step of the research process. Based on this review, we created an initial over-inclusive item set of 20 items. We then proceeded with an expert check by 17 scholars knowledgeable about the topic of career shocks. Their feedback allowed us to delete several unclear items and reformulate some others. Furthermore, based on their feedback, we decided to have separate questions for positive and negative shocks, as it would be difficult to test any effects if these were combined. This led us to include 15 items for positive shocks and 15 items for negative shocks – the same items but with positive vs. negative terms – for the exploratory factor analysis. After these analyses and potential changes to the items, we will proceed with a second data collection to conduct CFA. Afterward, we aim to finalize the career shocks questionnaire and conduct a third independent data collection consisting of two measurement waves. This final dataset will serve to conduct additional validity checks, such as predictive, discriminant, and incremental validity (e.g., compared to Seibert et al.'s scale and existing measures for chance events).

#### Results obtained and expected

The initial expert check allowed us to improve the clarity of the items and reduce the number of items. We are currently analyzing the first data to see if the career shocks questionnaire items will form one overall dimension for positive career shocks and another for negative career shocks. We expect to finalize the EFA in October 2022. Next, we will collect data for the CFA, which we expect to complete before the end of 2022. Finally, we will collect data to conduct the additional validity checks mentioned earlier, which we aim to finalize in Q1 2023. Overall, we expect to have a final career shocks questionnaire well before the EAWOP conference takes place.

#### Limitations

We decided to create a generic measurement instrument for career shocks because lists of specific events are never exhaustive and, from a conceptual perspective, do not form a coherent scale (e.g., being laid off and losing a loved one are entirely different events). As such, a generic questionnaire

allows respondents to make their assessment of disruptive events that triggered them to reconsider their career investments. Though we will include an open-ended question to assess those specific events, a potential limitation of this approach is that the items do not lend themselves well for diagnosis or intervention purposes. That said, we also plan to test more tailored items, e.g., where we replace terms such as „a disruptive event” with „the recent reorganization."

#### Conclusions and implications

The career shocks questionnaire will allow scholars to use this validated instrument to assess career shocks in future quantitative research on career shocks. We expect the final questionnaire to be relatively short, with four items for positive and four for negative shocks. As such, it will be easy to implement in larger survey research.

#### Relevance to the conference theme and the UN SDGs

The changing world of work likely features many disruptions in people's work and careers. As such, a valid method for assessing career shocks will significantly contribute to scholarly work and practical interventions moving forward. Our research also connects with several SDGs, notably good health and well-being and decent work.

*Keywords: Career shocks, measurement instrument, validation*

## Symposium S052

### **Emerging technologies and AI in organizations: Implications for job design and employee well-being**

Pascale Le Blanc, Eindhoven University of Technology; Maria Peeters, Utrecht University

science\_practice

What will be covered and why?

Influential trends, such as robotization, big data, and Artificial Intelligence not only play a major economic role, but they also have a profound impact on the way we live and work (Özdemir & Hekim, 2018). As technological innovations succeed one another at high speed and their applications are becoming increasingly versatile, the efficient functioning and survival of organizations requires the ability to continuously align work processes with the flow of digital innovations (Nylén & Holmström, 2015). Insight into the consequences of working with new technologies for job quality and employee well-being can be translated into guidelines for designing and implementing emerging technologies in a human-centered instead of a technology-centered way. In this way, a stimulating and healthy work environment in the midst of this ongoing technological revolution can be ensured. In this symposium, 5 empirical studies that focus on the implications of emerging (technological) changes for job design and employee well-being are presented.

In the first contribution, Hosseini and colleagues present the results of a daily diary study among logistics warehouse employees and their supervisors about the extent to which working with (new) technologies affects their job characteristics and well-being at work (i.e., exhaustion).

In the second contribution, Schneider and colleagues address the problem of the opaqueness of Machine Learning-based systems. Using existing ML use cases in the railway domain, they take on the challenge of providing new insights in designing explainable AI within an overarching design framework for socio-technical integration.

In the third contribution, Fraboni and colleagues emphasize the psychological and organizational aspects of industrial Human-Robot Collaboration. They present the development of a toolkit targeted at expanding guidelines for safety, efficiency, and acceptance of Human-Robot Collaboration HRC in the manufacturing sector.

In the fourth contribution, González-Romá and colleagues clarify the influence of job digitalization (i.e., the extent to which digital technologies are used by employees to perform their jobs) on overall perceptions of organizational fairness, and positive affect in a 3-wave study among 158 Spanish employees.

Finally, in the fifth contribution Sijbom and colleagues expand the focus by exploring the consequences of general changes at work (including, but not limited to technological ones) for the learning behaviour of employees. Results of two studies among representative samples of Dutch employees showed that changes at work generally foster employee learning and that supervisors' role in employee formal and informal learning is relatively large.

Research/practical implications

This symposium provides insights into (changing) job characteristics and employee well-being in workplaces where new technologies have recently been introduced. It contributes to knowledge about a more human-centered design and implementation of new technologies at work.

### Overall conclusions

The results of the studies in this symposium help us to better understand the complexities of implementing emerging technologies and AI in organizations and suggest ways to foster its functional consequences, reduce its dysfunctional ones and consequently improve employee well-being and performance.

### Intended audience

This symposium is interesting for both academics and practitioners

*Keywords: emerging technologies, job design, well-being*

## Paper 1

### Technologization in the warehouse: a diary study among logistics employees

Ziagul Hosseini, Pascale Le Blanc & Evangelia Demerouti | Eindhoven University of Technology

**Research goals:** The goal of this research is to (1) explore the relationship between physical workload, work pace and exhaustion, and (2) examine whether and how autonomy and participation in decision making buffer these relationships.

**Theoretical background:** 'Place your order now and get it delivered the same day.' That is what most webshops offer to their customers when they buy a product. The logistics sector, which is responsible for the warehousing, packaging and distribution of products, is challenged to pick and pack orders fast, and deliver them on time. Warehousing companies opt to make use of labour-saving technological innovations, such as automated picking and packing tools, to meet customers' (high) expectations. However, technologies can positively and negatively affect job characteristics, with unintended consequences on employees' job content, experience of meaningful work, wellbeing and performance. For example, technologies may make work-related tasks more complex and stressful due to information overload. However, when technologies help out, assist with, and take over the dull, dirty, and dangerous tasks, employees can focus on more challenging and meaningful tasks (Parker & Grote, 2020), such as coordinating and solving technical breakdowns (Smids et al., 2020). Taking the Job Demands-Control model (Karasek, 1979) as our theoretical basis, we investigated which job characteristics play an important role in working with technologies and their relation to employees' wellbeing. In other words, we wanted to know to what extent (new) technologies affect warehouse employees' job characteristics and their work-related outcomes.

**Design/Methodology:** We conducted a daily diary study among seventy-one warehouse employees in three Dutch warehousing companies. Using short daily surveys, we asked questions on, among other things, physical workload, work pace, work autonomy, participation in decision making and exhaustion (on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), or 1 (never) to 5 (always)). Warehouse employees filled out these (online and on paper) short diary surveys at the end of their workday for five consecutive days. Multilevel regression analyses were performed using MLwiN. We recognised two levels in the regression equations. All day-level variables were person-mean centred and the person-level variable was grand-mean centred. The dependent variable was day-level exhaustion, the independent variables were day-level physical workload and day-level work pace, and we had two moderators namely day-level work autonomy and person-level participation in decision making.

**Results:** Our results show that autonomy and participation in decision making buffer the positive relationship between physical workload, work pace and exhaustion. In other words, an increase in physical workload leads to more exhaustion in case of low autonomy and low participation in decision making. We also found that an increase in work pace leads to more exhaustion in case of low autonomy and low participation.

**Limitations:** A limitation of this study could be that the data is self-reported. However, taking multiple measures over five days could reduce the common method bias effects.

**Conclusions:** Extensive research into psychosocial aspects of (new) technology implementation may uncover ways in which warehouses can establish sustainable workplaces in the new technological era. Specifically, we explored whether and how (new) technologies impact the nature of work or the

conditions under which work is performed. This knowledge can guide companies to introduce and implement technologies to benefit the organization and their employees' wellbeing in a sustainable manner.

Relevance to the congress theme: This research fits the congress theme 'the future is now: the changing world of work' since logistics warehousing are going through this technological transition whereby employees' workplace and tasks are changing due to the deployment of new technologies.

Relevant UN SDGs: This research focuses on what impact new technologies has on warehouse employees in order to ensure that they can keep performing their job in a good health while warehousing companies can create workplaces that foster innovation to keep pace with the high demands and help drive the logistics sector forward. Good health and wellbeing; decent work and economic growth

*Keywords: technology, sustainable workplaces, well-being*

## Paper 2

### Designing explainable ML-based systems for collaborative work in the railways: First insights

Lena Schneider, ETH Zurich; Daniel Boos, Swiss Federal Railways; Gudela Grote, ETH Zurich

#### Research Goals

This study addresses the challenge of designing explainable AI within an overarching design framework for socio-technical integration based on the recently proposed concept

of networks of accountability. The results will provide first insights into the effects of AI on human factors in safety critical domains and the different stakeholders involved

#### Theoretical Background.

The opaqueness of machine-learning (ML) based systems is a key barrier to fully benefitting from these technologies. To advance research and practice on explainable AI, there needs to be a much clearer understanding of who the users are (e.g., system developers, employees working with the system, individuals affected by decisions made by the system) and what purposes the explanations aim to fulfil (e.g., technology acceptance, learning, collaboration).

Explainability is tightly linked to questions of shifting control and accountability in these systems. Control is an essential prerequisite for accountability; if it is lacking actors have to explain and justify actions they had no choice over. As ML-based systems may autonomously expand and alter their knowledge base and the way that knowledge is used for predictions and decision-making, humans interacting with the system have less influence and control increasingly resides in the AI itself, while the accountability remains with humans. The resulting control-accountability gap is not an entirely new phenomenon, as traditional automation already severely restricts human control. The opaqueness and dynamism of AI significantly adds to this gap, rendering efforts at human-centred design aimed at adequately matching control and accountability of actors through socio-technical integration particularly challenging. Control and accountability cannot be matched at the level of the individual human user anymore. Rather, all stakeholders involved in the development and use of AI need to be part of “networks of accountability” (Slota et al., 2021, p. 11). To date, no full account exists of what such networks entail for the development and use of systems based on AI-technologies. Accordingly, some general characteristics and functions of such networks need to be laid out before explainability requirements for different stakeholders and for successful negotiations of accountability among these stakeholders can be defined. Our study does this by building on a conceptual framework developed by Grote et al. (2022). In industries characterized by high safety standards and strict regulation, such as the railway industry, a potential loss of human control is particularly relevant and the gap between control and accountability is a limiting factor for the use of ML systems. Moreover, in many cases ML systems will be an integral part of work processes and coordination activities between individuals and teams within and between different occupations. Based on different professional backgrounds and roles along with different degrees of required control and accountability, explainability requirements may vary substantially, but need to be jointly met to allow effective collaboration.

#### Design/Methodology.

Using existing ML use cases in the railway domain, which will be collected from the literature as well as through qualitative interviews, we will develop a taxonomy regarding types of users, types of

collaborative use, distribution of control and accountability among users, and other relevant stakeholders. Issues concerning accountability and explainability of AI will be identified with the critical incident technique. We will conduct a document analysis on the most advanced internal AI projects collected by the network group for AI at the Swiss Federal Railways (SFR). Topic coding will be used to develop a taxonomy which will define requirements for the establishment of networks of accountability and the curation of accountability negotiations.

#### Results.

First results based on the qualitative interviews are expected by Spring 2023.

#### Limitations.

While the use of ML-based systems is gaining more and more interest and companies are planning to implement them, few industry sectors are actually using these systems which means the available use cases will be limited. Furthermore, while the qualitative interviews will provide first insights, the generalizability of our findings will be limited.

#### Conclusions.

This study will advance our understanding of the requirements to design explainable AI based systems and identify key characteristics and functions of networks of accountability. Potential application areas for our findings range from predictive maintenance (i.e., wheelset inspection) over rail traffic management systems (i.e., for re-dispatching), and assisted and driverless train operations to rolling stock planning and personnel deployment planning.

#### Relevance to the Congress Theme.

AI is an integral part of the future of work. ML systems are being integrated in work in more and more organizations and are going to change the way we work considerably.

#### Relevant UN SDGS.

Decent work and economic growth; industry, innovation and infrastructure

*Keywords: explainable AI, accountability, work design*

### Paper 3

#### **Development of a Toolkit for Improving Workers' Well-being in Collaborative Robotics – An Experts' Survey**

Federico Fraboni, University of Bologna; Erwin Rauch, Free University of Bolzano; Luca Pietrantoni, Hannah Brendel & Gabriele Puzzo | University of Bologna; Luca Gualtieri, Free University of Bolzano

#### Research Goals

Collaborative robotics profoundly affects workers' conditions by driving many work environments towards radical changes, particularly in the manufacturing sector. However, the psychological and organisational factors affecting workers' experience and the quality of human-robot collaboration are often underestimated or neglected. The present contribution emphasises the psychological and organisational aspects of industrial HRC. It presents the development process of a toolkit targeting collaborative workstation designers, which aims to provide operational support in increasing workers' safety, performance and well-being through cognitive ergonomics and organisational factors.

#### Theoretical Background

Previous authors argued that addressing psychological and organisational factors in HRC is crucial for the operator's well-being and production performance. However, current research primarily focuses on technical aspects (Torvald et al., 2017; Gualtieri et al., 2021). Literature suggests the importance of addressing factors such as perceived enjoyment (Elprama et al., 2016), perceived stress (Hancock et al., 2008), cognitive workload (Kalakoski, 2020) and acceptance (Bröhl et al., 2016) to improve workers' conditions in HRC.

Previous authors conducted a systematic literature review to develop guidelines addressing cognitive ergonomics and organisational factors when designing collaborative workstations (Gualtieri et al., 2022). After reviewing the content and main results, each article was labelled according to four categories: (i) workstation layout and elements, (ii) robot system features, (iii) robot system performance, and (iv) organisational measures. Their effectiveness was evaluated through a preliminary laboratory case study where participants interacted with a collaborative robotic system. Results show improved operator experience and efficiency by manipulating the system features and interaction patterns according to the proposed design guidelines.

#### Methodology

The toolkit development started with a systematic literature review of papers published between 2020 and 2022. The goal was to identify which workstation characteristics and HRC patterns could affect workers' perceived enjoyment, stress, cognitive workload and acceptance. A total of 615 documents were found. Duplicates and articles on healthcare robots, social robotics, mobile/teleoperated robots, and exoskeletons were excluded, leaving a total of 186 articles. After a further screening of the content, 93 works were selected to improve and expand the guidelines.

Afterwards, an online survey was developed. The survey targets experts in different disciplines: design; safety; system integration; human factors and ergonomics, work and organisational psychology.

The survey was administered to around 50 participants who were asked to comment on the guidelines. Participants reported their opinions on the guideline's clarity and relevance. Participants have been prompted to suggest one or more practical solutions for implementing the guideline and an assessment method or KPI to evaluate its effectiveness. Lastly, participants reported possible challenges and barriers in implementing the proposed solutions regarding organisational capabilities.

#### Expected Results

Results will be available around the first quarter of 2023 and will be used to improve the set of guidelines in terms of clarity and relevance. Furthermore, the results will be used to develop a toolkit containing practical solutions for guideline implementation and KPIs to assess their effectiveness in the organisation. Future steps will aim to evaluate the quality and effectiveness of the developed toolkit in two experimental studies.

#### Limitations

The study's main limitations are self-selection bias, common method bias, and questionnaire fatigue.

#### Research/Practical Implications

Theoretical implications relate to expanding guidelines for safety, efficiency and acceptance of HRC in the manufacturing sectors. Practitioners could also use results to overcome practical barriers and develop more comfortable, safe, and efficient collaborative workstations. The present study can contribute to the high-level goals of Industry 4.0 in terms of social and economic sustainability.

#### Relevance to the Congress Theme

The present work focuses on how Work and Organisational Psychology can contribute to steering technological advancements in modern manufacturing environments, highlighting the importance of workers' well-being. To our knowledge, our toolkit will be the first one aiming at supporting professionals with no expertise in organisational psychology to account for human factors, cognitive ergonomics and organisational elements when implementing robotic technologies.

#### Relevance to UN SDG

The present work is relevant for the UN SDG n° 8, "decent work and economic growth", and n° 9 "Industry, Innovation and Infrastructure".

*Keywords: collaborative robotics, toolkit, well-being*

## Paper 4

### The influence of job digitalization on overall organizational fairness and positive affect at work

Vicente González-Romá, University of Valencia; Marija Davcheva, University of Valencia; Agustín Molina, University of Valencia; Ana Hernández, University of Valencia; Inés Tomás, University of Valencia

#### Research goals and why the work was worth doing

The goal of this study is to clarify the influence of job digitalization (i.e., the extent to which digital technologies are used by employees to perform their jobs) on overall perceptions of organizational fairness, and an indicator of subjective wellbeing at work (positive affect). Job digitalization is a growing phenomenon that is rapidly changing the way employees work in organizations (Cascio & Montealegre, 2016). However, insufficient attention is being given to how digitalization is changing jobs and employee experiences (Barley, 2015; Cascio & Montealegre, 2016; Parker & Grote, 2022). This omission is worrisome if we want to maximize the potential positive influences of job digitalization and minimize its potential negative ones (Coovert & Thompson, 2014). We focused on organizational fairness because it can channel the influence of job digitalization on employee wellbeing.

#### Theoretical background

Based on theories about work design (Hackman and Oldham, 1976; Morgeson & Humphrey, 2006; Parker & Grote, 2022), and organizational fairness (Colquitt & Zapata, 2015), we posited that job autonomy mediates the influence of job digitalization on overall fairness, which in turn has a positive influence on positive affect.

#### Methodology

We collected data from a sample composed of 158 employees who responded to a questionnaire at three different time points separated by three months. Job digitalization was measured at Time 1, job autonomy at Time 2, and overall organizational fairness and positive affect at work at Time 3. Our research model was fitted to data by means of Mplus.

#### Results

The proposed model showed a good fit to data (RMSEA = .065; CFI = .96; SRMR = .076). Job digitalization was positively related to job autonomy (.40,  $p < .01$ ), which in turn was positively related to overall organizational fairness (.41,  $p < .01$ ), which in turn was positively related to positive affect (.37,  $p < .01$ ). The indirect effect of job digitalization on overall fairness via job autonomy was positive (.16) and statistically significant (bootstrapped 95% CI = .07; .27). The indirect effect of job digitalization on positive affect via job autonomy and overall fairness was positive (.06) and statistically significant (bootstrapped 95% CI = .02; .12).

#### Limitations

The main limitation of our study is that all the data were collected through self-reported questionnaires and from the same source (employees). This might have inflated the correlations among the study variables due to common-method variance. To minimize its impact, measurement occasions were separated by a 3-month period.

## Conclusions

Our results show some of the mechanisms through which job digitalization is related to subsequent overall organizational fairness and positive affect. Identifying this mediation chain helps us to improve our understanding about the influence of job digitalization on employee work outcomes. From a practical perspective, our results suggest that to harvest the functional benefits of digitalization, digital technologies should be implemented in a way that fosters employee autonomy.

## Relevance to the Congress Theme

Digital technologies are changing the world of work. To a certain extent, this study helps clarify how and why job digitalization impacts on a key job characteristic (job autonomy), an important employee judgement (overall organizational fairness), and a relevant indicator of employee subjective wellbeing (positive affect).

## Relevant UN SDGs

3 Good health and well-being. Ensure healthy lives and promote well-being for all at all ages

8 Decent work and economic growth. Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all

9 Industry, innovation, and infrastructure. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

16 Peace, justice, and strong institutions. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

*Keywords: job digitalization, organizational fairness, positive affect*

## Paper 5

### Change at work and employee learning: the moderating role of supervisor support

Roy Sijbom, University of Amsterdam; Roy Peijen, Paul Preenen & Jessie Koen | Dutch Organization for Applied Scientific Research (TNO)

#### Research goals

The goal of this research is to (1) explore the relationship between change at work and employee learning, and (2) examine whether and how supervisor support affects these relationships.

#### Theoretical background.

Due to labor market developments such as digitalization and technological innovations, changes at work have become increasingly common. Such changes incorporate, for example, changes in technology, in the way jobs are done, in the products/services to be made or provided, and/or in the contact with customers, patients, students, or passengers. It is essential that employees continuously develop new knowledge, skills and abilities to cope with these ongoing changes: such lifelong learning not only allows them to execute their changing job tasks and to remain employable, but also contributes to the performance and competitiveness of the organization.

According to the Work Design Growth Model (WDGM), changing job tasks and characteristics can promote employee learning. For example, technological changes at work might require new skills needed to work with new technologies, and new work relationships may expose employees to other ways of working, different feedback, and new knowledge. Using the WDGM as a theoretical lens, we argue that change at work is positively related to employee learning, both formal (participating in a course or training) and informal (learning from tasks and people at work). Furthermore, we propose that the relationship between change at work and employee learning can be better understood by paying attention to the role of supervisor support for learning: high levels of support may be a stimulating resource for employee learning, which might be especially fruitful for low levels of change at work.

#### Design/Methodology.

We used self-report survey data from a large subsample of employed workers who participated in the Netherlands Working Conditions Survey (NWCS) for Employees from TNO in 2018 (n=62,602) and 2020 (n = 58,012). Change at work was captured by creating an index of the number of structural changes at work that employees reported (i.e., change in technology, such as machines or ICT; in the way jobs are done, in the products/services to be made or provided, and/or in the contact with customers, patients, students, or passengers), with a higher score indicating a higher number of changes. We assessed both formal (dichotomous variable; participating in a course/training) and informal learning (continuous variable; learning from tasks and colleagues at work). Supervisor support was assessed by asking participants to indicate the extent to which their supervisor stimulated their development of knowledge, skills and abilities.

#### Results.

Change at work was positively related to formal and informal learning. For formal learning, this relationship was curvilinear: the positive relationship between changes at work and formal learning became especially pronounced when employees reported multiple changes at work. Supervisor

support was positively related to formal and informal learning, and weakened the curvilinear relationship between change at work and formal learning: only under high levels of supervisor support, learning depended less on the amount of change at work. For informal learning, the moderating role of supervisor support was slightly different: only under low levels of supervisor support, informal learning depended more on change at work.

#### Limitations.

The cross-sectional nature of the data does not allow for causal inferences. Furthermore, our measure of formal learning only provided information on whether employees participated in formal training, but did not take into account whether they completed the training and whether they were able to use it at work.

#### Conclusions.

This study shows that changes at work generally foster employee learning. The reported curvilinear effect for formal learning signals a tipping point or acceleration point at which changes at work seem to 'force' employees to participate in learning activities. Additionally, supervisors' role in employee formal and informal learning seemed relatively large: the more supervisor support, the higher the chance that employees participated in formal learning and the more likely they were to report that they had learned from their tasks and colleagues (informal learning). Supervisor support also outweighed the effect of change at work for learning: for employees who experienced high supervisor support, learning depended less on change at work. For informal learning, however, it was not the experience of supervisor support that made the difference, but the lack thereof.

#### Relevance to the congress theme.

Ongoing change at work is common for contemporary organizations. These changes also require new skills and competencies from employees to remain sustainably employable.

#### Relevant UN SDGs.

Good health and wellbeing; Quality education; decent work and economic growth

*Keywords: change at work, employee learning, supervisor support*

## **Symposium S053**

### **Affect at Work: New Conceptual Developments**

Hector Madrid, Universidad Adolfo Ibáñez, Chile

science

What will be covered and why? Affect is a pivotal psychological process in organizations (Barsade et al., 2003; Elfenbein, 2007). The extant research in this field of inquiry has shown that, for example, the experience of emotions and moods participate in employee motivation, stress, performance, and well-being in the workplace (Totterdell & Niven, 2012). However, despite the weight of studies conducted over the last two decades, research on affect at work is far from complete due to the constant introduction of new research questions, topics, and constructs of interest. Thus, this symposium presents a collection of conceptual papers aimed to address issues about affect linked to cognition, well-being, and teamwork in organizations.

In the first paper, Ibaceta develops a theoretical framework to describe the antecedents of mind-wandering in the workplace. The latter denotes the cognitive process of being immersed in the inner world and thoughts, which can promote creativity at work. The second paper of Escaffi builds a model to describe and understand the role of autonomy to take breaks in the workplace for affective well-being and work performance in service jobs. The third paper presented by Vasquez proposes a taxonomy for interpersonal emotion regulation in the context of teamwork, founded in multi-level theory and group composition models theories. Finally, Perez presents a theoretical review to build the basics of a conceptual model of group-level affect in virtual teams and how shared affective experiences in the context of virtuality influences teamwork effectiveness.

Relevance to the Congress Theme . The affective experience is a core component of psychological well-being, and the latter is essential to a better future. Furthermore, in the context of intense changes in the world of work, the correlates of affect studied here, expressed in creativity, work performance, and teamwork, should be deeply understood for effective practice in the present and future of organizations.

Research/Practical Implications . The papers presented in this symposium contribute to continuing and expanding research on affect in organizations by the conceptual elaboration of underexplored psychological processes and social dynamics related to affect at work. As such, these works have the potential to inform and nurture novel research initiatives in work and organizational psychology.

Overall conclusions . The symposium contributes to the work and organizational psychology by the elaboration of novel research questions and conceptual developments of affect at work.

discussant: Hector Madrid, Universidad Adolfo Ibáñez, Chile

*Keywords: affect, emotions, theory*

## **Paper 1**

### **Affect and Mind-Wandering at Work**

Miguel Ibaceta, University of Manchester, UK

Theoretical background. Mind-wandering refers to the shift of attention from events in the external environment to internal, self-generated thoughts (Smallwood & Schooler, 2015). Traditionally, mind-wandering has been considered counterproductive behavior in organizational psychology since it involves diminished attention to the tasks at hand (Robinson & Bennett, 1995). However, recent studies have argued and supported that mind-wandering may have under-appreciated benefits because it leads to creativity in the workplace (Baer et al., 2021). Given this positive side, determining which factors drive mind-wandering emerges as a relevant research problem (Dane, 2018). Thus, this conceptual paper develops a framework to understand where mind-wandering comes from, focusing on affect and job characteristics in the work context.

General psychology research has shown that affect plays a role in the emergence of spontaneous thoughts (Poerio et al., 2013; Smallwood et al., 2009). When individuals experience negative feelings linked to, for example, anxiety and depression, their minds are prone to drift from the external world toward their intrapersonal realm. The explanation for these effects proposes that mind-wandering is a “way of escape” from stressful environmental conditions to obtain mental recovery. Thus, integrating the job demands-resources model and the affect-as-information hypothesis (Bakker et al., 2014; Madrid & Patterson, 2019; Martin & Stoner, 1996), I argue that it might be the case that employee mind-wandering emerges from job stressors, such as workload, time pressure, and problem-solving demands. Specifically, negative affect informs individuals that potential threats to well-being (i.e., demands) are present in the work environment, increasing the likelihood of mentally escaping from them, which is functional to psychological recovery and, therefore, better future performance. Furthermore, I expand the above argumentation, proposing that spontaneous thoughts might also stem from positive affect, like enthusiasm and inspiration, associated with job resources, such as autonomy and task variety. In such a case, positive feelings cue the presence of environmental conditions involving possible psychological rewards, which facilitates spontaneous thoughts to engage in problem-problem solving. Together, mind-wandering evolving from job demands and resources, by means of negative and positive affect, would lead to performance outcomes depending on deep thinking processes, like creativity.

New Perspectives/Contributions. Mind-wandering has just recently been recognized as a relevant phenomenon to understanding psychological processes at work, such that relevant theory and research are still scant in work and organizational psychology. Thus, the model presented here is a novel research endeavor to expand and continue with this stream of research.

Conclusions. Given that mind-wandering could benefit work outcomes, the description of its etiological factors is valuable and needed for theory and practice in organizations. In the latter case, interventions in, for example, job design might help to manage the impact of mind-wandering in the workplace. This work is one of the first efforts to describe and understand the affective antecedents of mind-wandering at work by integrating research on general psychology and organizational psychology applied to the workplace.

Relevance to the Congress Theme . Affect and mind-wandering are potent drivers of creativity and innovation, which are essential ingredients for building change and a better future.

Relevant UN SDGs. Good health and well-being

*Keywords: affect, mind-wandering*

## Paper 2

### Break Autonomy, Affective Well-being and Service Performance

Maximiliano Escaffi-Schwarz, Universidad Adolfo Ibáñez, Chile

Theoretical background . Deciding when to take breaks should increase affective well-being because it lets employees effectively manage their energy levels and reduce the stress that may come from unwanted interruptions. However, why break autonomy is related to the affective experiences at work has not been theoretically elaborated enough in work and organizational psychology. Thus, here, I present a model of break autonomy considering the direct and combined effects of break activity and timing autonomy on affective well-being and, thereby, job performance. In this model, I focus on affective well-being because it contains in a single construct other common conceptualizations of break outcomes, such as vitality, energy, positive affect, and fatigue. Furthermore, customer satisfaction is utilized as the performance criterion in the model, given that service jobs are highly sensitive to the experience of well-being linked to intense interpersonal interactions.

Past empirical research on breaks has suggested breaks perceived as chores (i.e., low activity autonomy) or interruptions (i.e., low break autonomy) can have negative consequences, such as reduced well-being (Boucsein & Thum, 1997; Trougakos et al., 2014). Thus, breaks should be most effective in protecting well-being when taken in a timely way (Feyer & Williamson, 1995). Accordingly, having break timing autonomy will help keep low-activated negative affective experiences at bay and allow workers to feel more energetic after the break. Alternatively, a lack of break timing autonomy can turn breaks into interruptions. The latter makes it more difficult for workers to re-engage in work tasks after the break and increase experiences of stress. Therefore, workers with high levels of break timing autonomy should report higher levels of high-activated positive affect and lower levels of high and low-activated negative affect. Deciding what to do during breaks should also be related to affective well-being because it protects breaks from being perceived as chores and allows workers to engage in their preferred activities. Specifically, workers who are unable to decide what to do during breaks have to exert extra effort to engage in those activities, which results in higher levels of fatigue (Trougakos et al., 2014). Additionally, when there is a congruency between job demands and rest activities, break effectiveness is maximized (Dababneh et al., 2001) because workers can target their recovery efforts toward specific needs (Venz et al., 2019). All of this should be experienced as higher levels of activated and deactivated forms of positive affect.

In turn, affective well-being resulting from breaks should be related, in the context of service jobs, with higher levels of customer satisfaction after the break. Specifically, workers who experience positive affect during a break display more positive emotions after the break (Trougakos et al., 2008). Customers who interact with employees who display positive affect usually perceive workers as more helpful and friendly, resulting in higher levels of satisfaction with the interaction (Holman, 2016; Tsai & Huang, 2002). In contrast, workers who experience negative affect during the break will have to fake positive affective displays to meet display rules in service organizations (Hochschild, 1983). Nevertheless, some customers can detect these inauthentic emotional displays, which would violate the expectations of a service encounter, thus leading to lower levels of satisfaction (Holman, 2016). Moreover, when self-regulation processes fail, employee negative affect might leak out, violating customers' expectations. Combining the above points, I propose that break timing and activity

autonomy should be indirectly related to customer satisfaction via the experiences of affective well-being.

**New perspectives/Contributions .** This research contributes to current conceptualizations of breaks' boundary conditions and their specific effects on employee affective well-being. Specifically, studies on break usually focus on break activity autonomy (Trogakos et al., 2014; Venz et al., 2019) but do not consider whether workers proactively engaged in the break.

**Conclusions .** This conceptual development expands the emerging research on breaks and affect at work, focusing on service performance. In practical terms, practical implications derived from this knowledge will inform organizations to promote employee well-being and job performance. This work is one of the first conceptual developments aimed at disentangling the role played by break timing and activity autonomy for affective well-being and job performance.

**Relevance to the Congress Theme .** During the pandemic, many workers have been left mentally exhausted. One of the many ways to address this exhaustion is through better work breaks, but only if these breaks are taken when and how they are needed. Therein lies the relevance of this study to the congress theme: workers are in need of better work environments that help them restore and improve their well-being, and autonomous work breaks are one way of doing this.

Relevant UN SDGs. Good health and well-being

*Keywords: affect, breaks, well-being*

### **Paper 3**

#### **Interpersonal Affect Regulation in Groups and Teams**

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##### Theoretical background

In the past years, researchers have proposed several mechanisms by which group members may influence the affective experiences of other members (Collins et al., 2013; Marks et al., 2001). Most of the works have appeal to emotional contagion – the automatic process by which affect is quickly transmitted among group members – as the main mechanism through which team members influence others' affect (Ashkanasy & Humphrey, 2011; Collins et al., 2013). However, individuals are not simply passive receivers of others' affect; they are agents instead. They can strategically modify others' affect to match situations' requirements. Interpersonal Affect Regulation (IAR) has been defined as individuals' deliberate attempts to regulate someone else's affect (Niven et al., 2009).

This conceptual paper presents a theoretical elaboration of the concept of IAR in work groups and teams. Following the multilevel structure that IAR may adopt in group contexts, for example, multiple individuals engaging in actions to regulate other members' affect within the group, we examine previous evidence in IAR at different levels of analysis (i.e., individual, dyadic, team). Regarding the individual and dyadic level of analysis, previous evidence has shown how social ties and feedback mechanisms influence IAR between group members. Thus, members may engage in particular strategies to regulate the feelings of their colleagues who have a distinctive relationship. In terms of the group-level of analysis, we use Chan's (1998) composition model framework to examine several alternative ways of conceptualizing a group-level IAR (e.g. additive, direct consensus, referent shift, and dispersion models).

In a group additive model of IAR the greater the number of IAR behaviors shown by group members on average, the more the group level IAR. A direct consensus model of IAR involves there being an agreement between group members on the extent, frequency, or choice of strategies that members use to regulate others' emotions. Thus, the meaning of the group-level is in the consensus among members. A referent shift model of IAR adds nuances to the consideration of this agreement, claiming that a group-level phenomenon has meaning only if a shift in the referent prior to the consensus assessment is made. This shared perception of a group-level reality means that members agree on the extent to which the group-as-a-whole regulates its own affective states. The dispersion model of IAR obtains its meaning from the variation or heterogeneity that can be observed among group members. Specifically, as members may vary in terms of the strategies that they use to regulate colleagues' emotions and the frequency with which they engage in these actions, it is important to analyze this effect as well.

##### New Perspectives/Contributions

This research contributes to the contemporary theory of interpersonal affect regulation (Troth et al., 2018), and group emotions (Collins et al., 2013) by having a more refined understanding of the role voluntary actions that group members may engage in to actively influence other members' affect. This theoretical elaboration examines a key missing piece to understanding affective dynamics in groups and teams. Additionally, this research contributes to multilevel theory applied to organizational behavior (e.g., Ashkanasy & Dorris, 2017) by studying interpersonal affect regulation considering different levels of analysis (i.e., individual, dyadic, team).

## Conclusions

The theoretical development performed in this research will contribute to future scientific inquiries by outlining the importance of IAR as a key psychological mechanism to understand group affect, and by specifying the extension and boundaries of a conceptualization of this construct in the group context. This may facilitate more comprehensive research questions and appropriate methods to assess such behaviors. For example, regarding a hypothetical research question: Do group members engage more frequently in AIR with their friends within the group vs other members? The focus might be on understanding dyadic effects within groups. Thus, multi-level models may be the most appropriate to analyze individuals nested in dyads, and nested in teams.

### Relevance to the Congress

Theme Teamwork is the future for many organizations. The theoretical elaboration advanced in this article will contribute to the new world of work by enabling researchers to have a fine-grain knowledge of interpersonal behaviors within complex social contexts, such as groups and teams. Thus, having a more precise understanding of teamwork will likely increase the development of tailored initiatives to improve employee experience at work.

### Relevant UN SDGs

Good health and wellbeing

*Keywords: affect, emotion regulation, teams*

## Paper 4

### Affect and Team Virtuality

Ignacio Perez, University of Sheffield, UK

Theoretical background . Research about work groups has shown that shared affective experiences among team members play an important role in team effectiveness, expressed in, for example, information processing, motivation, and interpersonal behavior. However, most of this research is based on studies with face-to-face (FtF) teams, such that the function of affect in virtual teams is still underdeveloped. This paper presents a review of research to build the basics for a theoretical elaboration about affect and virtuality at work to contribute to this field of inquiry.

Emotional contagion, that is, “the transfer of emotion from one person to another” (Menges & Kilduff, 2015, p. 867), has been the most studied mechanism that allows team members to develop shared affective experiences. Several automatic and conscious processes have been accounted for to explain this transfer of emotions. From the automatic processes, mimicry is relevant as people copy the facial expressions, voice intonation, and body movements of their interaction partners (Barsade & Knight, 2015; Hatfield et al., 1993), which in turn leads to the mimicker to feel the emotions of their interaction partner based on primitive afferent feedback (Elfenbein, 2014). Regarding conscious processes, explicit expressions of emotions and sensemaking have been proposed. Emotional expressions are an important source of information, and team members will likely consider other members’ emotions to adapt their feelings to specific situations (Van Kleef, 2009). Similarly, sensemaking is the process by which team members arrive at collective interpretations – or appraisals – of events through interactions and conversations (Hareli & Rafaeli, 2008), which in turn makes them more likely to have similar emotional reactions to those events (Lazarus, 2001).

The media by which team members interact and its characteristics could be influential in facilitating or hindering several of the mechanisms mentioned above. Media Synchronicity Theory (MST; Dennis & Valacich, 1999; Dennis et al., 2008) is one of the recent developments that have systematized the physical attributes – or capabilities – of different types of media, considering both FtF and information and communication technologies (ICTs), such as video calls, chats, and emails. MST argues that media differ in their capabilities to support the transmission or processing of information (Dennis et al., 2008). Usually, the transmission of information requires media that support quick delivery of messages (transmission velocity), multiple communications and participants (parallelism), and the use of verbal and non-verbal communications (natural symbols). On the other hand, information processing is better supported by media that allows to review the information multiple times (reprocessability), refine messages before sending them (rehearsability), and that relies on text and numbers (digital symbols). While there is clarity on the relevance of transmission capabilities for emotional contagion (e.g., by allowing the mimicry of facial expressions or by facilitating the quick exchanges needed for sensemaking), less is known about the impact that processing capabilities could have on affective convergence. For example, Cheshin et al. (2011) found that emotional contagion happens in virtual teams that only communicate through text-based ICTs, which dampens the automatic mimicry of facial expressions or body movements. However, to do so, members rely on the interpretation of communicational behaviors, such that, for example, flexibility is seen as a reflection of happiness and resoluteness of anger.

Cheshin and colleagues' study offers important insights into understanding the impact of ICTs on affect in teams. Nevertheless, the dichotomy of virtual vs. FtF teams has been questioned as most

teams will have some degree of virtuality; that is, most teams will combine, to some extent, the use of FtF and ICT-mediated interactions (Gilson et al., 2015). In this context, we are still lacking theoretical works that help us to understand the impact of processing capabilities when used as a complement of transmission features rather than as a replacement.

**New Perspectives/Contributions** . This work will expand the literature on affect in work teams by examining how different media capabilities are related to the development of shared affective experiences within teams. Especial attention will be given to the impact that combining both processing and transmission capabilities can have on the development of affect in teams. This is of particular relevance as, after the COVID-19 pandemic, team members rely more on hybrid modalities of work communicating through a combination of ICTs and FtF than ever before.

**Conclusions** . This research will provide the basics for building a theoretical framework to understand how affective processes evolve in a virtuality context. In practical terms, this knowledge will help practitioners by giving them more fine-tuned guidelines to manage the use of multiple interaction media within teams beyond the dichotomy of virtual vs. traditional teams. This work represents one of the first attempts to understand the relationship between teams' virtuality and affective processes based on the conceptualization of media capabilities.

**Relevance to the Congress Theme** . Due to the many changes that the COVID-19 pandemic brought, team members are relying more than ever on ICTs to support their interactions. Understanding how the use of this type of media can impact the development of affective experiences within teams is crucial for researchers and practitioners to help teams in their development of positive interpersonal relationships, effective work processes, and thus contribute to the overall well-being of workers.

**Relevant UN SDGs** . Good health and well-being

*Keywords: affect, virtual teams*

## Symposium S054

### Process and effect evaluation of interventions at different levels across organisations: Case studies from the H-WORK project

Marco De Angelis, University of Bologna

science\_practice

What will be covered and why: The symposium aims to present the main evidence-based findings of the Mental Health and Workplace Stress Intervention, which was carried out as part of the H- WORK project (De Angelis et al., 2020). The EU-funded project aimed to test and validate interventions at different levels of the organisation (individual, group, leader, organisation; Day & Nielsen, 2017), particularly in public health and SMEs, which are considered critical work environments for mental health. In occupational health and work and organisational psychology, a limited number of studies consider relevant aspects of the intervention, such as the underlying mechanisms that determine effectiveness (Liu et al., 2019). In other words, there is still a lack of studies that use a realist approach to assess the mechanisms involved in interventions that promote well-being (Nielsen & Miraglia, 2017). The four contributions will provide valuable insights into how contextual factors and implementation mechanisms play a role in the overall effectiveness of interventions by applying the principle of realist evaluation

The first presentation will outline how mindfulness-based interventions influenced participants' emotional styles at an individual level. The intervention targets personal skills to better cope with stressful events, and training transfer and peer and supervisor support are critical mechanisms fundamental to achieving positive changes in mental health outcomes. The second presentation provides evidence of a group-level digital intervention to promote communication through social network visualisation and team coaching. The digital-based intervention offers real-time data on group dynamics and increases team awareness and reflexivity. In this study, a positive evaluation and experience with the digital tool are considered crucial for training transfer and the effectiveness of the intervention at the team level. Thirdly, the authors will present the results of the efficacy of the mental health intervention at the leadership level in Czech SMEs. The intervention, which involves managers and their employees, aims to raise awareness of the possible negative consequences of remote working. In this new work scenario, managerial commitment, individual readiness for change and job (in)security can promote positive change. The fourth presentation explores the effectiveness of e-coaching interventions for managers and employees to deal with the challenges the participants faced during the acquisition phase.

Relevance to the Congress Theme: Changing work environments are a constant in today's world. The pandemic has made the need to address mental health in the workplace even more apparent. At the same time, it has become even more urgent to provide employees, teams and managers with practical and evidence-based guidance on adequately dealing with the emotional and barely manageable consequences of such changes (WHO, 2022). It has recently been highlighted that managers lack knowledge and organisational measures to deal with the adverse effects of mental health in the workplace (EU-OSHA, 2019), or they rarely implement mental health promotion and occupational stress programs (Martin et al. 2020). The symposium explores the topic of mental health and wellbeing in the workplace by examining relevant aspects such as job insecurity and employees' attitudes towards the interventions they have participated in, group processes and leadership styles, and highly complex organisational scenarios such as mergers and acquisitions.

Research/Practical Implications: Understanding the contextual aspects and mechanisms that facilitate the implementation of different interventions targeting the different levels of the organisation allows practitioners and researchers to understand what works, for whom and in what circumstances. The results provide evidence-based knowledge about the effectiveness of these interventions, i.e., whether or not the interventions bring about the desired change, which promisingly facilitates the transfer of this knowledge and these interventions to other work environments. Indeed, another exciting aspect is the diversity of the organisational contexts studied. On the one hand, a public healthcare organisation, on the other hand, small and medium-sized enterprises from different sectors (IT, retail cloud services), thus providing practical guidance to multiple stakeholders.

Overall conclusions: This symposium will provide an overview of different interventions to promote well-being and mental health at different levels of the organisation (i.e., individual, group, and leadership). A realistic evaluation approach emphasises how contextual aspects in the workplace trigger the mechanisms associated with intervention outcomes that explain why, how and with whom the interventions had the desired impact in the different organisations involved in the European project.

*Keywords: Multilevel interventions; Realist evaluation; Mental Health*

## Paper 1

### **The impact of mindfulness-based individual level interventions on the Emotional Style of participants: A process evaluation study**

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**Research goals:** This study is part of the European project H-WORK, which aims to promote employee mental health and well-being in small and medium enterprises (SMEs) and public organisations through the design, implementation, and evaluation of multilevel interventions (De Angelis et al., 2020). Specifically, this study aims to examine the effects of different phases of three Mindfulness-Based Interventions (MBI) on participants' emotional styles. The individual-level intervention was conducted in four SMEs in Spain and the Czech Republic.

**Theoretical background:** Promotion of well-being and optimal mindset of employees belongs among the most fundamental and still current challenges for work psychology. This area has become even more urgent due to the Covid-19 pandemic and connected restrictions (Evanoff et al., 2022). One of the recent fast-spreading methods for improving the population's well-being is MBI (Carmody & Baer, 2008). However, little attention has been paid to MBI as a tool to promote healthy and positive outcomes rather than to reduce adverse outcomes (Coo & Salanova, 2018). One potential positive outcome is the Emotional Style of the participants, which is susceptible to changes (Kesebir et al., 2019). The construct of healthy emotionality is based on neuroscientific studies of emotions developed over the last three decades (Davidson & Begley, 2012), which identify six critical dimensions of emotional life: Attention, Self-Awareness, Outlook, Resilience, Social Intuition and Sensitivity to Context. In addition, the present study follows the theoretical approach of Realist Evaluation (Nielsen & Abildgaard, 2013), which strives to include elements from the Context and the implementation process (Mechanisms) associated with the expected Outcomes.

**Design/methodology:** Employees in four SMEs (one global retail company in the Czech Republic, N = 48; a mobile device management system developer company in the Czech Republic, N = 37; a Spanish IT company, N = 66; and a business performance consulting company in Spain, N = 28) participated in different Mindfulness-based interventions: 1) a 3 group sessions Positive Stress Management Program that aimed to develop a set of skills to proactively manage stressful situations (Coo & Salanova, 2018); 2) a Healthy Emotionality Program (Davidson & Begley, 2012), which consists of a digital platform and follow up group sessions with practical training on the six critical dimensions of emotional life; and 3) a group 8-week training in Mindfulness-Based Cognitive Therapy focused on increasing mindfulness and self-compassion and decreasing stress, anxiety, rumination and depressive symptoms (Williams & Penman, 2011; Frostadottir & Dorjee, 2019). For the evaluation, quantitative measures are collected at different points in time, covering contextual factors, mechanisms and outcomes. The data will be analysed using Structural Equation Modelling with PROCESS in SPSS to test for mediation and moderation effects.

**Expected results:** We expect that the baseline levels of employee Readiness for Change (Context measure) before starting the interventions will prompt participants to Transfer the Training

(Mechanism) acquired to their daily work, which in turn will increase participants' Emotional Style and Well-being (Outcomes) levels after the interventions. Peer support and Leader Support will act as moderators in the interaction between Readiness for Change and Training Transfer, and Work Demands will serve as a moderator in the interaction between Training Transfer and Outcomes. The intervention program, intervention site, country, and participation in other interventions will be used as control variables to compare our study sample.

Limitations: A limitation of the study is that data collection for follow-up intervention time (6 months after finishing interventions) will not be gathered before the presentation. Thus, we cannot present the results for the whole research model at this stage. However, we analyse and include baseline, process evaluation and post-interventions results for the presentation.

Practical Implications: Implementing these individual-level Mindfulness-based interventions in different organisations will allow for cross-countries scientific comparison on what conditions and mechanisms lead to the desired outcomes, for whom and under which circumstances.

Relevance to the congress theme : Findings might be of interest to the Congress theme because of the novelty of our study in incorporating digital versions of interventions, thus creating excellent opportunities for organisations to ensure continued working from home and maintaining productivity and well-being.

Relevance to UN SDGs: Results might contribute to UN SDGs 3 (Good Health and Well-Being) and 8 (Decent Work and Economic Growth), given that the ultimate goal of our study is to promote healthy, resilient, and productive employees and organisations, to be able to emerge even more robust and thrive in adverse situations, such as economic crisis or critical internal changes (Salanova, 2021).

*Keywords: Mindfulness-based interventions; Emotional Style; Well-being*

## Paper 2

### **A realist evaluation of a group-level digital intervention to promote communication via social network visualisation and team coaching: Longitudinal m**

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Research goals and why the work was worth doing: Perform a realist evaluation of a digital-based team coaching intervention to promote communication via social network visualisation. Context, working mechanisms, and attitudes should be considered when evaluating interventions (Nielsen & Randall, 2013; Roodbari et al., 2021) as they may influence intervention outcomes, facilitate, or hinder the effectiveness, and explain the success or failure of an intervention.

Theoretical background: Interventions are effective when trainees have support from colleagues and managers to use acquired skills and knowledge (Holton III et al., 1997). In turn, they must transfer new skills and knowledge to the workplace and implement action plans (Grohmann & Kauffeld, 2013). The digital-based intervention (Bahbouh, 2012) aims to promote desired over current dynamics through action plan development. Its success implies a team effort, acceptance, and usability of deployed digital tools. Therefore, we hypothesised that if recipients perceive peer and manager support to apply developed action plans to everyday work, they are more likely to transfer and implement the action plans jointly define during the intervention. In turn, they will show improved team performance, teamwork, coordination, and less interpersonal workplace conflict. Also, a moderation effect is hypothesised, such that relationships will be stronger for those higher in acceptance and usability at the immediate end of the intervention and those higher in team performance, teamwork, and coordination, and lower in interpersonal workplace conflict at pre-intervention.

Design/Methodology/Approach/Intervention: The intervention was delivered in a large Italian public healthcare institution and a medium Czech retail enterprise. In Italy, seven teams from 3 hospital areas were involved, each including 6 to 13 healthcare workers (N = 62) who received 4 group sessions in 2-month intervals via a videoconferencing platform. The first session was scheduled for 3 hours, and the remaining three sessions for 2 hours. In the Czech Republic, 15 teams from 5 departments were involved, including 6 to 16 members (N = 107) who received three online group sessions in 3-month intervals. Depending on team size, the first session was scheduled for 3 hours and the remaining 2 for 1.5/2 hours. We collected survey-based psychometric measures at five-time points. At T1, pre-intervention proximal outcome measures were collected for team performance (support, autonomy and reflexivity), interpersonal conflict at work, teamwork and coordination. At T2, measures of contextual factors such as peer and supervisor support were collected. At T3, attitudes towards the digital intervention were measured, e.g., acceptance and usability. At T4, measures of working mechanisms were collected, e.g., training transfer and implementation. At T5,

proximal measurements were taken post-intervention, as at T1. All measurements were quantitative and included Likert scales.

Expected results: We will use Mplus to test a Context-Mechanisms-Outcomes configuration (Nielsen & Miraglia, 2017), that is, a longitudinal structural equation model in which, by 2023, we expect to find peer and manager support as critical factors positively predicting training transfer and implementation which, in turn, will positively predict team performance, teamwork, and coordination and negatively predict interpersonal workplace conflict. These mechanisms will be moderated by higher/lower levels of acceptance and usability of the digital tool. Results will be compared across the intervention sites.

Limitations: The high turnover of participants across intervention sessions may have caused answers to questionnaires not to be fully informed. The small sample size limits statistical power; therefore the generalisability remains limited to digital team communication interventions in Italian public healthcare and Czech retail.

Research and practical implications: Findings may support previous research in that intervention context influences working mechanisms, with peer and manager support being able to facilitate transfer and implementation and those being able to translate into proximal outcomes, thus helping to understand how the intervention brings about changes. Managers may design the context in which digital group-level interventions occur to provide recipients with social support and opportunities to transfer and implement what has been learned and developed through training.

Relevance to the congress theme: Results might be relevant to “The Future is Now: The Changing World of Work” as the study encompasses novel ways of delivering workplace interventions.

Relevant UN SDGs: Results might be relevant to UN SDGs “3: Good Health and Well-Being”, “8: Decent Work and Economic Growth”, and “9: Industry, Innovation and Infrastructure” since good communications is a cornerstone of healthy teamwork and contribute to high team performance at work (Marlow et al., 2018).

*Keywords: Realist evaluation; Digital interventions; Team communication*

### Paper 3

#### **An evaluation of the effectiveness of leader-level intervention Mental Health Awareness Training on mental health in Czech SMEs**

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Research goals and why the work was worth doing. The study aims to evaluate the effect of mental health awareness training for managers on employees' appraisal of the mental health climate, considering the moderating role of leadership commitment, employee participation, readiness for change and job insecurity.

Theoretical background. The research seeks to analyse the effect of a leader-level intervention on mental health during the Covid-19 pandemic. Pandemic restrictions have entirely changed work habits. Most workers have moved from offices to their homes which caused new challenges and demands on several aspects of work (Žiedelis, 2022). One of the most affected is mental health. Online work settings make well-being issues less visible as online interaction focuses mainly on task topics (Molino et al., 2020). Continual changes, lack of predictability in workload, and unclear boundaries between work and personal life contribute to poor mental health (Helliwell et al., 2021). As people work from home, managers do not meet them daily to check their mental health in personal contact.

This demands managers to be more aware of how their employees feel. For this reason, there is an increased need to develop the competence to talk about mental health topics openly, safely and confidentially (Corrigan, 2014). Mental health awareness training helps managers to identify the early signs and symptoms of common mental health conditions, talk about mental health issues and prevent well-being-related problems (Dimoff et al., 2016; 2019).

Methodology. The pre-post field research design was implemented to investigate the effect of mental health awareness training on the well-being of employees. The intervention was delivered based on the results of a needs analysis carried out upfront, which indicated a lack of competency in talking about mental health issues openly, safely and confidentially.

In total, 60 managers (26 and 34) from two different SMEs attended the online training. Managers and their subordinates completed the mental health baseline questionnaire at two-time points- before the interventions had started and one year after the interventions had started.

Expected results. Data collection is in progress, and results will be available in the coming weeks. We expect that if there is a high leadership commitment, high participation from the employees, increased readiness for change and low job insecurity, then the employees will participate voluntarily in the sessions, will feel optimistic about the content, and have a high intention to transfer the knowledge and skills into their daily work life. As a result, the employees will be better able to care about their mental health and be more resilient due to increased psychological capital and self-compassion, which, in turn, will foster a mentally healthy work climate. Data will be analysed using Structural Equation Modelling to test the moderation effects of leadership commitment, participation, readiness for change and job insecurity on training effectiveness.

Limitations. At the time of the presentations, pre- and post-intervention data will be available even though the research will still be in progress. The research's field character might decrease the study's external validity.

Conclusions. There is a need for knowledge on preventing well-being-related problems in a changing world with more remote work and mental health issues. The present study adds to this need by exploring the effect of mental health awareness training. The practical contribution of this research is to provide specific recommendations on creating mental health awareness for leaders through training interventions and thus promote employee wellbeing.

Relevance to the congress theme. The presented study meets the congress topic as mental health is currently highly vulnerable and significantly impacts well-being and employee productivity.

Relevance to UN SDGs: Results might be relevant to UN SDGs "3: Good Health and Well-Being", "8: Decent Work and Economic Growth", and "8: Decent work and Economic Growth".

*Keywords: Mental health; Managers; Training effectiveness evaluation*

## Paper 4

### **Guiding through turbulent times: Positive Leadership Coaching during Merger and Acquisition**

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**Research goals :** This study examines how positive leadership coaching (PLC) supports employees and managers to cope with the challenges induced by M&As. Using a qualitative approach, we aim for a detailed understanding of the subject's experiences; the perceived challenges generated by the M&A and to analyse how exactly they reflect the coaching's support mechanisms to cope with those challenges. Our research provides evidence on the effectiveness of coaching in the context of M&A and advising organisations undergoing M&As, on how coaching should be organised to maximise its effect.

**Theoretical background:** Mergers and acquisitions (M&As) are common procedures in the business world, often associated with a negative impact on employee well-being. The M&A procedure may create difficulties, such as layoffs, job insecurity, reorganisation, or change in business culture (Dick et al., 2006; Seo & Hill, 2005). In addition, M&A has been associated with employee anxiety, feelings of ambiguity, lower productivity, lower self-esteem, and mental and physical illness (Mangundjaya & Fachruddin, 2012; Rosa et al., 2017; Smollan, 2015; Wang et al., 2012).

Over the years, this phenomenon triggered intense research on different mechanisms organisations may implement to support employees during M&A processes, such as leadership support or job redesign (Seo & Hill, 2005). Previous studies show a positive correlation between coaching and successful change management by promoting solution-focused thinking and self-efficacy (Grant, 2014). Yet, little is known about how coaching interventions help employees manage change in the M&A context (Bickerich et al., 2018).

**Design/Methodology:** The single-case study was conducted in a globally operating marketing company based in the Czech Republic with approximately 300 employees. A larger, UK-based corporate organisation acquired the Czech SME. PLC was implemented to facilitate well-being and empowerment, support managers to lead by example, and enhance personal and professional development. The coaching concepts drawn on were positive leadership (Malinga et al., 2019) and Whitmore's GROW model (2013), applied as individual case coaching (Grant & Greene, 2004). The coaching was part of the H-Work project, which offers multilevel interventions to organisations to promote mental health and well-being. We conducted 11 semi-structured interviews with PLC participants as part of an overarching study to evaluate the interventions' effectiveness. The purposive sample consisted of seven managers and four employees, all of whom stayed in the organisation after the acquisition. The data analysis was carried out by all researchers independently, who then discussed and merged the results. Deductively, we developed three main categories for the themes "acquisition", "Coaching," and "Leadership," with a total of 27 codes.

**Results obtained or expected:** We got preliminary findings creating a clear picture of the challenges the participants faced caused by the acquisition. In particular, they were dealing with changes due to the organisation's restructuring, the evolution of corporate identity, and the high fluctuation. Besides

a high satisfaction with the coaching, our findings point to a strong efficacy in helping employees cope with the acquisition process's challenges. In particular, we discovered that the participants benefited from an improved self-awareness regarding their needs and goals and empowerment to advocate for their interests. Further, this helped several participants evaluate their future, especially those considering leaving the organisation, which became aware of reasons to stay. Thus, we see an apparent effect on avoiding turnover. The analysis is still ongoing, and we expect to identify crucial factors relevant to the effectiveness of the coaching intervention in this context.

**Limitations:** The main limitation of this study is that it is a single case study. As every M&A process is different, this limits the transferability to other M&A cases. Also, the interventions took place amid the COVID-19 pandemic, thus, the acquisition wasn't the only cause of employee disruption. A second limitation is that the coaching was part of a package of multi-level interventions offered; Many interviewees participated in other interventions as well, so the effects can't be attributed to coaching explicitly.

**Relevance to Congress Theme "The Future is Now: the changing world of work":** M&A processes are one facet of today's changing world of work. This research underlines the importance of designing change processes emphasising the well-being of those affected.

**Relevance to UN SDGs:** As this research presents relevant findings about promoting well-being in the workplace during M&A processes, it contributes to goals 3, "good health and well-being", and 8 "decent work and economic growth", of the SDGs.

*Keywords: Leadership Coaching; Mergers and Acquisitions; Positive Psychology*

## Symposium S055

### Regret in Careers: Examining its sources, implications, and responses

Alexandra Budjanovcanin, King's College London; Bettina Wiese, RWTH Aachen

science

#### Introduction

Decisions are a mundanely routine feature of life and where there are choices to be made there will be scope to regret. Although individuals confront choices almost daily in their working lives, and the consequences of regretted decisions taken during one's career must be lived, it is an area of the research landscape that remains sparsely studied (Byington, Felps and Baruch, 2019). This symposium therefore explores career regret - the feeling of wishing to undo a past decision made in one's career – and illuminates its sources, implications, and responses, broadening our knowledge of this ubiquitous cognitive emotion. Specifically, through three empirical studies that encompass both qualitative and diary study designs, the symposium conveys the variety of ways in which regret is impacting individuals' careers and working lives, individuals' responses to experiencing career regret and both the positive and negative consequences of this emotion – for people and for organisations.

The first paper highlights how changes to global norms around parental leave have caused fathers to seek to take advantage of this practice. Yet, despite this good news story about greater equality in parental leave taking, the study shows that some fathers end up regretting their decision to utilise this HR practice, which may threaten its future adoption. Importantly, this diary study, amongst 146 German fathers, highlights that line managers in particular play a role in lessening parental leave regret and points specifically to practices that convey both supervisory and organizational family-support.

The second paper examines occupation-specific regret and its effect on performance through a 45-person qualitative study in the UK. Unsurprisingly, occupational regret is linked to detrimental consequences including withdrawal behaviours, which impacts on individual performance and has implications for organisations. However, the interviews revealed that a subset of individuals – those with a strong work ethic – reported no effect on their performance, highlighting a psychological paradox (a wish to withdraw from work caused by regret and a simultaneous wish to maximise effort because of their work ethic). The study draws attention to the personal costs of this paradox - emotional labour and exhaustion - and the findings highlight the divergent outcomes for organisations and individuals.

The final paper shifts focus to examining how individuals respond to their career missteps, allowing them to potentially avoid career regret. Through 72 interviews with a range of professionals in the Netherlands, this qualitative study coins the term 'career repair' in identifying the variety of processes that can occur to respond differently to regretted decisions. Specifically, the study identifies several clear and practical strategies, including restoring (re-aligning career with personal values), extending (broadening boundaries), transitioning (changing organization/team) and negotiating ((re-) negotiation of conditions) that can lead to either career recovery or career growth. This study brings the concept of regret full circle in providing a constructive approach to dealing with this cognitive emotion in the context of one's career.

In seeking to clarify the (practical and theoretical) relevance of illuminating the nomological network of career regret in this symposium, we will draw on the expertise of the discussant Dr Ricardo Rodrigues, whose scholarly work focuses on careers. Dr Rodrigues' knowledge of the careers

research landscape, and specifically career orientations, choice and regret (e.g., Rodrigues et al., 2013), will facilitate in contextualising the insights from the symposium to the broader careers and organisational literature.

#### Relevance to Congress Theme

In order to compete and collaborate in the changing world of work, individuals need to be positively psychologically adjusted to their careers. With ever-present changes occurring, decisions made by individuals today may become regretted tomorrow and as such, greater understanding of this emotion can help individuals to feel better equipped to navigate their working lives.

#### Implications

The contribution to research of this symposium lies mainly in the way it illuminates this less understood experience in the work context. Identifying its nomological network is important because of its detrimental individual and organisational implications for individuals in the workplace. Practical implications relate to individual actions (linked to career repair) organisational policy (linked to support-related practices) and government policy (linked to ensuring better career guidance for individuals choosing their occupation).

#### Overall conclusions

Despite its ubiquity, there is a relative dearth of studies that examine this experience in people's working lives. For better adjusted employees and greater career wellbeing, we propose the further study of career regret.

discussant: Ricardo Rodrigues, King's College London

*Keywords: Regret career decisions*

## Paper 1

### **Fathers' daily regrets of being on parental leave: The roles of perceived family-support by the supervisor and the organisation**

Anna Stertz & Bettina Wiese | RWTH Aachen University

**Aim:** Today, many fathers want to be actively involved in the care and development of their children. After childbirth, a parental leave offers employed fathers the opportunity to immerse in parenting and concentrate on family life for a certain period. In Germany, the number of fathers taking parental leave is increasing, but with a portion of around 40%, leave-taking fathers still represent a minority. Some studies have shown that a family-supportive work environment has an impact on fathers' decision to take parental leave. In our study, we go beyond the question of what role organizational influences play in fathers' decision whether to take a parental leave or not. We propose that to better understand involved fatherhood from an organizational perspective, it is important to also investigate how fathers evaluate their work-family decisions. For a deeper insight into fathers' post-decisional experiences, the concept of regret might be particularly well suited. In this study, therefore, we examine whether fathers who decided to take parental leave might regret this decision depending on how they perceive their social work environment.

**Theoretical Background:** This research combines theoretical strands and concepts from the fields of organizational support and decision making. We focus on informal organizational family-support and post-decisional regrets. Regarding organizational influences, we concentrate on fathers' perceptions of two forms of informal organizational support, that is, the family-supportiveness of (a) their organization as a whole and (b) of their supervisor. Perceived organizational family-support has been defined as employees' perception of the assistance available from their organizations regarding their family demands, perceived supervisory family-support as the extent to which the supervisor is perceived to be flexible and understanding regarding employees' family demands (Jahn et al., 2003). Regrets have been defined as a negatively toned experience resulting from "imagining that our current situation would have been better, if only we had decided differently" (Zeelenberg & Pieters, 2007, p. 3). In this research, we focus on fathers' being-on-leave regret and define it as the belief that it would have been better to have decided against parental leave and not to be on leave at the very moment. There is evidence that perceived organizational support can mitigate different forms of strain (cf. Rhoades & Eisenberger, 2002). Consequently, the level of strain—reflected in our study in the intensity of fathers' being-on-leave regret—is assumed to be lower among fathers who do perceive their organization and their supervisor as family-supportive in contrast to those fathers who feel not supported.

**Methodology:** Data were gathered in a standardized diary study involving fathers currently on parental leave. The study consisted of a pre-diary questionnaire and a diary part with daily questionnaires to be completed on five consecutive evenings within one week (i.e., from Monday to Friday). Perceptions of organizational and supervisory family-support were assessed in the pre-diary questionnaire; fathers' daily regret of being-on-parental leave were repeatedly assessed in each diary questionnaire.

The analyses are based on data from N = 146 German fathers (Mean age: 35.6 years, SD = 4.9). Half of them (50.0%) were first-time fathers, and nearly half of the participants were on parental leave for the first time during the study.

Results: Multilevel analyses showed that if the supervisor was perceived as family-supportive, fathers regretted less being on parental leave. Perceiving one's organization as family-supportive, in contrast, did not influence fathers' being-on-leave regrets.

Limitations: Fathers' use of parental leave and the lengths of leave vary across countries depending on legal frameworks and gender-specific norms. Accordingly, future research should investigate the role of a family-supportive work environment for fathers' regrets of being on parental leave in contexts other than the German one.

Conclusions/Relevance to the Congress Theme/Relevant UN SDGs: Fatherhood has changed and many fathers today strive for being much more integrated into family life than fathers in previous generations. The change in fatherhood ideals is also reflected in the changing world of work. In many countries, the number of men taking parental leave and temporarily interrupting their careers for family reasons is on the rise. Fathers' use of parental leave can foster gender equality by increasing fathers' participation in childcare and housework and, in turn, facilitating mothers' participation in paid work (Huerta et al., 2014; Tamm, 2019). However, at the same time, many fathers are still hesitant about taking parental leave. This study highlights the critical role of supervisors. It is the supervisor's understanding that helps to prevent the young fathers from regretting having taken time for the family in this important phase of their life.

*Keywords: Fathers regret support*

## Paper 2

### **Regret's consequences: the role of work ethic and emotional labour in the performance of regretful workers**

Alexandra Budjanovcanin, King's College London; Chris Woodrow, Henley Business School

#### Research Goals

The present study focuses on the consequences of occupational regret, which is argued to be increasing because individuals have greater access than ever to information about potential career paths and therefore far greater awareness of foregone alternative paths to feel regretful about (Obodaru, 2017). The consequences of occupational regret may be detrimental for employees as well as the organisations that employ regretful workers. The goals of this study are therefore to explore the outcomes of occupational regret, addressing the following question:

What are the individual and work-based consequences of occupational regret?

#### Theoretical Background

Regret is “the emotion we experience when realizing or imagining that our current situation would have been better, if only we had decided differently” (Zeelenberg and Pieters, 2007: 3). Within career-related research, it is notable by its absence (Byington, Felps and Baruch, 2018). Amongst the few studies examining occupational regret's consequences, Wrzesniewski, Tosti and Landman's unpublished, quantitative study of nurses, although not directly measuring performance, found evidence for “linkages between regret and likely precursors to poor performance, including absenteeism” (2006: 24). Another study by Budjanovcanin, Rodrigues and Guest (2019) focused on occupational commitment and professional quitting intentions, highlighted an association with these important work-related attitudes – albeit cross-sectionally. These studies hint at some of the individual-, organisation- and occupation- level consequences of occupational regret but are far from forming a complete picture. In the light of this paucity of findings, the present study focuses on how individual performance is affected by occupational regret and the consequences for both people and organisations.

#### Design/Methodology/Approach/Intervention

Interviews were conducted with 45 people at various stages of career, who self-identified as having career regret. The sample involved interviews with: 27 women, 18 men; high school to PhD educated; predominantly British (64%); ages ranging from 26 to 66.

#### Findings

The findings suggest that occupational regret has differential effects on performance for different types of individual. Broadly, our data revealed two categories of individual; those for whom occupational regret was detrimental to their performance, and those whose performance was not affected by their regret, but who suffered personal consequences of maintaining their performance in the face of regret instead.

The first group, in line with expectations, discussed how regret detrimentally impacts their engagement with work highlighting a reduction of work effort or hours invested in work, greater lateness and absenteeism and a decline in discretionary efforts - in other words psychological/behavioural withdrawal resulted from feeling regret about one's career choice. These

findings align with a broader literature on regret (e.g. Savitsky, Medvec, and Gilovich, 1997) and highlights the cost to organisations, as well as the customers or clients they serve.

The second, smaller group was of individuals who were characterised by a strong work ethic. These individuals didn't believe that their regret affected their performance at work, precisely because of their strong work ethic. However, the occupational regret and high work ethic combined led to a psychological paradox created by two contradictory elements (Smith and Lewis, 2011): both wanting and not wanting to engage with their work. This contradiction emerged from trying to stay true to multiple values – the value of diligence (underpinned by their strong work ethic) and the value of authenticity (driven by their wish to find a fulfilling career).

The resultant desire to simultaneously minimise and maximise their work effort led to personal costs including emotional labour, which was used as strategy to manage the paradox. Individuals described the emotional labour associated with hiding one's regret from colleagues; almost unanimously, participants outlined the toll taken by having to 'act' enthusiastically about their work whilst at work. This was compounded for individuals working in client facing sectors and roles (e.g. healthcare and teaching). Specifically, there was a negative impact on wellbeing from the additional emotional labour required to 'perform' for their clients or customers.

#### Limitations

Qualitative research is often retrospective in nature - however, the study interviewed individuals reflecting on both past and current occupational regret. Whilst the sample included a diverse range of interviewees, there is a bias towards more educated and professional individuals, which could be broadened out in future.

#### Conclusions/Relevance to the Congress Theme/UN SDGs

This study illuminates the nuanced way in which regret affects performance-related outcomes at different levels and highlights the vulnerabilities in worker wellbeing caused by this emotion, especially amongst those with a strong work ethic. Given the large role work plays in our lives, these findings are important for the UN SDG of good health and wellbeing. Empirically, it helps to build a picture of the mechanisms through which performance in the workplace is potentially threatened by occupational regret – directly or indirectly - and in a changing world of work, may become more relevant as individuals seek to leave less meaningful occupational avenues.

*Keywords: Regret career performance*

### Paper 3

#### **Finding the Beauty in Your Career Missteps: Exploring How Individuals Deal With Their Career Missteps and Prevent Career Regret**

Claire Schulze Schleithoff, Vrije Universiteit Amsterdam; Konstantin Korotov, ESMT Berlin; Svetlana Khapova & Evgenia Lysova | Vrije Universiteit Amsterdam

#### Research goals

Our study aims to shed light on career decisions that do not lead to the expected outcomes and are, thus, perceived as missteps and how individuals deal with them. To tackle this, we address the following research question:

How do individuals deal with their career missteps and prevent experiences of career regret?

In so doing, we aim to extend current knowledge on individuals' career decision-making in the contemporary career context (e.g., Gati & Kulcsár, 2021). Specifically, we contribute to prior calls to help individuals to make better career decisions which are not solely based on rationality and logic (Gati, 1996; Gati & Kulcsár, 2021). Additionally, we aim to contribute important theoretical knowledge for career regret development (e.g., Sullivan et al., 2007).

#### Theoretical background

Although, career research is fairly well established and topics such as career-decision making (e.g., Gati et al., 2019), career success (e.g., Heslin, 2005) and employability (e.g., Forrier et al., 2015) have attracted various scholars in the past (Akkermans & Kubasch, 2017), the "dark side of contemporary careers" (Baruch & Vardi, 2016, p. 355) has only been addressed to a limited extend so far. In particular, to date we lack important knowledge on career failure, career error, as well as career regret (Byington et al., 2019; Sullivan et al., 2007). While contemporary careers are characterized by self-management, deliberate decision-making, and an agentic career perspective (e.g., Arthur et al., 2005; Sullivan & Baruch, 2009), we need to acknowledge that not all career decisions lead to the desired outcomes and can, thus, be perceived as missteps later on. We conceptualize career regret is a constant negative feeling (Schulze Schleithoff et al., 2022), while career missteps are perceived as not optimal decisions (c.f., Gati & Kulcsár, 2021) since they do not lead to the expected outcomes.

However, insights on individuals' reactions to their career setbacks and failures (Baruch & Sullivan, 2022; Byington et al., 2019) as well as how they experience career regret (Sullivan et al., 2007) remains limited. This is surprising, since individuals are more frequently confronted with alternative career paths and consequently create possible selves leading to regretful thoughts about forgone opportunities (Obodaru, 2012, 2017) and occupational choice regret (Budjanovcanin et al., 2019). Hence, many of them experience career decision-making as difficult and stressful as they aim to avoid regret (Argyropoulou et al., 2007; Gati & Kulcsar, 2021). Thereby, the lack of insights on career missteps and career regret limits a comprehensive understanding of individual's decision making in the contemporary career context (Baruch & Vardi, 2016; Sullivan & Al Aris, 2021).

#### Design/Methodology/Approach/Intervention

We draw on qualitative data collected on a sample of professionals (N=72) and used the analysis techniques of grounded theory (Gioia et al., 2013; Strauss & Corbin, 1990). When looking at the emergent findings, we turned to the concept of repair, which we found in research about social

relationships (e.g., Dindia & Baxter, 1987) or customer relationships (e.g., Xie & Peng, 2009). This prior research helped us to see the interviewee's efforts as an example of conducting repair in relation to their careers. Thus, we introduce career repair as new term to the career literature.

### Findings

We saw that not every career misstep results in a regret. More specifically, the majority of our participants actively engage in career repair and value or rationalize their career missteps later on as they offer them valuable learning opportunities. We found four career repair strategies, namely (1) restoring ((re-) aligning career with personal values), (2) extending (broadening boundaries), (3) transitioning (changing organization/team), and (4) negotiating ((re-) negotiation of conditions). This leads to either career recovery or career growth. Consequently, career repair helps individuals to learn from their career missteps and to engage in a career learning circle. Based on these findings we developed a process model on career repair. The data further showed that successful career repair (regardless of the strategy) avoids career regret.

### Limitations

Since this study is based on perceptions of a group of individuals, who were all reflective towards their careers and highly educated, the outcomes are not generalizable to every working individual.

### Conclusions/Relevance to the Congress Theme/UN SDGs

In this paper, we emphasize that individuals deal with their career missteps by employing career repair which helps to prevent career regret. Our insights provide important theoretical and practical implications which help to foster individual's health and well-being (SDG 3).

*Keywords: Misteps careers regret*

## Symposium S056

### Reducing judgmental bias and adverse impact in recruitment and selection

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science\_practice

What will be covered and why: Systematic differences in unemployment rates show that underrepresented groups on the labour market, such as older and ethnic minority job seekers, are less successful in finding work than majority applicants with a comparable education level (OECD, 2016; Dagevos & Gijsberts, 2007). This is partly due to judgmental biases in recruitment and selection (Derous et al., 2017). This symposium brings together researchers from seven institutions in five countries, across Europe and the United States, involved in innovative research on reducing judgmental bias and adverse impact in recruitment and selection. They will present their work in three presentations followed by a discussion led by dr. Nikolaou.

Building on the dual-process theory, previous research showed that screening tools in the early selection stage, like resume screening (Derous & Ryan, 2019), are vulnerable to bias. Similarly, social media screening for selection might be prone to bias. Recent research indeed showed initial evidence for bias against older applicants during LinkedIn screening (Krings et al., 2021). Schellaert, Derous, and Oostrom are among the first to empirically investigate the role of recruiters' stereotypes (i.e., warmth and competence) of younger and older applicants on their job suitability ratings. Furthermore, Odijk, Hiemstra, Franx, and Born investigate an intervention aimed at reducing the influence of HR professionals' judgmental bias in CV screening of ethnically diverse applicants, namely via a standardized application form that was developed to increase equal opportunities among job seekers. They compare the effectiveness of this standardized application form with job suitability ratings of the same applicants via a traditional resume.

The studies by Schellaert et al. and Odijk et al. focus on judgmental bias that may lead to adverse impact for underrepresented applicants at the earliest selection stage (i.e., cybervetting and resume screening). Different stages of a selection process can vary widely from each other in selection ratio and selection measures used. It is not uncommon to use the same methods for assessing adverse impact across stages. Deciding which adverse impact metric(s) to apply can be difficult, confusing, and time consuming for researchers and organizations alike. Hence, Walker Nottingham, Rupp, and Iliescu provide evidence-based guidance, using a Monte Carlo simulation, that can help in choosing the best adverse impact metrics to use to understand how various demographic subgroups fare at various stages of selection processes.

Based on the three presentations in this symposium, dr. Nikolaou will reflect on the latest developments in personnel selection research aimed at reducing inequalities. Dr. Nikolaou is Professor of Organisational Behaviour, Director of the MSc in Human Resources Management at Athens University of Economics and Business, Greece and Editor-in-Chief of the peer-reviewed journal *International Journal of Selection & Assessment*. His research interests focus mostly on employee recruitment, selection and assessment and more recently on the use of social media and serious games/gamification. He maintains active links with the industry through Human Resource consulting projects and executive training. He is the co-founder of the European Network of Selection Researchers (ENESER).

Relevance to the Congress Theme: The urgency to reduce social inequalities (SDG goal) is expressed by the congress theme (The future is now!) and this symposium supports evidence-informed actions that aim to contribute to achieving this SDG goal in the context of recruitment and selection.

Research/Practical Implications: Given the global aging, diversifying work population and shortages on the labor market (United Nations, 2019) it is highly relevant to use unbiased selection tools. This symposium shows that LinkedIn screening is prone to age bias. As HR professionals tend to categorize less when more personalized information is available, a well-developed profile can help older applicants through the LinkedIn screening phase. Furthermore, structuring the rating process, particularly in the bias-prone resume screening phase, can help to reduce the influence of individual differences in ratings and hence ensure a more equal treatment of all applicants. This is important to prevent both over- and underprediction of (minority) applicants' job suitability. Lastly, our simulations and visualizations provide insight into how utilizing different metrics at various stages in a selection process can affect whether a selection procedure is determined to have adverse impact.

Overall conclusions: This symposium shows what recent empirical evidence is available to reduce inequalities in recruitment and selection. This symposium helps practitioners to make evidence-informed decisions to create an inclusive selection procedure and to assess the potential adverse impact in an optimal way.

discussant: Ioannis Nikolaou, Athens University of Economics

*Keywords: adverse impact; selection; judgmental bias*

## Paper 1

### LinkedIn as screening tool: Prone to bias?

Maaïke Schellaert, Ghent University; Janneke Oostrom, VU Amsterdam; Eva Deros, Ghent University

**Research Goals.** Social media, in particular LinkedIn, are widely used among HR professionals to screen job applicants and make initial hiring decisions (i.e., cybervetting). However, due to the limited information available on LinkedIn profiles, LinkedIn screening might be vulnerable to bias against underrepresented groups, including older applicants. Despite the societal importance to retain older workers in the workforce, studies on potential bias in LinkedIn screening and strategies to reduce age-related differences are limited.

We aimed to address this gap in the literature and examined age bias in LinkedIn screening. Further, we considered the role of two contingencies: recruiters' stereotypes and applicants' recommendations.

**Theoretical Background.** Building on the dual-process theory, previous research showed that initial screening tools, like resume screening (Deros & Ryan, 2019), are vulnerable to bias. Similarly, LinkedIn screening might be prone to bias. Recent research indeed showed initial evidence for bias against older applicants during LinkedIn screening (Krings et al., 2021). Therefore, we expected lower job suitability ratings for older compared to equally-qualified younger applicants during LinkedIn screening (H1). Due to the lack of personalizing information on LinkedIn, bias can be affected by recruiters' stereotypes about older workers' warmth and competence. However, it is unclear whether recruiters' explicit stereotypes can affect age bias during cybervetting. Since warmth/competence perceptions are related to hiring outcomes, we expected that positive attitudes about older workers' warmth (H2a) and competence (H2b) mitigate age bias. Further, LinkedIn-specific elements, like recommendations received from colleagues/supervisors, can provide personalized information and signal applicants' warmth and competence, which could affect social judgments. Therefore we expected that recommendations signaling applicants' warmth (H3a) and competence (H3b) mitigate age bias.

**Methodology.** An experimental study among 372 HR professionals/recruiters (M age =35.85y, SD age =11.65y; 73.1% women; 51.5% university degree), using a 2 (age: <30y vs. >50y) by 2 (recommendations' warmth: neutral vs. high) by 2 (recommendations' competence: neutral vs. high) within-subjects factorial design was conducted. Prior to the main analyses, we conducted three pilot studies (N total = 216) in order to develop study materials.

**Results.** Preliminary analyses showed that manipulations were successful. Based on the correlation table and previous research (De Meijer et al., 2007), we controlled for recruiting experience. First, a repeated measures ANCOVA showed a main effect for age (H1 supported). Job suitability ratings were higher for younger than older applicants based on their LinkedIn profile. Second, results showed no significant interaction effect between applicants' age and recruiters' warmth stereotypes (H2a unsupported), but a significant interaction effect of applicants' age and recruiters' competence stereotypes (H2b supported). When recruiters have more positive stereotypes about older workers' competence, the negative relationship between the applicants' age and job suitability ratings is weaker. Third, there was no significant interaction effect of applicants' age with recommendations' warmth (H3a unsupported), however the interaction effect of applicants' age with recommendations' competence was significant (H3b supported).

Limitations. First, fictitious LinkedIn profiles were evaluated; future research could use real LinkedIn profiles to increase ecological validity. Second, the within-subjects nature of our randomized experimental design is realistic and controls for participants' characteristics (i.e., real HR professionals/recruiters), but might potentially inflate hiring discrimination scores (Bal et al., 2011). Follow-up studies could use a between-subjects design to replicate findings. Third, we used male applicants with 30 and 50 years as age boundaries. Further research could consider female applicants and other age categories to investigate the intersectionality between age and gender.

Conclusions – Research and or Practical Implications. Given the global aging population and shortages on the labor market (United Nations, 2019) it is highly relevant to use unbiased selection tools. Nevertheless, thorough research on cybervetting and bias is limited. Our results showed that LinkedIn screening is prone to age bias, with recruiters' positive stereotypes about older workers' competence and applicants' competence recommendations mitigating this effect. As HR professionals tend to categorize less when more personalized information is available, a well-developed profile can help older applicants through the LinkedIn screening phase (Chiang & Suen, 2015; van Dijck, 2013). Additionally, organizations could organize trainings for recruiters to create awareness about the potential biases and advise them how to screen profiles.

Relevance to the Congress Theme. Fairness during personnel selection is increasingly important, especially given increased retirement ages and a switch to more technology-based hiring practices.

Relevant UN SDGs. The topic is related to the SDG 'Reduced Inequalities'.

*Keywords: cybervetting; older workers; stereotypes*

## Paper 2

### Equal opportunities in selection – The effectiveness of an intervention to reduce judgmental bias against diverse applicants in resume screening

Janice Odijk, Annemarie Hiemstra & Marise Ph. Born | Erasmus University Rotterdam

Goal and theoretical background. Systematic differences in unemployment rates show that minorities with a non-Western migration background are less successful in finding work than majority applicants with a comparable education level (OECD, 2016; Dagevos & Gijsberts, 2007). This is partly due to judgmental biases in recruitment and selection (Derous et al., 2017). An overwhelming number of studies show that people with a non-Western name or background are less likely to be selected during the selection process (Baert et al., 2017). Traditional CV screening has particularly been found to be very susceptible to judgmental bias as selection methods (Derous & Ryan, 2019). In this study, we investigate an intervention aimed at reducing the influence of HR professionals' judgmental bias in CV screening of diverse applicants, namely via a standardized application form.

Method . Applicant participants (89 Dutch, 7 Western and 31 non-Western backgrounds; N = 127) participated in an application simulation, in which they were instructed to apply for a non-existent vacancy for a retail management traineeship at a large Dutch company. The HR participants (N = 112) were actual professionals who assessed CVs or structured competency-based responses of 10 applicants. A 2 (CV format, within-subjects) x 2 (ethnicity, between-subjects) mixed design was used to test the effect of the intervention. The order of presentation of the CVs and forms was randomly shuffled (counterbalancing) to avoid order effects in the assessments. Prior to the experiment, the experimental materials (vacancies, standardized application form and questionnaires) were developed and piloted. The standardized application form was based on an intervention that was developed for the Dutch Ministry of Social Affairs and Employment (Huijs et al., 2021).

The assessment form used by HR participants to score the candidates contained items related to job suitability (3 items; Derous et al., 2009), perceived candidate fit as measured by perceived similarity (Person-Person fit, 4 items; Howard & Ferris, 1996) and likeability (2 items, Good & Rudman, 2009). Approximately two weeks after submitting the assessments, each HR professional completed a questionnaire about individual characteristics. This included demographic characteristics, External and Internal Motivation to Respond Without Prejudice (10 items; Plant & Devine, 1998) and Social Dominance Orientation (14 items; Pratto et al., 1994).

Results. Analyses showed no significant difference in job suitability ratings between Western applicants and non-Western applicants when applying with a traditional resume ( M = 3.51; M = 3.65 respectively) nor when applying with the standardized application form ( M = 2.92, M = 2.94). It was remarkable that the job suitability ratings were consistently lower in the condition in which the standardized application form was rated. Interrater reliabilities for the various rater groups were good for the standardized form (between 0.90 – 0.94), but variable for the traditional resume (between 0.45 – 0.91). Correlational analyses showed a significant relation between individual differences dimensions and job suitability ratings, but only in the traditional resume condition (e.g., perceived similarity:  $r = .45, p < .001$ ;  $r = .15, p = .27$ ). Further analyses are currently being conducted and will be presented. First results suggest that in the traditional resume condition a higher perceived similarity positively moderated the job suitability score for minority applicants, while this effect was not found in the standardized application form condition.

Implications, limitations, and conclusion. We tested the effectiveness of an intervention to reduce judgmental bias against ethnic minority applicants by using a structured application form compared to a traditional resume. No difference in job suitability ratings were found between minority and majority applicants. The relation of job suitability ratings with HR professionals' individual difference variables, however, were significant in the traditional resume condition and absent in the structured application form condition. Furthermore, interrater reliabilities were lower in the traditional resume condition. Based on these results we conclude that structuring the application process, particularly in the bias-prone early selection stage, can help to reduce the influence of individual differences in ratings and hence ensure a more equal treatment of all applicants. This is important to prevent both over- and underprediction of (minority) applicants' job suitability.

Relevance to Congress theme and UN SDGs. The urgency to reduce social inequalities (SDG goal) is expressed by the congress theme and this presentation provides an evidence-informed intervention to contribute to achieving this goal in the context of recruitment and selection.

*Keywords: bias; resume screening; intervention*

### Paper 3

#### Adverse impact statistics across selection stages: A Monte Carlo simulation

Dragos Iliescu, University of Bucharest; Deborah Rupp & Anna Walker Nottingham | George Mason University

Research goals and why the work was worth doing. Adverse impact is the statistical result that occurs when organizations (often unintentionally) select individuals from a legally protected demographic subgroup at a significantly lower rate than a comparison group. Several adverse impact metrics are used by researchers, organizations, plaintiffs, expert witnesses, and the courts to determine if differences in selection rates across demographic subgroups are statistically and/or practically significant. The use of these various metrics can make a difference in terms of both the strength/rigor of the inferences made based on the results, and whether adverse impact is viewed as being present. In this paper, we explore the implications of using differing adverse impact metrics, under various selection conditions, which often exist (and vary) across the stages of a selection process.

Theoretical background. Even though different stages of a selection process can vary widely from each other in number of applicants assessed, selection measures used, selection rate, etc., it is not uncommon to use the same methods for assessing adverse impact across stages. Deciding which adverse impact metric(s) to apply can be difficult, confusing, and time consuming for researchers and organizations alike. Hence, evidence-based guidance is needed that suggests the best adverse impact metrics to use to understand how various demographic subgroups fare at various stages of selection processes.

Design/Methodology/Approach/Intervention. Specifically, we utilized a Monte Carlo simulation to evaluate various adverse impact statistics. We varied overall sample size, overall selection ratio, proportion of minority group members, and minority selection ratio to simulate different contexts throughout the stages of the selection process (see Table 1 for our parameter levels). Iterating through each combination of parameter levels produced 6096 configurations that each contained 1000 runs so that we could evaluate each metric's sensitivity to 'calling' adverse impact in a variety of contexts. Then, we computed data visualizations to better understand how various adverse impact metrics behave under varying circumstances mirroring typical selection stages. First, we created a data visualization in which overall sample size was held constant and all other parameters (overall selection ratio, minority selection ratio, proportion of minority group members) were allowed to vary. This chart enabled us to evaluate the overall effect of sample size on each hurdle's sensitivity to 'call' adverse impact. Second, we simulated the characteristics of a typical multiple hurdle selection process.

Results. The data visualization chart with all parameters held constant except for sample size displays the metrics and their sensitivity (S) to call adverse impact across sample sizes. From most sensitive to least sensitive, the shortfall 80, shortfall 85, impact ratio, Phi coefficient, h-statistic 20, and h-statistic 50 display almost uniform sensitivities across sample size. The Z-test and LMP display increasing sensitivity as sample size increases.

Limitations, implications and conclusions. Our simulations and visualizations provide insight into how utilizing different metrics at various stages in a selection process can affect whether a selection procedure is determined to have adverse impact. When other parameters were allowed to vary,

sample size greatly affected the sensitivity of the Z-test and LMP, but not the shortfall statistic, impact ratio, phi coefficient, or h-statistic. Consequently, as sample size decreased, especially to under 50 applicants, the Z-test and LMP showed much less sensitivity to concluding adverse impact, even when a selection method may be ‘truly’ adversely affecting a certain subgroup.

Relevance to the Congress Theme. The theme of adverse impact and of fairness specifically is becomes even more critical than it was already in light of our interest in the changing nature of work – which is also the Congress theme.

Relevant UN SDGs. The topic is connected to SDGs 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), and 10 (Reduced Inequalities).

*Keywords: adverse impact; selection; monte carlo simulation*

## Symposium S057

### The role of leisure crafting in people's (working) lives

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science

What will be covered and why

Leisure crafting is often defined as the proactive pursuit of leisure activities targeted at goal setting, learning and development, and human connection. Unlike in casual leisure, leisure crafters take up high-commitment and long-term challenges in their free time, which may help them grow as individuals. Recently, literature has revealed that leisure crafting has benefits for individuals, both at their work and outside their work. The goal of the present symposium is to showcase this relatively new, yet growing, research area and bring together researchers who are currently investigating the benefits of leisure crafting. Notably, all four contributions adopt a work-life interplay perspective and suggest that leisure crafting plays a prominent role within work-life balance. Different contributions of this symposium highlight different directions in which work-life balance may unfold. The first contribution (Manzanares, Martínez-Corts, Hernández, Demerouti, & Medina) reveals that on weeks when employees craft their jobs, they also display leisure crafting, which enhances not only their own wellbeing but also the wellbeing of their partners. The second contribution (Abdel Hadi & Häusser) proposes leisure crafting as a mechanism that may potentially transform suboptimal levels of job control (too high or too low control) into need satisfaction at work. Similarly, the third contribution (Chen) uncovers leisure crafting as a mechanism that transforms employees' homesickness into creativity at work. Finally, the last contribution (Petrou & de Vries) proposes and validates a leisure crafting intervention that leads to work-related benefits (e.g., work engagement and creativity) and context-free benefits (e.g., meaning and self-efficacy).

Relevance to the congress theme

The changing world of work has led to drastically new working conditions. Jobs become increasingly flexible; "nine-to-five" jobs are becoming an exception and employees are expected to be proactive, creative and entrepreneurial and to reinvent themselves in this revolutionary new world. The notion of leisure crafting, by definition, shows employees to be more than just workers. Leisure crafters proactively pursue what is meaningful to them and this is not only at work but it can also be outside work. As such, they cross boundaries and navigate their way throughout multiple life domains. Especially in the post-COVID-19 times, boundaries between such life domains are blurred. A potential risk of blurred boundaries is that employees neglect their authentic selves and identities outside work (e.g., because they overwork). A potential opportunity of these blurred boundaries is that by engaging in leisure crafting, employees may not only benefit their lives and wellbeing overall but also these experienced benefits may carry over to other life domains (e.g., at their work).

Research/practical implications

In work-life literature, there are alternative views about how life domains interact with other. For example, one life domain may compensate for the inefficiencies of another domain (i.e., compensation perspective), but also one domain may further enhance or boost another domain (i.e., spillover perspective). Arguably, the studies of this symposium highlight that both of these perspectives can be true. While contribution 2 and 3 suggest that leisure crafting compensates for suboptimal personal states (e.g., homesickness) or working conditions (e.g., job control), contribution 1 suggests a positive spillover effect from work to leisure, while contributions 2, 3 and 4 suggest a

positive spillover effect from leisure to work. As suggested by contribution 4, future research should keep developing and optimizing leisure crafting interventions that can be used by employees and practitioners to attain higher quality of (working) life.

#### Overall conclusions

Leisure crafting may be triggered by both context-free states and work-related states and it may have both context-free and work-related benefits for individuals. The present studies validate this assumption by using longitudinal survey methodology of different time intervals as well as intervention methodology.

discussant: Jessica de Bloom, University of Groningen, The N

*Keywords: leisure crafting, wellbeing, motivation, job crafting*

## Paper 1

### **Crafting Behaviors and Employees' and Partners' Well-being: The Mediating Role of Leisure Crafting**

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science

Research goals and why the work was worth doing

The importance of employees' well-being for organizations is increasing, due to its impact on organizational performance and competitiveness and on society. This is especially relevant if we consider that employees' well-being might be transferred to other people in their close environment (for example, to their partners), thus multiplying its effects. In this study, we address job crafting and leisure crafting as proactive behaviors that build a pool of useful resources for work and nonwork domains and enhance employees' and their partners' well-being.

Theoretical background

Based on the COR theory, the Work-Home Resources (W-HR) model explains how resources are interconnected across work and non-work domains. Employees develop different personal resources to foster goal achievement. These personal resources are relevant because organizational resources are generally scarce. Then, through a gain spiral, these personal resources generate new resources that spillover from the work domain to the nonwork domain. The relationship between job crafting and leisure crafting is suggested to be based on a positive spillover process of motivation, efforts, and outcomes between work and nonwork domains.

Design/Methodology/Approach/Intervention

A quantitative longitudinal study using weekly online questionnaires (for four weeks) was conducted among 50 participants and their partners.

Results obtained or expected (if not available, it must be made clear when they will be)

Multilevel analyses provided empirical support for a three-path sequential mediation model: Weekly expansion-oriented job crafting related to weekly leisure crafting, which related to employees' weekly well-being, which related to partners' weekly well-being. Leisure crafting played a key role as a mediating mechanism.

Limitations

The methodology used does not allow us to establish any causal relationships between our main variables. We encourage the use of longitudinal diary studies with a large and heterogeneous sample and several data points per day, in order to analyze the link between work, leisure time, and personal relationships over time, where antecedents precede the mediators and mediators precede the outcomes.

Conclusions – research and or practical implications

This study demonstrates that the work and leisure domains can be integrated rather than segmented to increase employees' well-being. This is one of the first studies to show the relationship between weekly expansion-oriented job crafting and leisure crafting behaviors and to empirically

demonstrate the benefits of weekly leisure crafting for the weekly well-being of employees and their partners.

#### Relevance to the Congress Theme

As work and organizational psychologists, we are unique professionals in understanding how individuals relate with contextual and personal resources and the benefits that resources have not only to avoid pain but also to enhance wellbeing. By understanding these psychological mechanisms we can design tools such as job crafting and leisure crafting interventions to increase personal resources, help individuals deal with demands in different life domains and increase their wellbeing.

#### Relevant UN SDGs

The present study proposes two mechanisms (job crafting and leisure crafting) that help employees improve their work and non-work domains, and enhance their own health (i.e., wellbeing) as well as the health of their partners. As such, the research is aligned with the “Good health and wellbeing”, and “Decent work and economic growth” Sustainable Development Goals.

*Keywords: leisure crafting, job crafting, wellbeing*

## Paper 2

### **Relationships between optimal job control, psychological need satisfaction, and leisure crafting**

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science

#### Research goals

A central goal of this study is to examine how (optimal) job control is related to the satisfaction of basic psychological needs, assuming a curvilinear relationship between job control and need satisfaction. We expect that both too low as well as too high levels of job control decrease opportunities for psychological need satisfaction at work, whereas moderate levels of control should be positively associated with it. In addition, we propose that leisure crafting is initiated by unfavourable (too low or too high) levels of job control to compensate for insufficient psychological need satisfaction at work, by providing opportunities for need satisfaction during leisure time.

In a four-wave longitudinal study, we aim to test the curvilinear relationship between job control and psychological need satisfaction, which in turn should be negatively related to leisure crafting, ultimately restoring need satisfaction. To test the assumption of curvilinear relationships between job control and need satisfaction, we adapted optimized measures (too much/too little rating scales) of job control to capture its full range.

#### Theoretical background

Previous research based on Self-Determination Theory supports the assumption that job control (i.e., the ability to make own decisions at work) is crucial for the satisfaction of basic psychological needs. Basic psychological needs refer to the need for autonomy, the need for competence, and the need for relatedness. However, theoretical considerations and empirical studies suggest that there might be a tipping point with regard to the effects of job control beyond which its (positive) effects turn negative. Thus, both too high and too low levels of job control may pose a threat to need satisfaction, and satisfaction of psychological needs should occur at moderate levels of job control.

Furthermore, we assume that leisure crafting can serve as a strategy for need fortification. Leisure crafting is defined as the proactive pursuit to engage in leisure activities targeted at goal setting, human connection, learning, and personal development. Prior research has found that, on the one hand, leisure crafting is affected by job control (in combination with job demands and home control) and that, on the other hand, it satisfies psychological needs.

#### Methods

We are currently conducting a longitudinal study with four measurement waves to examine whether unfavorable levels of job control (Time 1) undermine need satisfaction (Time 2), which in turn increases leisure crafting (Time 3), which should ultimately be related to fortification of these needs (Time 4). Our surveys include measures with regard to (optimal) job control, as well as measures to capture need satisfaction and leisure crafting. Data collection is conducted through an international online panel provider. We aim to collect data of at least 300 participants over the course of all four times of measurement.

#### Results and Conclusions

As the study is still ongoing we are not able to provide final results by the time of the abstract submission. However, data collection will be completed in time so that the results will be presented within the session.

Our research adds to theorizing on job control as a work-related resource by increasing knowledge with regard to possible curvilinear relationships and need satisfaction. Applying a new measure to capture optimal levels of control contributes to a deeper understanding of non-linear effects of job control. Furthermore, by testing whether unfavorable levels of job control initiates leisure crafting, we increase the understanding of how employees might compensate for unsatisfied psychological needs at work through crafting leisure.

#### Limitations

Although we will model time-lagged effects, we cannot fully exclude the possibility of reversed effects or third variable influences.

#### Relevance to the Congress Theme and to UN SDG's

Our research fits well with the congress theme of EAWOP '23 "The future is now: the changing world of work" and the UN SDG'S ("Good health and wellbeing" and "Decent work and economic growth") as it increases knowledge on how to improve flexible working conditions through optimal levels of job control. Furthermore, it aims to identify strategies (i.e., leisure crafting) that workers use to compensate for unfavourable levels of job control.

*Keywords: leisure crafting, job control, need satisfaction*

### Paper 3

#### **Expatriates' homesickness and creativity: The mediating role of online leisure crafting moderated by technology self-efficacy and COVID-19 stress**

I-Shuo Chen, Anglia Ruskin University, UK

#### Research goals and why the work was worth doing

Our primary aim was to investigate whether homesickness benefits expatriates' creativity at work through online leisure crafting. Investigating this issue enables not just us to broaden existing knowledge regarding homesickness in the literature but also the managers of multinational enterprises to promote better work behaviors for expatriates who experience homesickness during the pandemic. We took creativity at work as the studied work behavior since it is critical for the long-term development of companies.

#### Theoretical background

We adopted conservation of resources theory as the theoretical underpinning. By viewing homesickness as a sign of the need for resources, we posited that although homesickness hinders creativity at work directly, it indirectly benefits creativity at work through online leisure crafting. We also claimed that as a personal resource, technology self-efficacy may motivate individuals to perform online leisure crafting. It is conceivable that compared to those low in technology self-efficacy, homesick individuals who have high technology self-efficacy may be more likely to invest resources in online leisure crafting. Furthermore, we claimed that, due to its resource depletion nature, COVID-19 stress may lead individuals to reduce creativity at work. It is also conceivable that compared to those low in COVID-19 stress, those high in COVID-19 stress may not be in a better position to invest the resources they acquired through performing online leisure crafting in work creativity.

#### Methodology

By studying a group of Taiwanese expatriates using a three-wave design (N= 485), we measured homesickness and technology self-efficacy at Time 1, online leisure crafting and COVID-19 stress at Time 2, and manager-rated creativity at Time 3.

#### Results

We not just provided empirical evidence to support existing studies' finding that homesickness may reduce creativity at work, but also showed that homesickness contributed to creativity at work through online leisure crafting. We revealed that expatriates' technology self-efficacy amplified the positive impact of homesickness on their online leisure crafting. We showed that expatriates' COVID-19 stress nullified the positive impact of online leisure crafting on their creativity at work.

#### Limitations

First, all respondents had the same nationality. Our results may not be generalizable to non-Taiwanese expatriates. Second, this study does not consider the role of manager- or organizational-level variables in the model. Third, future research may use quantifiable creativity as an outcome measure to retest our hypotheses.

#### Conclusions

We explored the positive role of homesickness in creativity, while providing empirical evidence to support the conventional view of homesickness in the literature. We proposed that online leisure crafting is a mechanism homesick individuals use to obtain resources that in turn benefit their creativity at work. The test of the moderating role of COVID-19 stress in this study allows us to discover what may affect the effect of online leisure crafting on individuals' behaviors. We opened a budding debate by proposing that different levels of COVID-19 stress may alter the impact of online leisure crafting on individuals' subsequent behaviors.

#### Relevance to the Congress Theme

The Congress theme is The Future is Now: the changing world of work. The world of work has been largely impacted by the COVID-19 pandemic. We investigated the role of expatriates' homesickness due to the pandemic in their online leisure crafting and subsequently creativity at work. We also took into account the role of COVID-19 stress in the model. This study is hence relevance to the Theme of the Congress.

#### Relevant UN SDGs

This study reflects and contributes to one of the sustainable development goals of the United Nations. According to Goal 3: Good health and wellbeing, it is essential to ensure and promote the wellbeing for individuals, regardless of age, for sustainable development. Homesickness has long been viewed as a detrimental factor for individuals' wellbeing and health. However, we proposed that homesickness motivates individuals (e.g., expatriates) to acquire resources (e.g., through online leisure crafting). This to a certain extent contributes to their wellbeing and health due to resources acquisition. To promote the wellbeing for homesick expatriates, we suggest that the managers encourage them to perform online leisure crafting.

*Keywords: leisure crafting, homesickness, creativity*

## Paper 4

### **Context-free and work-related benefits of leisure crafting: An online intervention and a survey study**

Paraskevas Petrou, Erasmus University Rotterdam; Juriena de Vries, Leiden University, The Netherlands

science

Research goals and why the work was worth doing

Recent literature has addressed leisure crafting (i.e., proactive pursuit of leisure activities targeted at goal-setting, human connection, and personal development) as a behavior that may help employees attain both context-free and work-related benefits. However, there is a paucity of leisure crafting interventions aiming at training participants to display leisure crafting and, thereby, attain such benefits. The current study aims at designing and validating a leisure crafting intervention among working individuals and, thus, provide concrete tools that employees may use in order to not simply survive but also to thrive in multiple life domains.

Theoretical background

The theoretical rationale for our expectations is two-fold. First, we draw on theoretical frameworks suggesting that active leisure behaviour leads to multiple benefits by enhancing positive emotions and strengths-use, by helping people form their identity and by fulfilling needs that cannot be otherwise met. Second, our expectations are built on work-life spillover theoretical frameworks. Accordingly, the positive experiences and personal resources that individuals build during their leisure time do not cease to exist but, rather, they are carried over when individuals cross boundaries towards different life domains (i.e., work).

Design

Study 1 was a 4-week randomized controlled trial among 257 respondents working in several occupational sectors in The Netherlands. It compared an online leisure crafting intervention group against a control group, on context-free outcomes (i.e., meaning in life, need satisfaction, self-efficacy and context-free creativity) and work-related outcomes (i.e., work engagement, seeking challenges, and employee creativity). Study 2 was a cross-sectional survey study among 195 employees in The Netherlands. It aimed at replicating findings from Study 1 and, additionally, assessing correlations between self-reported leisure crafting and other-rated subjective wellbeing and context-free creativity.

Findings

Analyses from Study 1 revealed that the intervention group experienced a greater increase in meaning, self-efficacy, work engagement and employee creativity (results for need satisfaction were significant but not robust). Study 2 replicated these effects and additionally revealed positive links between leisure crafting and other-ratings of subjective well-being and context-free creativity.

Limitations

Study 1 was conducted among a sample where younger females were overrepresented and about half of the sample comprised working students. Future research should replicate our intervention among a more representative sample that does not include students.

## Conclusions

Leisure crafting seems to be an effective strategy that helps employees achieve multiple work-related and non-work-related benefits. These benefits are validated by a variety of methodologies including an actual leisure crafting intervention (Study 1) and self-reported leisure crafting correlations (Study 2) and they still hold true even when outcomes are other-rated (Study 2).

## Relevance to the congress theme

The changing world of work has been a central instigator and inspiration for our research. Our studies suggest that employees are not passive recipients of their (work) life conditions. Rather, they are active agents who cross life domain boundaries and may use one domain (i.e., leisure) to boost another domain (i.e., work). This is especially important in the post-COVID-19 times, where working from home creates blurred boundaries between life domains. Our research suggests that leisure crafting may be a way to not only minimize potential risks of these blurred boundaries but also to capitalize on potentially positive (spillover) effects that one domain may have on the other.

## Relevant UN SDGs

By helping employees achieve work-related benefits (e.g., work engagement) as well as context-free benefits (e.g., self-efficacy and wellbeing), leisure crafting is arguably relevant for the UN SDG “Good health and wellbeing”. Furthermore, leisure crafting implies that individuals are more than simply the role of a worker. In fact, they have additional identities that span outside their work or their families. This helps individuals build meaning and authenticity that exists not only in their free time but is also carried over to their working lives. This connects to the “decent work” end of the “decent work and economic growth” UN SDG.

*Keywords: leisure crafting, intervention, quality of life*

## Symposium S059

### **Do you see what I see? Exploring the antecedents and outcomes of congruence of perspectives at work.**

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science

#### Content

Congruence in perception also referred to as perceptual difference, perceptual fit, perceptual congruence, and perceptual similarity, refers to alignment of perceptions of different parties. There are many reasons why different individuals in the same organisation, or even on the same team, may have differing perceptions of the same phenomenon, including different experiences, personalities, skills, and values (Harrison et. al, 2002). The difference in perception between team leaders and members has been illustrated in relation to work performance, communication, subordinates' roles, and organisational support (e.g., Hsiung et. al, 2009; Li et. al, 2015; White et. al, 1985). Such incongruence between hierarchical levels matters because research suggests that it is related to team performance, team-positive behaviours, and employee health and satisfaction (e.g., Gibson et al., 2009; Matta et al., 2015; Baer et al., 2021). The present symposium aims to bring together new research on (in)congruence.

The researchers contributing to this symposium use different theoretical frameworks (e.g., person-fit environment, complacency theory, justice enactment, and social exchange theory) and different approaches of analysis (e.g., DNDD approach, latent change score model, polynomial regression, and response surface approaches); promising to spark new debates. Specifically, our presenters provide insight into (1) the congruence between the psychological needs of employees, which refer to what employees want from work, and the promises made by their managers (Paper 1), (2) entrepreneur-employee socioeconomic wealth congruence effects on employee task performance and OCB, and the moderating effect of leader-member exchange on such congruence effects (Paper 2), (3) employee-work group, and employee-leader change in trust congruence over time and its impact on well-being and helping, as moderated by task interdependence (Paper 3) and, (4) antecedents of congruence in employees' justice perceptions and managers' justice enactment perceptions (Paper 4).

Paper 1 finds that a deviation from promises of supplies for employees leads to negative affect. This highlights the crucial need for psychological contracts and the need for alignment between promises and needs supply. Paper 2 finds that congruence on entrepreneur-employee socioeconomic wealth congruence is related to negative outcomes, namely decreased performance behaviours. They draw on complacency theory to explain this counterintuitive finding. Paper 3 finds a higher level of positive change in trust congruence to be linked to positive outcomes, with this relationship being moderated by task interdependence. Finally, the contribution by Paper 4 finds support for the hypothesized role of three antecedents of congruence; goal clarity, continuous feedback, and supervisor credibility, each of which can reduce incongruences in justice between managers and employees. All papers presented in this symposium thus present empirical contributions focused on the topic of congruence.

#### Research & Practical Implications

By including both potential negative effects of congruence and positive effects of congruence, the symposium highlights the complexity of the role of alignment of perspectives for both researchers

and practitioners. Similarly, including both work on outcomes and antecedents allows for a more holistic comprehension, which is particularly important for practitioners wishing to improve congruence dynamics. Our collective results also begin to show that congruence can be changed with time and so training, communication methods, and other actions can be put in place to achieve this.

#### Relevance to the Congress Theme

In line with this year's theme, "The Future is Now: the changing world of work" this symposium highlights the role of congruence in the workplace, both theoretically and practically. The work included in this symposium will showcase methods for analysing multistakeholder perception data (polynomial regression and latent change score models). Through the inclusion of employee well-being outcomes, our session contributes to the good health and well-being category. Our focus on team dynamics, performance team outcomes, and the overall impact on the company's bottom line of congruence effects speak to decent work and economic growth also.

#### Conclusions

This symposium will conclude by delivering an agenda for future research and practical insights. These results can help companies choose actions in order to better align perceptions and to reflect on which level and type of tension will push performance. This 90-minute symposium will be an interactive dialogue between presenters and audience members. The presentations will be 15 min each, after which we will summarise key insights and identify important directions for future research (5 minutes). The remainder of the time (20 min), will be dedicated to an interactive discussion between the audience and the presenters.

*Keywords: congruence, multistakeholder perception, team performance*

## Paper 1

### **Multi-stakeholder view of Trust Congruence: Does change in trust congruence impact team effectiveness?**

Emilia Keegan, University of Toulouse Capitole; Yannick Griep, Radboud University; Marion Fortin, University of Toulouse Capitole

Research goals and why the work was worth doing:

A crucial component of ongoing cooperative relationships is mutual trust. Trust can play a significant role in determining productivity for individuals, teams, and the organisation in organisational contexts (Anderson & Weitz, 1989; Smith & Barclay, 1997; Dirks & Ferrin, 2001, 2002; Kramer & Tyler, 1996; Rousseau et al., 1998). We know that perceptions of team trust lie in the eye of the beholder (Carter & Mossholder, 2015) and that misalignment or incongruence can be detrimental causing diminished effects on positive outcomes (Baer et al., 2021). Beyond looking at baseline trust congruence, practitioners and researchers need to understand the impact of change in trust congruence over time. Therefore, the aim of this study is to examine whether and when a change in trust congruence between employees and their team members or team managers over time predicts well-being and helping behaviour.

Theoretical background:

Individuals who work together have varying experiences, skills, values, and personalities (Harrison et al., 2002) and thus can have differing perceptions of trust in their team. This incongruence can occur between team members as it can occur between managers and teams (Bass & Yammarino, 1991; Van Velsor et al., 1993; Tafvelin et al., 2017). Research on perception between managers and teams on various salient team concepts (e.g., goal accomplishment, constructive conflict, power distance preferences, organisational support) and various team outcomes found that levels of congruence led to positive team outcomes, above and beyond the baseline level of the team process being measured (Gibson et al., 2009, Cole et al., 2013, Bashshur et al., 2011).

More specifically, a study on trust congruence has found that when cognitive and affective trust congruence between supervisor and work group increase over time, both extra-role behaviour and group performance increased (Carter & Mossholder, 2015). Amongst the theoretical reasoning given for the positive effects of congruence and the negative effects of incongruence are; collective cognition, social exchange theory, relational uncertainty, and cognitive dissonance.

We hypothesise that a positive change in trust congruence over time between employees and (1) managers and (2) team members, will lead to increased helping and well-being. Furthermore, we expect task interdependence to moderate the effect of change in trust congruence over time because task interdependence leads to members frequently interacting, communicating, and information sharing (Kozlowski et al., 1999; Thompson, 1967), leading to more opportunities to find a common purpose and common understanding. Therefore, we expect that when task interdependence is higher, the positive effects of change in congruence over time will be stronger.

Methodology:

Overall we collected matching data for 122 teams (T1 1559 members and 137 managers, T2 1393 members and 122 managers) in a repeated-measurement design, separated by a time lag of four to six months. To model change in congruence between (1) an individual employee and their team

members, and (2) an individual employee and their team manager in trust, we used a latent change score model (see Cheung, 2009; McArdle, 2009).

#### Results obtained:

Our results show that an increase in trust congruence over time between an employee and their team members is positively and significantly related to well-being and helping at T2. Task interdependence at T1 moderated this relationship, further strengthening the already positive effects of trust congruence. These effects are present above and beyond baseline levels of trust and initial levels of trust congruence. Unexpectedly, an increase in trust congruence over time between an employee and team manager, was not significantly related to wellbeing at T2, whereas it was positively and significantly related to helping behaviour at T2. This relationship was again moderated by task interdependence, as hypothesised. These effects are present above and beyond baseline levels of trust and initial levels of trust congruence.

#### Limitations:

A measurement design with two-time points does not allow us to fully investigate more complex temporal developments.

#### Research & Practical Implications:

Our results highlight the importance of considering change and directionality in change of trust congruence beyond absolute levels of trust congruence and the explanatory value of taking a multistakeholder perspective on congruence. This understanding is important for organisations wishing to improve their team functioning.

#### Originality & Value:

To the best of our knowledge, this is the first study to investigate the evolving effects of two types of trust congruence in the same design, member-to-team and member-to-manager. In addition, we introduce a structural moderator (task interdependence).

*Keywords: trust congruence, latent change, well-being*

## Paper 2

### **Do You See What I See? The Performance Effects of Congruence Between Entrepreneur-Employee Socioemotional Wealth**

Min Carter, Southern Illinois University; James Vardaman, Memphis University; Benjamin McLarty, Mississippi State University

Research goals and why the work was worth doing:

As the most common organisational form in the world, family businesses often face the dilemma of pursuing financial wealth or maintaining socioemotional wealth (SEW) (Gomez-Mejia et al., 2018). Whereas prioritising SEW (e.g., family prominence) shifts the firm's focus to actions that promote the image and reputation of the organisation to external stakeholders (Gomez-Mejia et al., 2017), motivating performance behaviors of employees, a key internal stakeholder, in alignment with these goals can be challenging. After all, employee performance collectively contributes to firm performance, a key indicator of financial wealth. Thus, the goal of this research is to examine the complexity of this dilemma among the two key internal stakeholders, employees and entrepreneur-supervisors (entrepreneurs thereafter) who directly manage their employees. Specifically, we examine entrepreneur-employee SEW congruence effects on employee task performance and OCB, and the moderating effect of leader-member exchange (LMX) on such congruence effects.

Theoretical background:

SEW is defined as non-financial endowments that meet the family's affective needs (Gomez-Mejia et al., 2018). A specific form of SEW, family prominence (Debicki et al., 2016), reflects the goals to preserve and enhance the recognition/reputation of the family in the eyes of external stakeholders (e.g., community, suppliers). The desire to preserve family prominence often requires firms to shift their focus externally and stay small, especially if they seek to maintain their family essence by maintaining control and involvement in the business (Carr et al., 2011), which presents challenges for motivating employee performance. Although some perspectives submit aligning the importance of SEW by entrepreneurs-employees should foster behaviors (e.g., Joshi et al., 2003), complacency theory suggests that SEW alignment may create a state of equilibrium, or an "all is well" feeling (Raup, 1925), that reduces the salience of engaging in valuable performance efforts.

We theorize that SEW-prominence alignment between entrepreneurs and employees may create a sense of self-contentment and attentional inertia that makes performance behaviors less salient. Conversely, incongruence should create tensions and increase the salience of these behaviors, thus cultivating performance behaviors. We further propose that high-quality LMX can enhance these effects, as entrepreneurs and employees with better relationships should communicate and understand their differences and agreements more clearly which alleviates employees' complacency mindset.

Hypothesis 1: The more aligned entrepreneur-employee SEW-prominence importance perceptions, the lower (a) task performance and (b) OCB.

Hypothesis 2: LMX moderates the congruence effect of entrepreneur-employee SEW-prominence importance perceptions on (a) task performance and (b) OCB, such that the congruence effects are stronger when LMX is lower than when it is higher.

Design/Methodology/Approach/Intervention :

We included family firms from various industries including retail, services, construction, agriculture, finance, and manufacturing with the vast majority (82%) being small organizations (i.e.,  $\leq 50$  employees). We collected employees' demographics and contact information for their entrepreneur-supervisors in Survey 1. Two weeks later, employees assessed SEW-prominence importance (Debicki et al., 2016) and LMX (Liden & Maslyn, 1998) in Survey 2, and entrepreneurs assessed SEW-prominence importance and their employees' task performance (Alper et al., 2000) and OCB (Kluemper et al., 2013) in Survey 3. Our final sample consists of 159 entrepreneur-employee dyads. We control for employee gender, age, race, dyadic tenure, and family membership status.

We used polynomial regression and response surface approaches to test congruence effects (H1) (Edwards & Cable, 2009) and followed the principles of moderated regression (Cohen et al., 2003) to test moderated congruence effects (H2).

Results obtained:

Supporting H1, the response surface along the incongruence line is curved upward for task performance (curvature = .21,  $p = .011$ ; slope =  $-.31$ ,  $p = .045$ ) and for OCB (curvature = .24,  $p = .029$ ; slope = .001, ns), indicating that performance behaviors decrease as entrepreneur-employee SEW scores become more aligned but increases as the scores diverge in either direction. For H2, the five product terms collectively account for significant incremental variance in OCB ( $\Delta R^2 = .08$ ,  $p = .016$ ) but not in task performance ( $\Delta R^2 = .05$ , ns) over and above the polynomial regression terms. Thus, H2b is supported but not H2a.

Limitations:

Our study focuses on smaller entrepreneurial family firms; caution should be taken when generalizing results to larger family-owned organizations. We only collected perceptual data.

Research/Practical Implications:

Our findings inform the effects of the entrepreneur-employee relational dynamics involving the dilemma, a "paradox of fit" in family-owned ventures. Although counterintuitive, the interplay between entrepreneur-employee and a focus on SEW creates a unique situation where SEW congruence has a significant downside on performance. Our research further provides evidence that high-quality LMX can buffer undesirable congruence effects on OCB, underscoring the importance of social exchange between entrepreneurs and employees.

Originality/Value:

This research is original, not previously presented or published, and not under concurrent consideration elsewhere.

*Keywords: socioemotional wealth, performance, congruence*

### Paper 3

#### **What makes employees and managers see eye to eye concerning organizational justice? Predicting congruence in the pay-setting context**

Eib Constanze, Uppsala University; Magnus Sverke, Johnny Hellgren & Helena Falkenberg | Stockholm University

Research goals and why the work was worth doing:

The aim of this study is to investigate predictors of congruence in employees' justice perceptions and managers' justice enactment perceptions. Using pay-setting as context, we hypothesize that goal clarity, continuous feedback, and supervisory credibility are predictors of congruence in justice perceptions (distributive, procedural, interpersonal and informational justice). With this, we make a theoretical contribution to the organizational justice literature by investigating predictors that may facilitate congruence in justice perceptions.

Moreover, the literature on congruence as an outcome is generally scarce in any field of organizational behavior. One of the reasons for this lack of studies has to do with the methodological difficulties to predict congruence. In this paper, we use a recently published strategy to analyze congruence and, with this, we add to the very scarce literature of congruence-as-outcome.

Theoretical background:

A large number of studies show that employees' justice perceptions are positively associated with organizational commitment, citizenship behaviors, and task performance. Only recently has the literature started to also consider justice enactment, or a manager's adherence to justice rules and principles. Rooted in social exchange theory, perceived and enacted justice supposedly refer to the same phenomenon but empirical studies report correlations from non-significant to moderately high. This is a puzzle essential to solve for the justice literature at large. While some may claim that it is employees' justice perceptions of managers' behaviors that matter, this line of thought would render justice enactment or what managers think they do in terms of justice futile. In contrast, recognizing that both – what employees perceive their manager does and what managers perceive they do – are subjective evaluations from different perspectives may provide fruitful avenues to study how to improve justice and fairness at workplaces. One of these avenues is to look at which managerial actions can facilitate congruence in justice perceptions.

Methodology:

Data stem from an industrial company operating in Sweden. Analyses were based on 124 pay-setting managers, who had at least two employees who provided data (N=535). Based on sufficient agreement indices, scores were aggregated for employees who had the same manager.

We followed the directional and nondirectional difference (DNDD) approach, as suggested by Bednall and Zhang (2020), which attempts to overcome limitations of prior approaches to estimate congruence as outcome variable.

Results obtained:

Generally, managers' justice enactment perceptions had a higher mean (i.e., directional difference) than corresponding employees' justice perceptions. The directional difference in justice perceptions was reduced for distributive ( $b = -.37, p < .05$ ) and informational justice ( $b = -.28, p < .05$ ) but not for

procedural and interpersonal justice with higher levels of goal clarity as perceived by employees. Thus, with increasing levels of goal clarity, congruence between managers and employees regarding distributive justice and informational justice increased. With higher levels of continuous feedback as perceived by employees, the directional difference was reduced for all four justice dimensions ( $b = -.33-.53, p < .001$ ). Similarly, with higher levels of supervisor credibility as perceived by employees, the directional difference was significant for all four justice dimensions ( $b = -.37-.63, p < .001$ ). In addition, supervisor credibility was negatively associated with shared variability in distributive justice ( $b = -.12, p < .05$ ), which suggests that with higher levels of supervisor credibility, the response pattern between managers and employees diverged more.

#### Limitations:

Data were cross-sectional and were aggregated by manager but stem from two different sources. The method used to predict congruence is a newly published approach.

#### Research & Practical Implications:

We focused on concrete managerial actions in the context of pay setting as predictors of justice congruence. Generally, results revealed that the three chosen predictors (goal clarity, continuous feedback, supervisor credibility) reduced the mean value difference in justice between managers and employees. This is an important result, because the differing views of managers and employees in pay-setting discussions are widely known and problematized. When managers provide clear goals, give continuous feedback to their employees, and are seen as credible and competent in assessing performance, these differing perspectives may be overcome and justice congruence can be facilitated.

#### Originality & Value:

This is, to our knowledge, the first study to predict congruence in justice perceptions from the perspectives of pay-setting managers and their employees.

*Keywords: Organizational justice; justice enactment; pay-setting*

## Paper 4

### **Needs-Supplies Fit and Psychological Contract Fulfillment: Competing Versus Complementary Predictors of Work Outcomes**

Lisa Schurer Lambert, lisa.schurer.lambert@okstate.edu; Anders Friis Marstand, Durham University; Jeffrey Edwards, University of North Carolina

Research goals and why the work was worth doing:

Much research has examined how employees evaluate their work experience against various standards. One standard involves the psychological needs of the employee, which refer to what employees want from work. Psychological needs are central to various streams of research, most notably needs-supplies fit (Edwards, 1991; Kristof-Brown, Zimmerman, & Johnson, 2005), and the person-environment fit theory of stress (French, Caplan, & Van Harrison, 1982), and discrepancy theories of job satisfaction (Dawis & Lofquist, 1984; Locke, 1969). This research is based on the premise that, when psychological needs are fulfilled by work experiences, the employee experiences positive outcomes. Another standard concerns beliefs held by the employees about the promises made by the employer, which form the core of psychological contract research (Rousseau, 1995). To the extent these promises are fulfilled, positive outcomes are expected to result. Research on needs-supplies fit and psychological contract fulfillment both attempt to explain how employees respond to work experiences. Where these streams of research differ concerns the standards held by employees, with psychological needs underlying needs-supplies fit and perceived promises emphasized by psychological contract fulfillment. Because these streams of research have developed independently, little attention has been devoted to comparing them, which leaves important questions unanswered. For instance, are psychological needs or perceived promises more influential as evaluative standards? When explaining outcomes, are needs-supplies fit and psychological contract fulfillment redundant, or do each provide unique insight? How might integrating psychological needs and perceived promises enhance our understanding of how employees respond to work experiences?

Theoretical background:

This study addresses these questions by presenting a conceptual and empirical integration of needs-supplies fit and psychological contract fulfillment. We develop three perspectives regarding the relationships of needs-supplies fit and psychological contract fulfillment with affective outcomes associated with work. The first perspective argues that needs-supplies fit is the primary predictor of work-related affect, based on research that positions psychological needs as the most salient standard held by employees. The second perspective treats psychological contract fulfillment as the core predictor of work affect, drawing from theories that characterize perceived promises as the foremost standard by which employees evaluate their work experiences. The third perspective is integrative, whereby employees compare what they receive at work against psychological needs as well as perceived promises, which operate as related but distinct standards of evaluation. This approach to hypothesis development draws from the principle of strong inference (Platt, 1964), which argues that scientific progress is enhanced when alternative hypotheses are pitted against one another. As outcomes, we use two dimensions of work-related affect, which include job satisfaction and affective organizational commitment.

Methodology:

Data were collected from 366 employees in five manufacturing organizations in Denmark who held jobs in various functions (e.g., production, project management, sales and marketing, research and development). Respondents completed three-item measures of supplies (“How much do you have in your job?”), needs (“How much would you like to have in your job?”), and promises (“How much has your employer promised you?”) in reference to variety, security, autonomy, pay, and authority. Outcome measures included job satisfaction and organization commitment.

We tested our hypotheses using an expanded version polynomial regression and response surface methodology (Edwards, 2002) based on the following equation:

$$Z = b_0 + b_1S + b_2N + b_3P + b_4S^2 + b_5SN + b_6N^2 + b_7SP + b_8P^2 + e$$

where S, N, and P represent supplies, needs, and promises, and Z signifies the outcome (job satisfaction or organizational commitment). Tests of needs-supplies fit focused on the terms S, N, S<sup>2</sup>, SN, and N<sup>2</sup>, and psychological contract fulfillment involves the terms S, P, S<sup>2</sup>, SP, and P<sup>2</sup>.

Results obtained:

Results for needs-supplies fit suggest that supplies themselves are related to affective outcomes, irrespective of psychological needs. In contrast, deviations of supplies from promises were associated with negative affect, which increased when supplies differed from promises in either direction. These results challenge the core assumptions of needs-supplies fit research and highlight the crucial role of psychological contract fulfillment.

Limitations:

We acknowledge that our study has limitations, such as relying on self-report data, although this method of data collection is appropriate due to the psychological nature of the constructs involved.

Research & Practical Implications:

Having said this, we believe our findings underscore the importance of considering multiple standards when attempting to explain how employees respond to experiences at work. We discuss future directions, theoretical and methodological work in the domain of congruence research.

Originality & Value:

Our study demonstrates the extension of polynomial regression and response surface methodology to accommodate multiple standards against which experiences are evaluated.

*Keywords: Needs-Supplies Fit, Psychological Contract, polynomial regression.*

## Symposium S060

### **Job Insecurity – symposium 3. How do subjective and objective insecurity associate with health, proactive work behaviour and career-related outcomes?**

Claudia Bernhard-Oettel & Magnus Sverke | Stockholm University, Sweden

science\_practice

What will be covered and why?

This third symposium on job insecurity extends the perspectives provided Jiang & De Witte in symposium 1 and symposium 2. In this third symposium, we focus on new evidence concerning subjective perceptions of job insecurity and objective circumstances that imply different degrees of insecurity (e.g., employment contract, degree of labor market participation, national safety networks) and discuss how these link to health, proactive work behaviors and career prospects in today's world of working.

This symposium brings together five contributions that take different approaches (diary study, group comparisons, meta-analysis, trajectory analysis, multi-country and longitudinal study of reciprocity), focus on outcomes of relevance for both employees and organizations (e.g., health, proactive work behaviour, career-related outcomes), and build on evidence from different countries and labour markets (Germany, Sweden, New Zealand, Belgium, the UK, and the US).

In the first paper, Klug and Drobic study trajectories of labour market attachment (permanent vs. temporary employment) using German panel data from 2008 to 2019 to investigate predictors and health consequences of more stable vs. unstable career trajectories. Low education and motherhood appeared as risk factors for less stable trajectories, and trajectories of lower attachment associated with lower life satisfaction and higher depressiveness over time. Second, Bernhard-Oettel and Müller compare how young vs. older Swedish employees (re)starting their career with temporary agency work experience their job and career insecurity and differ in job and career satisfaction. Preliminary results did not support the hypotheses that younger workers perceive less insecurity and are more satisfied with temporary jobs. Third, Van Hootegem, Näswall, Selenko, Shoss and De Witte investigate how associations between job insecurity and safety networks differ across countries (UK, US, Belgium) and study reciprocal relationships between job insecurity and safety networks in Belgium. Preliminary results indicate that better safety networks decrease job insecurity and buffer its negative effects. Fourth, in a diary study Näswall and Van Hootegem follow daily fluctuations of job insecurity and proactive work behaviour at the intra-individual level. In line with the hypothesis short-term fluctuations were found. Quantitative job insecurity related to lower proactive behaviour in resource seeking, qualitative job insecurity related to lower levels in seeking challenges. Finally, Sverke, Pienaar, Richter, Hellgren, Näswall and Låstad report results of a meta-analysis of job insecurity and career-related outcomes (e.g., career management, learning, employability, mobility). Preliminary findings are mixed and may signal different consequences of job insecurity for career and learning inside and outside of the organization.

Relevance to the Congress Theme

Restricted possibilities for labour market participation, temporary employment and contextual factors related to a national safety network are all of relevance to better understand and mitigate negative effects of employment uncertainty and job insecurity. In a time with a growing inflation and economic turmoil, employment uncertainty and job insecurity that may threaten the individual's economic situation and affect their work-related behaviors and career prospects are important

factors to study to build a sustainable future and good health for the working population. This ties well into the congress theme since the future is already shaped by circumstances of today. Likewise, the symposium also has relevance for the UN goals regarding “decent work” and “good health”.

#### Research and practical implications

The symposium gives a deeper understanding of how employment uncertainty and job insecurity and their consequences are experienced in different and potentially vulnerable groups in the labour market, and highlights the implications for a variety of national contexts and across different time frames. Altogether, this enables a better understanding of what needs to be done for individuals, in organizations, and at the societal level to mitigate negative effects for proactivity, health and individual career prospects.

#### Overall conclusions

The various presentations in this symposium highlight the importance of studying subjective and objective indicators of job and employment insecurity in a rather complex manner. By covering various forms of uncertainty (attachment to the labor market, temporary agency work, and perceived job insecurity), focusing on various outcomes that directly relate to career development (e.g., career management, employability) or indirectly fuel a successful career (e.g., health and proactive work behaviour), this symposium provides a rich perspective to add knowledge about job insecurity and uncertain employment and their relevance for health, proactive work behavior and career outcomes.

*Keywords: Job insecurity, Employment, Career*

## Paper 1

### **Who is secure in the long run? On trajectories of labor market attachment, their socio-demographic predictors, and consequences for mental well-being**

Katharina Klug & Sonja Drobnič | University of Bremen, Germany

#### Research goals and why the work was worth doing

Throughout Europe, the flexibilization of labor markets has made employment more volatile for many workers, while the risk of instability is unequal: Temporary jobs and unemployment are more common among those in weaker labor market positions, namely people with lower education, women and especially mothers reconciling employment with childcare. As for health consequences, unemployment is evidently a risk, but research has been inconclusive regarding temporary employment. We argue that timing and duration play a role: Throughout their career, people may move in and out of more or less stable jobs, thus accumulating differing degrees of labor market attachment. The aim of this study was to identify such long-term trajectories of labor market attachment and investigate their relationships with sociodemographic predictors (education, gender, parenthood) and mental well-being (life satisfaction, depressiveness).

#### Theoretical background

Labor market attachment is defined as a person's proximity to the labor force. The concept refers to the formal employment status, ranked on a spectrum from "fully attached" (i.e. employed) via less stable, temporary jobs to "completely detached" (i.e. inactive). Previous research suggests that most adults still experience long-term high labor market attachment, but a substantial number also follow less stable trajectories. Conservation of Resources Theory serves to explain the relationships between trajectories of labor market attachment, predictors, and outcomes: First, continuous labor market attachment secures access to resources. We therefore expect the threat or lack of resources implied by less stable, low or declining attachment to impair well-being. Second, accumulating resources tends to be more difficult for people with fewer resources to begin with. We therefore expect people in weaker labor market positions, namely those with lower education, women and especially mothers to experience less stable trajectories.

#### Methodology

Our analyses are based on a sample of  $N = 3208$  employees from the German Family Panel, covering 12 years from 2008 to 2019. Labor market attachment was operationalized as the formal employment status (1 = permanent employment, 2 = temporary employment; 3 = not employed), and we calculated latent class growth analyses to identify trajectories. We investigated relationships with predictors and outcomes via multinomial and linear regression, respectively.

#### Results

We identified five distinct trajectories: 1) persistent high attachment (67%), characterized by continuous permanent employment, 2) persistent low attachment (8%), characterized by continuous non-employment, 3) decreasing attachment (8%), characterized by initially permanent employment, followed by temporary employment, 4) early increasing attachment (14%), characterized by initially temporary employment, quickly followed by permanent employment, and 5) late increasing attachment (4%), characterized by long-term non-employment, followed by a slow transition to permanent employment. Relative to persistent high attachment, low education and motherhood

appeared as risk factors for each of the less stable trajectories. Persistent low attachment predicted lower life satisfaction at T12 compared to persistent high attachment, as well as higher depressiveness. Decreasing attachment predicted lower life satisfaction and late increasing attachment predicted higher depressiveness.

#### Limitations

We cannot rule out that the sample may have been selective regarding initial labor market attachment, nor can the design account for the mobility dynamics underlying the trajectories. Similarly, trajectory differences in outcomes at the end of the observation period do not account for the process of change in well-being over time.

#### Conclusions

The results provide a nuanced understanding of when and for whom low or less stable labor market attachment becomes a risk to well-being: Analyzing trajectories uncovers qualitative differences in patterns of accumulated labor market attachment. This approach better reflects the notion of employment stability as long-term access to employment than a snapshot at a specific point in time. Accounting for both sociodemographic predictors and health outcomes, the findings illustrate the implications of labor market attachment for health inequalities. Future research is needed to test the generalizability of our findings and delve deeper into the change processes underlying employment trajectories and their relationship with mental well-being.

#### Relevance to the Congress Theme

Our findings reflect broader trends of changing employment relations, which have been unfolding for decades and will likely persist. Equal access to long-term stable employment and the economic security it provides is a key issue to ensure sustainable and healthy work for everyone.

#### Relevant UN SDGs

Good health and well-being; decent work and economic growth; reduced inequalities

*Keywords: Labor market participation, career, temporary employment*

## Paper 2

### **(Re)Starting a career: Job and career insecurity and their importance for well-being in older vs. young temporary agency workers in Sweden**

Claudia Bernhard-Oettel & Franziska Müller | Stockholm University, Sweden

#### Research goals and why the work was worth doing

As much as 25% of all young workers in Sweden enter the labour market via a temporary agency, and to growing extent, even older workers redirect or restart their careers via temporary agency work (TAW). It is often assumed that young – in contrast to older - workers seek flexibility and thus react differently to different aspects of insecurity (with respect to job, career, finances) that working in a temporary agency may entail. In this study, we therefore test and compare how younger and older temporary agency workers' demographic backgrounds, contractual arrangements, vulnerability factors, contractual motives and career stages relate to their insecurity perceptions. Furthermore, we test how insecurity relates to well-being and satisfaction in both groups.

#### Theoretical background

By nature, TAW entails switching clients on a regular basis, thus offering opportunities to gather work experience, build a CV and test different employers. For young workers with little experience TAW may provide a pathway into the labour market, and for older workers, TAW may be a useful means to restart or redirect their careers.

For the group of young workers, it is often assumed that they value flexibility and choose temporary work to higher extent than older workers do, and thus perceive less of- or react less to - the different aspects of financial, job and career insecurity. Theoretically, this assumption may be based on the fact that young workers still have lower income responsibilities and thus are less dependent on a particular job and income. Additionally, having been in the labour market only for a short time, they may not yet have had many scaring' experiences (e.g. unemployment, lay offs) Also, the group of young workers may be considered more resourceful with more recent and perhaps also higher education. However, whether this assumed difference between younger and older workers entering TAW holds true has not been studied in detail.

#### Design/Methodology/Approach/Intervention

Data was collected in during December 2021 to February 2022 in three temporary agencies in Sweden (N = 238). Mean age for younger TAWs (M = 25,7 years) significantly differed from the mean age (M=43,8 years) in the older group. After missing analysis and factor analyses to establish the quality of the data and measurement instruments, we ran some first preliminary regression analyses for both groups to (1) compare level of insecurity perceptions, (2) examine predictors for job insecurity, career insecurity and financial insecurity in young and older temporary agency workers and to (3) test how the three different types of insecurities related to well-being, job and career satisfaction.

#### Results

Preliminary findings from first analyses show no significant mean differences in perceived job insecurity, financial insecurity and career insecurity between younger and older temporary agency workers. Few significant relations were found between individual background and contract

arrangements and insecurity perceptions. Instead, vulnerability factors (unemployment experience, financial household responsibility), contract motives and perceived career stage were significantly, but differently related to the studied insecurity perceptions. Moreover, we found that the three tested insecurity perceptions were related to well-being, job and career satisfaction in different ways in both groups of temporary agency workers.

#### Limitations

This is a cross-sectional study in a specific sample of Swedish temporary agency workers which restricts generalizability of the findings.

#### Conclusions – research and or practical implications/Originality/Value

Many young workers work via temporary agencies in their early career, but at growing rate also older workers may use temporary agency work as a pathway to restart or redirect their career. The results of this comparative study suggest that both groups perceive insecurity related to their job, finances and career future, but the magnitude of these perceptions and their relations to well-being and satisfaction did not differ. The idea that younger workers at the beginning of their careers do not feel as insecure as older workers, or do not react upon insecurity is not supported. Starting and re-starting a career seems to be perceived similarly, independently of age.

#### Relevance to the Congress Theme

(Re)starting a career is an activity of today that paves the way into a desirable future – an individual's work of tomorrow.

#### Relevant UN SDGs

Good health and well-being, decent work and economic growth

*Keywords: Job insecurity, temporary agency work, career*

### Paper 3

#### **The role of social safety net in job insecurity reactions: a multi-country and longitudinal test of reciprocal and moderating relationships**

Anahí Van Hootehem, KU Leuven, Belgium; Hans De Witte, KU Leuven, Belgium; Mindy Shoss, University of Central Florida, USA; Eva Selenko, Loughborough University, UK; Katharina Näswall, University of Canterbury, New Zealand

#### Research goals and why the work was worth doing

The social safety net refers to economic or social support provided by the government to maintain a good standard of living for vulnerable individuals or families. In the current volatile organisational and economic landscape, these explicit provisions can be seen as resources that may buffer and protect employees from economic, such as experiencing job insecurity. Several studies have shown the relevance of the social safety net in job insecurity reactions (e.g., Debus et al., 2012), usually operationalizing countries as proxy's for the access to a social safety net. However, no prior research has considered perceptions of one's social safety net, which may be useful in capturing the large range of differences across countries. Moreover, perceptions of social protection have been shown to be an important indicator to explain variance in psychological variables (e.g., Schmalor & Heine, 2022). In addition to testing the moderating role of social safety net, this study also wants to examine whether social safety net functions as a predictor or a consequence of job insecurity perceptions.

#### Theoretical background

This study builds on principles of Lazarus and Folkman's appraisal theory of stress to reason that social safety net may function as an antecedent of job insecurity. Individuals who experience a strong safety net could appraise an insecure job situation as less threatening, and consequently, experience less job insecurity. At the same time, we build on sociological and political literature to argue that individuals coping with job insecurity may be more likely to attribute their economically precarious position to inefficacy of the government. Previous research has shown that distrust in political institutions is associated with negative assessments of social protection (Haugsgjerd & Kumlin, 2020). In this sense, job insecurity may be associated with lower evaluations of one's social safety net. Lastly, social safety net may function as a moderator, in which higher perceptions may aid in providing a higher sense of control over one's situation, thereby becoming less prone to experiencing strong negative reactions. This study uses job satisfaction, life satisfaction, trust in one's organisation, and trust in government as outcome variables.

#### Methodology

We employ two different datasets to test our hypotheses. First, we use multiple-country cross-sectional data to test the moderating role of social safety net perceptions across three countries (i.e., UK, US, Belgium). Second, we use longitudinal data among Belgian employees to test reciprocal pathways in the relationships between job insecurity and social safety net, as well as to test the moderating role of social safety net across time. Analyses were conducted by means of structural equation modelling using Mplus statistical software.

#### Results

We first tested the moderating role of social safety net across three countries using a multiple-group analysis. The preliminary results demonstrated that social safety net functioned as a moderator for

job satisfaction in the UK, life satisfaction in the UK and the US, and trust in one's organisation in the UK. All significant interactions pointed towards a buffering effect of social safety net, as expected. The longitudinal cross-lagged panel analysis – based on an all-Belgian sample – tested the direction of the relationship between job insecurity and social safety net and provided support for a negative relationship that flows from social safety net to job insecurity, and not for the other way around. This indicates that higher perceptions of one's social protection are associated with lower job insecurity perceptions across time. The longitudinal analyses did not provide support for the moderating role of social safety net perceptions.

#### Limitations

Our study focussed only on three specific countries, while many other country differences may exist. Moreover, we focussed only on perceptions, whereas it may be valuable to include a combination of objective and subjective indicators.

#### Conclusions – research and or practical implications

The present study contributes to the job insecurity literature by focussing on perceptions of a macro-level indicator, thereby acknowledging the broader context within which job insecurity unfolds. In addition, we focus on a broad level of outcomes, and apply a comprehensive approach in examining social safety net by considering its role as an antecedent, consequence, and moderator.

#### Relevance to the congress theme

To understand job insecurity reactions in a changing world of work it is important to consider the influence of the broader context.

#### Relevant UN SDGs

This research aligned with SDG 8 “Decent work and economic growth” and SDG 16 “Peace, justice and strong social institutions”.

*Keywords: Job insecurity, social safety net, reciprocal relations*

## Paper 4

### **Within-person fluctuations of job insecurity and proactive work behaviours: A diary study**

Katharina Näswall & Katharina Näswall | University of Canterbury, New Zealand; Anahí Van Hootegem, KU Leuven, Belgium

#### Research goals and why the work was worth doing

Previous research consistently associates job insecurity with negative consequences for employees and organisations, but less is known about the impact of changes in job insecurity perceptions within person over a short period of time. The current study uses daily diary study design to investigate whether fluctuations in job insecurity are observable in a New Zealand sample of employees over a 10-day period. It is expected that job insecurity will vary within person and that this variation will relate to variation in the job crafting behaviours.

#### Theoretical background

The limited research on job insecurity and job crafting have had mixed findings. Some research suggests the uncertainty surrounding job insecurity motivates people to engage in proactive behaviour (i.e., job crafting) that subsequently reduces uncertainty. Other research suggests job insecurity negatively affects proactive behaviour because the insecurity may result in threat perceptions that trigger behaviours like withdrawal from work. This study aimed to address these conflicting findings by investigating whether job insecurity directly influences job crafting behaviours. Additionally, as previous research suggests self-efficacious individuals have greater confidence in their abilities to overcome a job insecure situation, and that self-efficacy is a predictor of proactive behaviour and job crafting, self-efficacy was included as a moderator in the job insecurity-job crafting relationship.

There is also very little evidence about whether job insecurity experiences fluctuate in the short term. To address this, a 10-day diary study design was used to investigate daily levels of job insecurity.

#### Design/Methodology/Approach/Intervention

Participants in this study were 56 full-time workers from a range of industries in New Zealand. Ages ranged from 20 to 66 years old, with an average age of 33.52. 73.2% of participants identified as female and 26.8% identified as male. Organisational tenure ranged from less than a year to 26 years, with an average tenure of 4.07 years.

Participants completed diary surveys for 10 working days. A baseline survey captured person-level qualitative and quantitative job insecurity, self-reported job crafting behaviours (resource seeking and support seeking), and self-efficacy. For the daily surveys the measures were adapted to reflect job insecurity and job crafting on that day.

#### Results

Short-term within-person fluctuations in job crafting behaviour and job insecurity perceptions were observed over the 10-day study period. Participants with higher job insecurity engaged in less job crafting behaviour compared to participants with lower job insecurity. Specifically, the results found that higher levels of quantitative job insecurity predicted lower levels of seeking resources. Additionally, higher levels of qualitative job insecurity predicted lower levels of overall job crafting

and seeking challenges. Self-efficacy did not moderate any of the relationships between the two types of job insecurity and three job crafting outcomes.

#### Limitations

The study was conducted over a relatively short period of time, and it may be that the daily intervals were too short to identify fluctuations. Future research might extend the intervals to weekly to understand the nature of fluctuations better. It may also be useful to control for the opportunities employees have to engage in job crafting, as this may vary between different roles.

#### Conclusions – research and or practical implications

The results have important implications as organisations can take action to increase positive outcomes and reduce withdrawal behaviour. Because job crafting is associated with positive outcomes, and this study found that job crafting can fluctuate daily, organisations should support employees in their job crafting behaviour and train them in how to craft their jobs on a day-to-day basis. This study also found differences between quantitative and qualitative job insecurity. The former impacted seeking resources and the latter impacted seeking challenges and overall job crafting behaviour. Therefore, organisations should identify what type of job insecurity employees are experiencing so they can adapt their job crafting training based on the type of job insecurity experienced. Due to the fluctuations in job insecurity perceptions, organisations should regularly monitor employees job insecurity and behaviour to identify any changes early, allowing them to intervene at the right time.

#### Relevance to the Congress Theme

Job insecurity is a very salient part of the changing world of work – for many people, work will change from secure to more insecure, but it may also be that job insecurity perceptions fluctuate for individuals. Understanding the behavioural responses to these changes will help organisations implement supportive structures to enable proactive behaviours despite uncertainty.

#### Relevant UN SDGs

This research aligned with SDG 8 “Decent work and economic growth”

*Keywords: Job insecurity, diary study, proactive work behaviour*

## Paper 5

### **Moving on up now? A meta-analysis of the associations between job insecurity and career, learning, employability, and mobility outcomes**

Magnus Sverke, Stockholm University, Sweden; Lena Låstad, Stockholm University, Sweden; Katharina Näswall, University of Canterbury, New Zealand; Johnny Hellgren, Stockholm University, Sweden; Anne Richter, Karolinska Institutet, Sweden; Jacobus Pienaar, Stockholm University, Sweden

#### Research goals and why the work was worth doing

While the literature regarding job insecurity and work-related and health-related outcomes has blossomed over the last approximately 40 years (as covered in several reviews and meta-analyses), studies investigating how job insecurity relates to career-related attitudes and behaviors remain scarce. We aim to contribute to this literature by providing, to our knowledge, the first meta-analysis of job insecurity and career-related outcomes, including career management (career planning, networking, perceived career opportunities, career satisfaction, and career commitment), learning (proactive skills development and willingness to participate in training), employability, and mobility (job search behaviors, organizational turnover intention, occupational turnover intention, and actual turnover). A further aim of the study is to explore the potential moderating role of study design (cross-sectional vs. longitudinal studies) and type of job insecurity measure (cognitive, affective, or mixed) in the associations between job insecurity and such outcomes.

#### Theoretical background

Job insecurity represents the subjective experience of risking to lose one's employment. A range of studies, including several reviews and meta-analyses, have shown that job insecurity may result in impaired health and well-being, negative attitudes towards the job and the organization, and work-related behavior such as poorer job performance and a higher willingness to quit one's job. Previous research also suggests that employees may engage in active career management, learning, and attempts to enhance their employability to try to counteract their vulnerability in the labor market (as evidenced by high levels of perceived job insecurity). Job insecurity may also, ultimately, be related to career mobility, such as job search behaviors and turnover. The global economic outlook points to a future increase in precarious forms of employment (short-term, part-time contracts) but also precariousness (uncertainty of job futures and stabilities).

#### Methodology

Literature searches were conducted in established databases (PsycINFO, Web of Science and EBSCO) to identify peer-reviewed articles written in English and published in scientific journals 1980–2020. A total of 180 independent studies (covering 218 samples, 58 countries and with  $N = 72,094$  individuals) could be included. We used Hunter and Schmidt's (2017) meta-analysis method to calculate the meta-analytic mean correlations and the variability of associations between job insecurity and career-related outcomes.

#### Results

Preliminary results of main effects show that job insecurity was negatively related to career satisfaction and career opportunity, but not significantly associated with career planning, networking behaviors, and career commitment. In terms of learning, job insecurity was negatively related to proactive skills development but unrelated to the willingness to participate in training. Job insecurity

was negatively related to (external) employability. Regarding mobility, job insecurity evidenced positive associations with job search behaviors and organizational turnover intention, whereas the confidence intervals for occupational turnover intention and actual turnover included zero. The possible moderation effects of study design (cross-sectional vs. longitudinal) and job insecurity measure (affective, cognitive, mixed) will be tested before the congress.

#### Limitations

Any meta-analysis depends on the quality of the included studies. The forthcoming moderator analyses regarding study design (cross-sectional vs. longitudinal), as well as type of job insecurity measure (affective, cognitive, mixed), may shed additional light on the associations between job insecurity and career-related outcomes.

#### Conclusions

The present meta-analysis of job insecurity and career-related outcomes suggests that job insecurity may result in poorer career opportunities, less learning, lower employability, and a higher inclination to leave the organization. It is therefore vital to counteract experiences of job insecurity. The findings may assist individuals in planning their career management and learning, but also organizations in supporting employee employability and managing turnover.

#### Relevance to the Congress Theme

Job insecurity is a prevalent attribute of the changing world of work. By investigating how this experience relates to career-related outcomes, we contribute to the understanding of the implications of employment uncertainty.

#### Relevant UN SDGs

Good health and well-being

Decent work and economic growth

*Keywords: Job insecurity, career, meta-analysis*

## Symposium S061

### Understanding and Breaking the Self-Maintaining Cycle of Gender Inequality in Organizations

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science

What will be covered and why? Despite great efforts, women are still underrepresented in traditionally male-dominated careers, such as in the military, in STEM (science, technology, engineering, mathematics) fields, and in high-level leadership positions. This symposium, with presenters from three different countries (i.e., the Netherlands, United Kingdom, and United Arab Emirates), addresses the complex, self-maintaining cycle of gender inequality in organizations and aims to provide implications for individual careers, and decision-makers in organizations. Specifically, the symposium consists of four reports of empirical research that focus on women's experiences with and coping responses to different forms of stigmatization at work. Talk 1 takes a self-selection perspective by addressing psychological processes – such as work-life conflict, fear of backlash, identity threat, and leadership self-efficacy – that can help explain gender differences in career aspirations. Talk 2 focuses on incivility as a subtle form of stigmatization at work and reveals how this increasingly prevalent form of subtle mistreatment negatively affects female employees' career and work attitudes. Talk 3 focuses on workplace cultures with strong masculinity norms as a covert form of gender bias, leading women to distance themselves from other women to gain status in such workplace cultures. The final talk 4 reflects on the challenges and opportunities in creating an inclusive workplace. A future research agenda is proposed which aims at stimulating new research streams to enhance our understanding of processes and practices to foster inclusion.

Relevance to the Congress Theme : The world of work is changing and the workforce becomes increasingly diverse. With these changes come new possibilities and challenges for organizations to perform at their best by including and providing chances for all their employees. For example, women are increasingly entering industries and positions that have been historically occupied by men (Catalyst, 2020), yet they remain substantially underrepresented in those domains. In line with the EAWOP Congress Theme "The Future is Now", this symposium aims at providing a better understanding of (a) some of the main challenges that women (and members of traditionally underrepresented groups more generally) face in majority-male industries and positions, (b) how they cope with them, (c) what effects these challenges have on targets' work- and career-related outcomes, and (d) how practices of inclusion (e.g., inclusive leadership, inclusive HR management) can become means of support. These insights will support our understanding of how to attract and retain a diverse workforce and develop towards a sustainable and healthy workforce in the future that may tackle society's major challenges.

Research/Practical Implications : The overall symposium shows the importance of addressing the complex and self-maintaining cycle of gender inequality in organizations: It shows several ways in which women experience subtle forms of stigmatization, such as through lack of fit (Talk 1), incivility (Talk 2), and workplace culture (Talk 3). Talks 1 and 2 demonstrate that these subtle forms of stigmatization negatively affect women's career-related attitudes, for example through processes of low belonging and perceived discrimination (Talk 2) and lower leadership self-efficacy, fear of backlash, and anticipated work-life conflict (Talk 1). Talk 3 shows that women distance themselves from other women to try and gain status in organizations in which they experience such subtle forms of stigmatization – an identity-management strategy that maintains gender inequality by legitimating these subtle forms of stigmatization that often seem neutral at surface. Talk 4 provides insight into the complex and self-maintaining cycle of gender inequality by discussing paradoxes in inclusion

research and how we can move this research field forward. This talk also provides practical tools on how this cycle can be broken by organizational practices that foster inclusion.

Overall conclusions : All four research reports address the persisting challenges of women's career advancement to prestigious occupations and high-level leadership roles, and provide practical implications on how to break the complex and self-maintaining cycle of gender inequality at work through practices of inclusion.

*Keywords: Managing diversity, Gender balance, Equal opportunities*

## Paper 1

### Career Aspirations: Why Do Women and Men Differ?

Tanja Hentschel, University of Amsterdam

Research goals: Despite equal levels of education and research demonstrating that women have equal leadership skills to men, women are underrepresented in leadership positions. On the one hand, much research shows how biases of hiring or promotion committees can prevent women from being selected for high-ranking organizational positions. On the other hand, women may also choose not to pursue high-ranking organizational positions – and we currently know little about reasons for their potentially lower career aspirations. Such knowledge, however, may inform organizational policies targeted at advancing the careers of women. Thus, this research aims to understand if and why women have lower career aspirations than men.

Theoretical background: Building on Lack of Fit (Heilman, 1983), Role Incongruity (Eagly & Karau, 2002) and Backlash Theory (Rudman & Phelan, 2008), four mechanisms may be relevant in explaining women's versus men's career aspirations. First, due to a lack of fit between how women perceive themselves and how they stereotypically perceive leaders, women may perceive themselves as having lower leadership self-efficacy compared with men. Second, because of these same lack of fit perceptions, women may anticipate higher levels of identity threat in leadership positions (e.g., they may anticipate lower levels of belongingness). Third, because leaders are often perceived to work overtime and women tend to have more household and family responsibilities compared to men, women may anticipate higher levels of work-life conflict. Finally, people have normative expectations about which behavior they appreciate in men and women and they socially penalize or sanction people who violate these expectations. Women might be aware of the norm that career ambition is less accepted for their gender and experience higher levels of fear of backlash for being ambitious. These four processes – that is, women's lower levels of leadership self-efficacy, and higher levels of identity threat, anticipated work-life conflict and fear of backlash – are likely to limit career aspirations.

Methodology: A time-lagged field study with three times of measurement (about 1-2 weeks apart) and almost 400 participants was conducted in the Netherlands. Gender (as well as self-ratings on gender stereotypical characteristics) was measured at time 1, leadership self-efficacy and fear-of-backlash at time 2, and career aspirations, anticipated work-life conflict, and identity threat at time 3. Participant age and whether participants worked in a male-dominated (or female-dominated) surroundings was controlled for in the analyses.

Results: PROCESS model 4 (mediation model) was used with gender as the predictor, leadership self-efficacy, identity threat, work-life conflict, and fear of backlash as parallel mediators and career aspirations as an outcome. Results showed that women had lower career aspirations than men. Female gender was negatively related to leadership self-efficacy and positively related to anticipated work-life conflict and fear of backlash. However, gender was unrelated to identity threat. In addition, leadership self-efficacy was positively related to career aspirations while work-life conflict and fear of backlash were negatively related to career aspirations (identity threat was unrelated). The indirect effect of gender on career aspirations was, however, only significant for the mediator leadership self-efficacy.

Limitations: Despite limiting common-method bias with partly separating the measurement of variables, no causality can be inferred. In addition, other variables not measured in this study may mediate the relationship between gender and career aspirations. All ratings were done by the same person and common-source bias might be an issue. Future studies should replicate these findings using experiments to infer causality and include ratings by supervisors or colleagues to limit common-source bias.

Implications: Knowledge about the psychological processes influencing men's and women's career aspirations can help organizations and policymakers to design interventions. For example, designing organizational surroundings to show achievements of women and having visible female leaders may heighten other women's leadership self-efficacy. In addition, creating a gender-inclusive culture in which career aspirations of all people are accepted and appreciated, may limit women's fear of backlash.

Relevance to the Congress Theme : When considering desirable changes in the future, this research helps to better understand the factors that might hold women back from choosing leadership careers. The research further offers practical implications that can help organizations to implement policies aiming at gender equality.

Relevant UN SDGs : This work is relevant to the UN SGD goal of gender equality. More women in high-level leadership positions is one of the UNs sustainable development goals and hopefully what the future of work will look like.

*Keywords: gender stereotypes, leadership, career aspirations*

## Paper 2

### **Experienced Incivility at Work: Effects of Perceived Belongingness and Gender Discrimination in Female-Dominated and Male-Dominated Work Teams**

Levke Henningsen, University of Exeter; Colette Van Laar, University of Leuven; Tara Reich, King's College London; Jamie L. Gloor, University of St.Gallen

Research goals and why the work was worth doing: Overt workplace discrimination has become largely unacceptable; however, scholars have identified modern, covert forms of discrimination that sustain inequalities at work and beyond. Previous research addressing selective incivility as a modern form of discrimination revealed that low-status groups (e.g., women in male-dominated work domains) are at higher risk to experience uncivil behavior at work than high-status groups (e.g., men; e.g., Cortina et al., 2013). The present study addresses the concept of selective incivility (Cortina, 2008) and aims to advance the understanding of the psychological mechanisms through which experiences of uncivil acts at the workplace affect women's career-related attitudes.

Theoretical background: Despite previous evidence on more frequent incivility experiences among low-status (e.g., women) compared to high-status group members (e.g., men) in male-dominated work domains, the existing literature reveals theoretical gaps that limit our current understanding of the outcomes, psychological mechanisms, and moderators of experienced workplace incivility for these groups. To better understand how incivility experiences at work contribute to gender inequality in careers, we bridge selective incivility (Cortina, 2008), social power (Sidanius & Pratto, 1992), and attribution (Jones et al., 1972; Weiner, 1974) theories to study the psychological mechanisms (i.e., belongingness at work; attributions of incivility to gender discrimination) through which experiences of uncivil behavior predict women's career-related attitudes. Further, we considered contextual factors (e.g., gender of initiators, gender distribution in the work team) as moderators of the proposed relationships.

Design/Methodology/Approach: We conducted a time-lagged online survey with three measurement occasions (with time lags of four weeks each) among 276 female employees from German-speaking countries and a variety of sectors (e.g., finance, transportation, engineering). At timepoint 1, the survey included measures of participants' demographics, work situation, experiences of workplace incivility (predictor), gender of initiators of uncivil behaviors, and the gender distribution in the work team (moderators). At timepoint two, participants were asked to indicate their perceived belongingness, and their perceived gender discrimination at work (mediators). At timepoint 3, participants filled in questions regarding their work- and career-related attitudes (i.e., career withdrawal intentions; job turnover intentions).

Results obtained or expected: Multi-group path analyses revealed associations between experienced incivility and women's lower sense of belongingness as well as stronger perceptions of gender discrimination at work. More precisely, in male-dominated work teams, perceptions of gender discrimination mediated the effects between women's experiences with uncivil workplace behavior and higher job- and career withdrawal intentions. In female-dominated teams, women's perceptions of a lower belongingness at work mediated the effects between experienced workplace incivility and the career outcomes. Furthermore, in female-dominated teams, women were more likely to perceive gender discrimination from male than from female initiators of uncivil behaviors.

Limitations: Although longitudinal research designs provide strengths, there are some limitations. For example, despite separating the measurements of study variables across three time-lagged surveys to address common-method bias, we cannot claim causal effects. Furthermore, data from different time lags came from the same sources and therefore, common-source bias might have affected our study results. Future studies are encouraged to investigate ratings of team members to limit this bias.

Conclusions – Research/Practical Implications : The study contributes to previous research while also offering practical insights on the factors that shape women’s career-related attitudes. For example, the current study contributes to previous research efforts by showing that low-intensity forms of mistreatment at work (e.g., interrupting, or questioning the expertise of a team member) affect women’s career-related attitudes, mainly through stronger perceptions of gender discrimination in male-dominated teams, but through feelings of lower belongingness at work in female-dominated teams. The study further highlights the importance of the context in which uncivil behavior takes place as it affects the way in which individuals make sense of their experiences. It therefore offers implications that take away the pressures from victims of incivility and puts the focus on the context that requires different organizational strategies, such as awareness trainings.

Relevance to the Congress Theme : Although there have been considerable changes in the labor market with more women entering traditionally male-dominated careers, women are still underrepresented in many of these career fields. This research aims at providing a better understanding on how subtle barriers could be dismantled to facilitate women’s equal workplace participation.

Relevant UN SDGs : This work addresses subtle forms of gender discrimination that can sustain inequalities at work and beyond. Therefore, the research is most relevant to the UN SGD goal of gender equality but also addresses the goal of good health and wellbeing.

*Keywords: incivility, career, gender*

### Paper 3

#### **Current and Emerging Paradoxes in Inclusion Research: A Focused Review and Future Research Agenda**

Brooke Gazdag, Deanne N. den Hartog, Corine Boon, Tanja Hentschel & Emma M. Op den Kamp | University of Amsterdam

Theoretical background. In today's ever increasingly diverse and globally connected world, employees are inevitably confronted with questions and challenges around how to manage and harness the power of diversity. Inclusion has been positioned as the missing puzzle piece that allows people to be outwardly and openly valued for their unique qualities and to feel that they, too, belong in the organization and team (e.g., Nishii, 2013; Roberson, 2006; Shore, Randel, Chung, Dean, Holcombe Ehrhart & Singh, 2011). Beyond the context of diversity, inclusion, or specifically inclusive leadership or inclusive HR management, creates a climate of psychological safety (Carmeli, Reiter-Palmon & Ziv, 2010; Nembhard & Edmondson, 2006), and facilitates learning from failure (Hirak, Peng, Carmeli & Schaubroeck, 2012). It also enhances team performance via creating a team identity (Mitchell, Boyle, Parker, Giles, Chiang & Joyce, 2015). Although still in its nascent stages of development (Janssens & Steyaert, 2020), the burgeoning research on inclusion demonstrates its increasing relevance, not just for the study of diversity, but also as a concept and practice that incorporates many aspects of organizational life.

New Perspectives/Contributions. However, existing work on inclusion tends to narrowly focus on a single aspect or perspective, which neglects the paradoxical nature of inclusion. Scholars often depict inclusion from a structuralist perspective in that the actions of one entity, that is the organization, team, or leader, impact the intended includee and their subjective experience, as opposed to the agentic perspective, which argues that individual includees are able actors that also in part shape their own outcomes and pathways. In addition, current inclusion research takes primarily a social approach, often neglecting inclusion or exclusion for functional reasons. We believe that the reliance on an understanding of inclusion from a structuralist and/or social perspective unnecessarily narrows the scope of inclusion research and theory (e.g., Janssens & Steyaert, 2020), and thereby stunts potential growth to reach the popularity and ubiquity of diversity research.

Conclusions – research and or practical implications. Using a two part approach (Parmigiani & King, 2019), we both synthesize existing research and highlight two existing paradoxes in inclusion research and three emerging paradoxes. First, in Part I, we conduct a focused review of the inclusion literature and organize and summarize the literature using a paradox framework to make explicit two paradoxes in existing inclusion research: (1) Inclusion is the responsibility of both organizations/teams/leaders and individuals and (2) Inclusion is both social and functional. Based on our review, in Part II, we extend our framework to include three additional paradoxes emerging in the field: (1) Members of underrepresented groups both need to be included and their resources need to be respected and protected, (2) Inclusion is based on individual subjective perception and objective measures or practices, (3) Everyone needs inclusion and everyone has different needs. In doing so, we attempt to redirect (Cronin & George, 2020), add to (e.g., Adamson, Kelan, Lewis, Śliwa & Rumens, 2020; Tyler, 2018), and ultimately “shed light (not just heat)” (Hollenbeck, 2008, p. 20-21) on the conceptualization and operationalization of inclusion. Taken together, our paradox framework answers calls to focus more on processes and practices that foster inclusion (Nkomo, Bell, Roberts, Joshi & Thatcher, 2019) and ultimately, by taking this approach seeks to avoid unintended consequences of well-intended inclusion initiatives (Leslie, 2019). In bringing the paradoxical nature

of inclusion to the fore we hope to stimulate new streams of future research that both challenge and accelerate the nascent field of inclusion research.

Relevance to the Congress Theme. The concept of inclusion is evolving as our way of working evolves. How inclusion is practiced in organizations must take a process approach and activate all the relevant populations and incorporate their voices. In other words, in order to manage the competition and collaborate effectively with diverse others, future workers will need to develop a competence for managing the paradoxes inherent in inclusion.

Relevant UN SDGs. This work is relevant to three UN SDGs. First, for Goal 5: Gender equality, organizations, teams, and leaders who master inclusion can effectively attract and retain talent from all genders. Second, Goal 3: Good health and wellbeing and Goal 8: Decent work and economic growth together support a holistic approach to work-life and inclusion can achieve these goals by embracing individual needs and establishing systems that adapt and evolve with employee needs.

*Keywords: inclusion, diversity, paradox*

## Paper 4

### Masculinity Contest Workplace Cultures Lead to Self-Group Distancing in Women

Jenny Veldman & Andrea Vial | New York University Abu Dhabi

**Theoretical Background & Research Goals:** Women are increasingly entering industries that have been historically occupied by men (Catalyst, 2020), although they remain substantially underrepresented in those domains. In part due to the preponderance of men, these organizational contexts are often characterized by a “masculinity contest culture” (MCC; Berdahl et al., 2018)—a workplace environment that encourages the enactment of (negative) stereotypically masculine behaviors and attitudes, leading to a workplace culture where employees frequently adopt a “dog eat dog” mindset, avoid showing weakness at all costs, strive to display endurance, strength, and a single-minded focus on work, and engage in cut-throat competition with others (Berdahl et al., 2018). Although masculinity contest workplace cultures do not explicitly refer to gender (Cheryan & Markus, 2020), they place women at a disadvantage by rewarding male-typed behaviors incongruent with gender prescriptions for women to be communal (Prentice & Carranza, 2002). The traits that make up the “ideal worker” in these contexts align well with the highly-assertive elements of male norms, including negative agency traits like aggression and dominance. Women, who have been traditionally taught to be modest, kind, and cooperative (Prentice & Carranza, 2002) may find it challenging to navigate MCC environments, and may experience their gender group membership as a liability in these contexts. We theorize that, in order to gain status in MCCs, women try to create a distance between themselves and their gender ingroup or to dissociate themselves from it—a phenomenon known as self-group distancing (Van Veelen et al., 2020).

**Methodology & Results:** Four pre-registered studies examined how women create a distance between themselves and their ingroup in order to gain status in workplace cultures with a masculinity contest culture. Experiments 1 (n = 358) and 2 (n = 816) showed that the female (vs. male) social identity is devalued in a strong (vs. weak) MCC workplace, which partly explains women’s (vs. men’s) lower sense of personal status in strong MCCs. Experiment 3 (n = 1687) showed that women (and not men) were more likely to distance themselves from their gender group in a virtual workplace characterized by a strong (vs. weak) MCC, both affectively (self-report) and behaviorally (i.e., to conceal their gender). Field Study 4 (n = 612) demonstrated this process in a representative sample of men and women employed in industries with strong and weak MCCs.

**Limitations :** All studies were pre-registered before data collection and were high-powered for the analyses. Our methods are diverse. We used experimental methods (Studies 1-3) that gave strong internal validity and insight into the causal process. A limitation of these studies is that convenience samples from an online recruitment pool were used. This enabled us to collect large samples, but it constrains generalizability. To account for this limitation, we also collected correlational field data (Study 4) among a representative sample of employees across a range of industries with the highly respected market research company Ipsos.

**Conclusions /Implications:** Together, the studies demonstrate that women distance themselves from other women to gain status in workplaces with strong masculinity contest cultures. The research presented here sheds light on the antecedents and psychological function of self-group distancing, a strategy that perpetuates the legitimization of masculinity norms in the workplace. Previous research has shown that self-group distancing occurs in direct response to a personal experience of gender bias (Derks et al., 2011a, 2011b). However, we demonstrate how merely being immersed in a cultural

context that devalues the ingroup leads to self-group distancing. This distinction between first-hand experiences of gender bias and a more subtle workplace climate that glorifies male behavior as the “default” (Berdahl et al., 2018; Cheryan & Markus, 2020) is practically meaningful because blatant forms of discrimination are becoming largely unacceptable in modern-day organizations and women increasingly face discrimination in more subtle and covert forms that are harder to recognize as bias (Ellemers & Barreto, 2015), but which have important social identity consequences.

Relevance to the Congress Theme : With the workforce getting increasingly diverse, it is crucial to understand how members of underrepresented groups (such as women in majority-male industries) cope with the challenges they face and how these coping strategies can perpetuate gender inequality.

Relevant UN SDGs: The present work is relevant to the UN SDG of gender equality. This research focuses on an identity management strategy that women use to navigate masculine contexts. By focusing on how women cope with challenges they face in masculine contexts, the present work provides critical insight into understanding the often-subtle ways in which gender inequalities are maintained from women’s perspective—and ultimately also how we can challenge persistent gender inequality by changing organizational cultures.

*Keywords: masculine workplace cultures, identity management, women*

## Symposium S062

### Do it Yourself – Multilevel Perspectives on Job Crafting in the Workplace

Elisa Lopper, Humboldt-Universität zu Berlin

science

What will be covered and why: Job crafting describes employee-initiated changes to the job to better fit their skills, preferences, and abilities (Tims & Bakker, 2010; Wrzeniewski & Dutton, 2001). There is numerous evidence that job crafting is positive for employees as well organisations (e.g., increases in work engagement or performance). The changing world of work challenges employees to adapt to uncertain and dynamic situations. Also, the COVID-19 pandemic has required mechanisms of adaptation. Job crafting enables employees to deal with such demanding situations, as it can fluctuate within employees within short periods of time (e.g., daily). Therefore, is important to have deeper insights into between- and within-person variations of job crafting and their effects. In this symposium, we discuss three studies with different multilevel approaches of job crafting. The focus is on the experiences of employees in the workplace. The first paper (Mülder et al.) introduce the new construct job crafting preparation to refine how employees cognitively prepare for job crafting. Furthermore, the authors investigate cross-lagged relationships between job crafting preparations and job crafting during a workweek on between- and within-person levels. This helps to better understand cognitive processes that play a role before, during and after job crafting. The second paper (Lopper et al.) examine within-person relationships between job crafting, work engagement and performance on a weekly basis. Over and above unidirectional associations between the study variables, the authors reveal a more dynamic approach. Using a weekly diary study, they investigate within-person gain cycles between job crafting, work engagement and performance from one week to the next. The third paper addresses the COVID-19 pandemic. Lehmann et al. focus on job crafting and its changes during the COVID-19 pandemic to examine how employees adjust their work under societal and work-related challenges due to the pandemic crisis. Especially, in their longitudinal panel study they differentiate between employees with and without mental health issues to address the high prevalence of employees with mental health issues. Additionally, the authors investigate the role of job resources on changes of job crafting.

Relevance to the Congress Theme : In the changing world of work organizations benefit from proactive employees. The future of work makes it is almost impossible for organizations to create jobs that fit all. Job crafting describes changes to aspects of one's work to make the job to better fit itself. That is, employees adjust proactively aspects of their work which has numerous positive effects for employees and employers. Especially, in a changing world of work, job crafting plays an important role to adapt to uncertainty and dynamic situations. The different papers of this symposium cover newest developments of between- and within-person level job crafting in the workplace.

Research/Practical Implications : The three studies provide different multilevel approaches of job crafting, demonstrating that there are different results by separating between- and within-person level. Furthermore, there are change differences in job crafting depending on the mental health status of employees. Thus, future research should focus the multilevel perspective on job crafting with varying time intervals. From a practical point of view, the studies demonstrate that it is important to consider the multilevel approach of job crafting by developing job crafting interventions in organisations.

Overall conclusion : Overall, the research in this symposium confirmed that job crafting fluctuates within different time periods and enables employees to deal with changing situations. As the future of work faces new challenges for employees and organisations, employees' self-initiated changes to aspects at work becomes more important. In the changing world of work, not only employees benefit by using job crafting, but also organisations stay competitive.

Arianna Costantini

*Keywords: Crafting, Multilevel approaches*

## Paper 1

### **Cognitive processes before showing job crafting behaviour – Introduction of the concept job crafting preparation and time-continuous relations to job**

Lina Marie Müller, Johannes Gutenberg-University Mainz; Thomas Rigotti, Johannes Gutenberg-University Mainz/Leibniz-Institute for Resilience Research Mainz; Wiebke Plückhahn, Johannes Gutenberg-University Mainz

Research Goal: Flatter hierarchies in organizations, the growth in mobile work, as well as dynamic adaptations to the organization of work go along with increased demands for self-management of employees. Employees need to take the initiative to fit their job characteristics to their personal needs. Such proactive behaviour of self-initiated bottom-up job design is known as job crafting. By introducing the new construct of job crafting preparation, we aim to refine how employees cognitively prepare for job crafting. Improving our understanding of the process of job crafting can help to tailor job crafting interventions and refine our knowledge on how employees determine which job crafting behaviour is the most suitable and healthy in the long run.

Theoretical background: Job Crafting is a set of employees' self-initiated adaptations of their job characteristics. Drawing on the wise proactivity model and given that human actions require analysing the situation, evaluation, and execution processes, we introduce the construct job crafting preparation. We understand job crafting preparation as the cognitive processes happening before job crafting behaviour, which involves the dimensions of conducting job analysis (external analysis; e.g., examining working conditions that help to perform tasks), internal analysis (e.g., reflecting own actions at work), job evaluation (e.g., do job characteristics match individual needs), and the planning of job design solutions (e.g., knowing how own actions can improve working conditions) to set goals and perform appropriate and adequate crafting. First, we introduce the construct job crafting preparation and illustrate how employees use job crafting preparation based on a multi-study validation (cross-sectional and weekly diary sample). Second, as short-term effects might play an important role in considering cognitive processes, we give insights on how it is related to actual job crafting behaviour and well-being outcomes, using time-continuous analysis on a daily diary basis over one week.

Design/Approach: We collected daily diary data from 93 employees over five consecutive workdays in spring 2021 who worked at least 10 hours a week from home. As continuous time models give the opportunity to specify differing underlying processes for how constructs change from one time to the next, and to test for reciprocal relationships. Therefore, a continuous time cross-lagged panel model implemented in the R package ctsem was performed to detect the cross-lagged relations between job crafting preparation and job crafting during a workweek on within- and on between-person level. First, we determine the optimal time lag of strongest lagged effects in both directions. We will report specific effects that occur after one, two, three, and four days.

Results : On the between-person level, no significant effects from job crafting preparation on job crafting and vice versa were detected. The effects are the strongest after the second day. However, we found significant negative reciprocal effects from job crafting to job crafting preparation on the within-person level. Job crafting negatively predicted subsequent job crafting preparation, and this effect reached its maximum after one day, and was still present after four days. Job crafting preparation on the other hand showed no lagged effects on job crafting behaviour. The results provide additional insights into short-term job crafting behaviour, as sooner studies showed a

positive relationship between the two variables over five weeks on the within and the between levels.

Limitations: The data was collected during the COVID-19 crisis, where many participants worked from home, which resulted in the sample overrepresenting white-collar workers.

Conclusion: Our study indicates that over the workweek, job crafting impacts job crafting preparation stronger than the other way around. However, analyses with the four dimensions of job crafting preparation and job crafting are necessary to refine conclusions regarding reciprocal relationships. Additionally, different time intervals as over several weeks should be considered in the future.

Relevance to the Congress Theme: The construct of job crafting preparation is directly related to the changing world of work, as it underlies the individual cognitive process that employees do before, during, and after adjustments to their own work (e.g., job crafting). Investigating the dynamic relations is a first step to supporting employees in managing the given expectations to take the initiative and craft their jobs.

Relevant UN SDGs : “Good health and wellbeing” and “Decent work and economic growth”

*Keywords: Job crafting, Work design, Health & well-being*

## Paper 2

### **Weekly Reciprocal Relationships between Job Crafting, Work Engagement, and Performance – a Within-person Approach**

Elisa Lopper & Annekatrin Hoppe | Humboldt-Universität zu Berlin; Sandra Nitz, University Koblenz-Landau; Dorota Reis, Saarland University; Marvin Milius, University Koblenz-Landau

Research goal: Following principles of conservation of resources theory (COR; Hobfoll, 1989), we aimed to investigate whether job crafting outcomes, like work engagement and performance, can simultaneously be antecedents of job crafting (i.e., reciprocal relationships). Thereby, we focused on effects within employees on a weekly basis. More specifically, we aimed to explore whether positive cycles evolved between job crafting, work engagement and performance within employees from one week to the next.

Theoretical background : Job crafting as a form of proactive behavior at work describes self-initiated changes to one`s job (Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001). According to COR (Hobfoll, 1989), job crafting enables employees to create a resourceful work environment, which enhances work engagement and offers employees the opportunity to do their job well (i.e., performance). Through this initial resource reservoir, employees can build further resources that finally tend to form resource caravans (Hobfoll, 2002). That is, due to an increase in work engagement and performance – triggered by job crafting – the mobilization of further resources, for example by job crafting, can be facilitated. Indeed, engaged and high-performing employees are likely to use job crafting, as they can be motivated to fulfill (further) work goals (Xanthopoulou et al., 2009). For this, employees need resources that they can get by job crafting. To conclude, job crafting, work engagement and performance tend to be reciprocally related and evolve on gain cycles. Gain cycles can be seen as reciprocal relationships between constructs that relate to each other over time (Salanova et al., 2011). As employees have to deal with dynamic situations in the workplace, for instance, job crafting can fluctuate within an employee over short periods of time (e.g., weekly; Petrou et al., 2017). Given these fluctuations, it is important to know whether job crafting induce short-term resource gain cycles with work engagement and performance.

Design/Approach: 175 teachers in Germany participated in the diary study, completing questionnaires once a week over a period of six weeks. Data were analyzed with a random intercept cross-lagged panel model (RI-CLPM) that differentiates between stable trait-like between-person and state-like within-person components.

Results: Results revealed that, between persons and within weeks, job crafting, work engagement, and performance are related to each other. Across weeks, on average, job crafting predicted work engagement and performance at the within-person level in the next week. Inversely, work engagement, on average, predicted job crafting in the next week. Although job crafting predicted performance in the next week, there was no reverse effect of performance on job crafting. Finally, work engagement and performance were reciprocally related from one week to the next, although the effects varied greatly in magnitude and direction.

Limitations: The generalizability of our results is limited as we used a homogenous sample consisting of teachers. Furthermore, performance was assessed with a specific form of teacher`s performance, such that it is hard to compare our results with previous research as well there might have been a misfit between the study variables regarding their level of specificity.

Conclusion: Overall, job crafting, work engagement, and performance are related to each other between teachers. Further, our results indicate that weekly teachers' job crafting plays an important role as it predicts both work engagement and performance in the following week. In addition, work engagement, predicted by job crafting in the last week, can in turn predict job crafting in the next week, indicating a positive cycle between both variables. That is, by using job crafting teachers enhance their motivational state that they maintain (or increase) by changing aspects at work proactively. Having a better understanding of the mechanisms by which these variables are linked helps to prepare more effective interventions.

Relevance to the Congress Theme: Job crafting is able to fluctuate within short-time periods (Petrou et al., 2012) and has positive effects on employees (e.g., work engagement). These short-term adjustments are significant in a changing world of work, in which employees have to deal with dynamic, demanding situations.

Relevant UN SDGs: "Good health and wellbeing", "Quality education", "Decent work and economic growth"

*Keywords: Job crafting, Within-person effects, Gain cycles*

### Paper 3

#### **Changes in job crafting during the COVID-19 pandemic in employees with and without mental health issues: The role of job resources**

Anja Lehmann, Georg F. Bauer & Philipp Kerksieck | University of Zurich

**Research goals:** The aim of this study was to investigate changes in job crafting during COVID-19 among employees with and without mental health issues (MHIs). Furthermore, this study aimed to explore the role of job resources with regard to these changes.

**Theoretical background:** MHIs were highly prevalent in society long before the COVID-19 pandemic. The COVID-19 pandemic has further increased mental health pressure across the population. Due to limited personal resources, employees with MHIs might be less able to craft their jobs during the COVID-19 pandemic. This is important since work-related proactive efforts at the individual level (job crafting) have been identified as beneficial to various work-related parameters. On the other hand, the psychosocial working conditions, particularly job resources, might have a buffering effect on a deterioration of job crafting among this group of employees.

**Design:** We have analyzed longitudinal panel data of five waves between 2018 (pre-pandemic baseline) and 2021 from employees in Switzerland, Germany and Austria (N = 597). Furthermore, N = 150 employees with (sub-)clinical depression or anxiety were identified.

**Results:** The multilevel growth models showed that employees with MHIs rather experienced a decrease in job crafting throughout the COVID-19 pandemic compared to employees without a MHI. However, job resources buffered the decrease of job crafting among this group of people.

**Limitations:** Other mental health issues (e.g., alcohol addiction) were not considered in the study. Moreover, our study was limited by self-reported information.

**Conclusions:** This research illustrated change differences in job crafting among employees with and without MHIs throughout the pandemic crisis. The psychosocial working conditions, particularly job resources, can prevent a decrease in job crafting among employees with MHIs and thus a potential deterioration of their working situation. Therefore, strengthening job resources is particularly important for this group of persons.

**Relevance to the Congress Theme:** This research fits to the congress theme “The Future is Now: the changing world of work” as it addresses societal and work-related challenges due to the pandemic crisis. Beyond that, the high prevalence of MHIs indicates that mental health should be a stronger focus in research and practice. To prevent further social inequalities, we need knowledge about how workplaces should be designed to support employees with MHIs. Job crafting as a concept eliciting well-known positive effects on work-related outcomes needs to be elaborated in the context of MHIs.

**Relevant UN SDGs:** (3) “Good health and well-being”, (8) “Decent work and economic growth” and (10) “Reduced inequalities”.

*Keywords: Job crafting, COVID-19, Mental health*

## Symposium S063

### Understanding the Temporal Dynamics of Employee Wellbeing in a Changing World of Work

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science\_practice

What will be covered and why: Many workplace phenomena are dynamic and continuously undergoing change, especially in a world that is continuously changing. The COVID-19 pandemic has caused changes in the lives of many. The pandemic has barely passed, and the next world-changing events such as war, the oil-and-gas crisis, and climate-change are already at our doorstep. These larger-scale events also impact employees' work lives. However, changes in employees' work life have been apparent for a while, for example via the rise of technology (e.g., internet availability). These large-scale events (e.g., a pandemic) and changing trends (e.g., technology) manifest in how employees experience their daily work. To adapt effectively to these changes in terms of practices and policies, we need to better understand the temporal processes that unfold in employees' workplaces and with respect to their well-being.

Researchers are increasingly paying attention to these dynamics of change in the workplace related to employee wellbeing. Initially, with longitudinal studies examining timeframes of several months. More recently, interest is shifting from the stable aspects of employee wellbeing to day-to-day changes. Whereas interest in these temporal dynamics is rising, the COVID-19 pandemic revealed gaps in our understanding of these dynamics. Wellbeing theories inform about the consequences of adverse events for wellbeing but are vague about how these responses evolve over time. For example, how does the safety climate change during enforced remote work? How do resilience and burnout interact when facing acute stressors? How does burnout develop and change over time? And, are existing conceptualizations suitable to answer these questions? Answers to these questions contributes to the literature on employee wellbeing and to an appropriate societal response to the changing nature of work. This symposium highlights the temporal dynamics of employee wellbeing with the aim to advance the temporal specificity of wellbeing theories and improve the practical applicability of research results on this topic.

In the first paper, Mäkikangas et al. use a person-centered approach to examine how psychosocial safety climate (PSC) evolves over time during remote work. Results show that psychological safety climate deteriorated during enforced remote work and that subgroups of employees experienced different patterns of decrease over time. These results suggest a need for interventions to improve PSC, especially during stressful times. In the second paper, Fleuren et al. present a 30-day diary study examining how burnout affects employees' resilience in response to acute stressors. Thus, they identify a proximal mechanism that may explain burnout's negative effects on health, well-being, and performance. In the third paper, Vullingsh et al. use a 35-week daily-diary study to examine teacher wellbeing pre- and post- COVID-19 lockdown. Results reveal the limited temporal specificity of existing wellbeing theories and highlight its relevance for the ecological validity of these theories. In the fourth study, Sagmeister et al. develop a temporal network conceptualization of burnout. By acknowledging the dynamic and developmental nature of burnout, this study offers a fundamentally different conceptualization of burnout to advance a more dynamic and person-centered approach to employee burnout research, prevention, and treatment. Lastly, Prof. Dr. Thomas Rigotti will serve as a discussant on this symposium. Relying on his extensive experience in employee well-being research, he will address strengths and limitations of the individual papers and highlight their potential to stimulate future research on the temporal dynamics of employee well-being.

Implications: This symposium will stimulate critical discussion among scholars about the temporal specificity of existing wellbeing theory and draw attention to the temporal dynamics in employee wellbeing in the face of a changing world of work. Beyond new empirical insights, also several novel methodological and conceptual advancements that will aid in the future study and understanding of the temporal dynamics in employee wellbeing will be presented. The results and methods advanced in the studies of this symposium will also enhance potential implications for practitioners interested in employee-wellbeing.

Overall conclusions. Employee wellbeing is dynamic, and especially in the changing world of work, these dynamics need to be understood to enable employees, leaders, and policymakers to manage them appropriately. Novel empirical findings, conceptualizations, and methods are presented in this symposium that advance your understanding of the temporal dynamics in employee wellbeing and how these can be studied. Existing wellbeing theories are informative in the face of crisis, but particularly their ecological validity and practical utility can be improved by enhancing their temporal specificity.

discussant: Thomas Rigotti, Leibniz Institute for Resilien

*Keywords: Employee wellbeing, Burnout, Temporal Dynamics*

## Paper 1

### Development of psychosocial safety climate during enforced remote work: a longitudinal person-centered approach

Anne Mäkikangas, Jaana-Piia Mäkineniemi & Kirsi Sjöblom | Work Research Centre, Tampere University, Finland

**Research goals:** There is an urgent need to better understand what factors contribute to healthy multilocational work, which is predicted to present an increasingly pervasive model. The study therefore set out primarily to investigate the development of psychosocial safety climate (PSC), referring to shared perceptions of the extent to which psychological health and safety are prioritized in organizations during enforced remote work occasioned by COVID-19. Second, the implications of the PSC for remote work preferences in the future, the clarity of the new hybrid work practices, and experienced job-related well-being were investigated.

**Theoretical background:** Psychosocial safety climate (PSC) refers to shared perceptions regarding policies, practices and procedures regarding how psychological health and safety are prioritized and protected in organizations (Dollard & Bakker, 2010). It comprises four content domains: 1) management commitment: is management committed to preventing stress at the workplace? 2) management priority: does management prioritize psychological well-being over productivity? 3) communication: are the employees' concerns regarding psychological well-being listened to, and is information about psychological safety and well-being brought to their attention? and 4) participation: are all levels of the organization involved in preventing stress? (Hall, Dollard, & Coward, 2010). Psychosocial safety climate is seen as an antecedent and moderator of work conditions: it complements and extends the Job Demands-Resources theory (JD-R; Bakker & Demerouti, 2017). A recent organizational intervention aiming at improving PSC was successful although the COVID-19 pandemic started during the intervention (Dollard & Bailey, 2021). However, there is no evidence for how PSC developed during COVID-19 without interventions, whether there were differences between employees' experiences of PSC and its development, and whether the development of PSC had vital consequences for the new work practices and well-being.

**Methodology:** The participants were 351 Finnish higher education employees who completed five well-being surveys. Data collection began in April 2020, soon after the large-scale shift to COVID-induced remote work, and continued through November/December 2021, covering altogether a 20-month period. Participants completed the psychosocial safety climate questionnaire (PSC; Dollard, 2019) at each of the five measurement times. Latent profile analysis (LPA) was used to investigate PSC profiles. Differences between profiles were examined with the BCH method using the auxiliary command in Mplus (Asparouhov & Muthén, 2014). Analyses were performed using Mplus (version 8.8).

**Results:** The results revealed four distinct PSC profiles: 1) Low and linearly decreasing PSC (23%), 2) Very low and fluctuating PSC (6%), 3) Average decreasing PSC (44%), and 4) High and initially increasing PSC (27%). Participants belonging to profile 4 showed a more marked preference for remote work in the future than did participants in profile 1 at T5. The PSC profiles also differed in the clarity of the new work practices at T5, that is, these were evaluated at the highest level in profiles 3 and 4. Moreover, emotional exhaustion increased and work engagement decreased among the participants belonging to profiles 1 and 2, that is the profiles where PSC was found to be at a low level.

Limitations: As regards the generalizability of these results, our sample was limited to higher education employees. Moreover, the initial (T1) response rate was 38%, which would suggest initial selective attrition. Furthermore, the data did not include information on the level of PSC before COVID-19.

Conclusions and implications: A notable finding is that PSC decreased among all participants during the enforced remote work. Different PSC profiles were also evident, suggesting varying remote work experiences. PSC had important consequences for remote work preferences, clarity of the new work practices, and well-being. In practice this means that organizations need to design interventions to improve PSC, especially during stressful times.

Relevance to the congress theme: Investigation of psychosocial safety climate in the new era of work is much needed and aligns well with the theme of the congress. There is a need to better understand multilocational knowledge work from the perspective of the health-promoting organizational climate as flexible working arrangements will likely increase in the future.

Relevant UN SDGs : The study will mainly and mostly facilitate the development of sustainable employment. Investigation of psychosocial safety climate is rooted in positive organizational psychology – an approach urgently needed to create socially sustainable work now and in the future.

*Keywords: Psychosocial safety climate, longitudinal person-centred approach, enforced remote work*

## Paper 2

### **Troubles on Troubled Minds: An Intensive Longitudinal Diary Study on the Role of Burnout in Resilience in face of Acute Stressors**

Bram Fleuren, Annika Nübold, Sjur Uitdewilligen, Philippe Verduyn, and Ute Hülshager | Department of Work and Social Psychology, Faculty of Psychology and Neuroscience, Maastricht University, The Netherlands

**Research goals.** Burnout is a work-related state of exhaustion that manifests as reduced cognitive and emotional regulation, extreme tiredness, and mental distance to work. Burnout is known to negatively affect employees' health, well-being, and performance considerably and in various ways and to occur at increasing rates in the general working population. Importantly, studies that documented these undesirable effects of burnout typically look at distal and general outcomes (e.g., well-being, performance, and health in general), while much less is known about how burnout shapes immediate responses to stressors. As elaborated below, the present study argues that as burnout might represent a state of diminished regulatory abilities it could impact workers' resilience when facing stressful events. This study aims to examine how burnout shapes workers' resilience using an intensive longitudinal daily diary study design. It uniquely considers how workers' levels of stressor-specific worrying, positive and negative affect, and work engagement are impacted on the day of a stressful event and what the recovery trajectories on the subsequent days looks like. By comparing workers with high and low burnout scores, this study offers fine-grained analysis of how burnout can proximally produce its known adverse distal outcomes. Moreover, the study provides an innovative longitudinal illustration of studying process resilience as demonstrated.

**Theoretical background.** Theoretical work on burnout suggests that it includes a decreased ability to regulate cognitive and emotional processes. This decreased ability could theoretically reflect the notion that people with higher burnout scores have adverse distal work-related outcomes because they have a lowered resilience. Resilience can namely be defined as the ability to withstand adversity and bounce back from difficult (life) events. Translating this general definition of resilience to resilience as a process, resilience can be observed by considering workers' responses to an event on relevant proximal outcomes. By doing so across multiple narrowly spaced time points the regulatory resilience process can then effectively be observed and be compared across individuals with higher and lower burnout scores. Following the line of reasoning that burnout makes workers less resilient, it is to be expected that workers with comparatively higher burnout scores show more profound immediate reactions to and slower recovery from being exposed to a stressful event.

**Methodology.** The study consists of a 30-day diary study among an international sample of 410 employees. All variables in the study (i.e., burnout, work engagement, positive and negative affect, COVID-19 related worrying, and the COVID-19 event) were measured through self-reports that were previously validated if possible.

**Results.** Multilevel analyses with cross-level interactions between individual-level burnout and day-level stressor occurrence reveal that employees high in burnout score significantly higher on negative affect and lower on positive affect and work engagement on the day the stressor occurred. Additionally, discontinuous random coefficient growth modeling with burnout-time parameter interactions shows that employees high in burnout sustain higher levels of COVID-19 worrying, but their negative and positive affect return to pre-event levels in the post-event days.

Limitations. The study has some limitations. The first is the relatively narrow scope of the immediate outcomes considered. On other potentially stressor-relevant proximal outcomes, additional relevant patterns might emerge. Second, the COVID-19 event used as stressor is not perfectly comparable among participants given variations in severity, actual closeness, and international difference in infection rates. Finally, the power of the study is limited as only 66 events have been reported by participants, which might have resulted in under detection of effects.

Conclusions. This study's findings shed new light on how burnout affects employees' resilience in response to acute stressors. Hereby they potentially identify a key proximal mechanism by which burnout's negative distal effects on health, well-being and performance emerge.

Relevance to the conference theme and SDGs. This study fits with the conference theme as it offers a novel dynamic approach to studying burnout related individual differences in resilience. The changing world of work requires dynamic approaches that consider change over time and both resilience and burnout become more important in rapidly changing workplaces. By understanding these phenomena better, the SDGs of decent work and health and well-being can be more easily attained.

*Keywords: Process Resilience, Burnout, Dynamic Recovery*

### Paper 3

#### Temporal Dynamics of the COVID-19 Lockdown Impact on Employees' Wellbeing

Jesse Vullingsh, Vrije Universiteit Brussel & STRASS Research; Tim Vantilborgh, Vrije Universiteit Brussel; C Drive, Max Planck Institute for Human Development; M Geijer, STRASS Research

**Research goals.** The aim of this study is to examine the temporal characteristics (i.e., direction, duration, rate of change, and shapes) of the COVID-19 lockdown effect on employee wellbeing. Although the Job-Demands-Resources (JDR) model is informative about employees' initial responses to the lockdown as a work-stressor (i.e., demands increase and job resources and employee wellbeing decrease), wellbeing theories are conflicting in their predictions of the temporal dynamics that follow this initial response; does the effect of the lockdown increase over time (i.e., JDR/COR-theory) or does the effect dissipate over time (i.e., Set-point theory)? At what rate do these changes occur? And thus, what are the time courses of these effects?

**Theoretical background.** JDR theory builds on Conservation of Resources (COR) theory, which states that individuals are motivated to obtain, retain, foster and protect resources that they value (Hobfoll, 1989). In the context of the COVID-19 lockdown, COR/JDR theory would suggest that the COVID-19 lockdown triggers a loss cycle, meaning that perceptions of job demands and burnout increase gradually over time, while perceptions of job resources gradually decrease over time. Alternatively, Set-point theory (Headey & Wearing, 1989) proposes that employees have a baseline in their work experience. While events cause employees to deviate from their baseline, people generally adapt and return to their baseline over time. This suggests that the COVID-19 lockdown effects are temporary and dissipate over time as employees return to their baseline. Interestingly, the temporal patterns implied by COR/JDR theory, and Set-point theory appear to be conflicting. Moreover, both theories remain vague about the effect duration and rate of change.

**Methodology.** We investigate these temporal effects in a sample of Dutch educational staff (N = 118, 42% men and 58% women) through daily surveys over 35 weeks. Data collection has continued, and we plan to redo the analysis before the EAWOP conference in the dataset of 50+ weeks of data. We used Hierarchical Bayesian Continuous Time Dynamic Modeling to analyze the data and model the impact and temporal characteristics of the COVID-19 lockdown effect. To illustrate the relative impact of the COVID-19 lockdown on employee wellbeing, we contrast its effects with that of a positive event, namely vacations.

**Results.** Our preliminary results show that job demands increased (i.e., work-to-life spillover), job resources (i.e., social support) increased, and while employees experienced an increase in cynicism, they simultaneously felt less exhausted, and their professional efficacy was unaffected. Our results, however, suggest that the lockdown effects on employee wellbeing worsen over time: work-to-life spillover (job demands) further increased in the weeks following the lockdown; the increase in social support from the workplace (job resources) dissipated rapidly, suggesting employees rapidly deplete their resources. Moreover, employee cynicism also increased over time. Our results align mostly with a gradual change effect (i.e., COR theory), when focusing on a timeframe of five weeks after the lockdown. However, the gradual change effect may shift into a dissipation effect as the observational timeframe widens, which we will assess in our additional data.

**Limitations.** The preliminary analysis only included 5 weeks of data after the first lockdown and including more weeks of observations might impact on the results, as the effect of the lockdown

impact changes over time. Therefore, we will re-run the analysis on the additional data that we already collected. Another limitation is that our sample is comprised of secondary-school teachers and employees in other professions might have had experienced the lockdown differently (e.g., not as a stressor).

**Conclusions.** The immediate effect of the COVID-19 lockdown on employee wellbeing may appear amendable—the magnitude of effects did not appear to differ substantially from that of vacations—but this picture changes when one takes the duration and rates of change of effects into account. This draws attention to the time courses of effects, and that (implicitly) assuming that effects are stable over time can lead to false conclusions. As such, our study underscores the importance of improving the temporal specificity of our wellbeing theories. The results of our study provide fertile ground for such conceptual development.

**Relevance to the conference theme and SDGs.** This study fits with the conference theme as it illustrates a novel method to measure and analyze the changing world of work. Moreover, it draws attention to the dynamic nature of employee wellbeing and how our current wellbeing theories can be improved to be more informative about the changing world of work. Our study contributes to the SDGs good health and wellbeing and to decent work and economic growth.

*Keywords: Employee wellbeing, Time courses of effects, Temporal Dynamics*

## Paper 4

### **Capturing burnout dynamics: A systematic review to identify symptoms relevant to the development of burnout**

Valentina Sagmeister, Sara de Gieter, Jesse Vullings, Safâa Achmak & Tim Vantilborgh | Vrije Universiteit Brussel, Belgium

Research goals and why the work was worth doing. In this study we aim to identify burnout symptoms relevant to conceptualising this phenomenon from a dynamic network perspective. Results will be used to formulate hypotheses on the role of these symptoms in the development of burnout and on the dynamics between the identified burnout symptoms. Using this perspective will contribute to our understanding of burnout as a dynamic and idiosyncratic phenomenon.

Theoretical background. Burnout continues to have a strong, negative impact on society, which we should urgently attend to. Decades of research using a latent variable approach, i.e., burnout as an unobservable entity that can only be measured through its symptoms (de Vet et al., 2011), have given us important insights into risk factors, correlates, and consequences of burnout. Nonetheless, this research has not yet led to successful person-centred care, with burnout rates continuing to be high and long recovery periods for individuals with burnout (van Dam, 2021). Inspired by research on other psychopathologies (Fried, 2017; Cramer et al., 2010), researchers are proposing an alternative conceptualization of burnout, namely as a dynamic network of interacting symptoms (Sagmeister et al., 2022). In this approach, burnout symptoms have an active role by forming a network of causally related factors that interact over time, giving rise to burnout. Currently, there are no tools available to appropriately measure burnout as a dynamic network, since latent measures typically omit symptoms to avoid undesired overlap between psychopathologies, e.g., between burnout and depression (Schonfeld et al., 2018) or anxiety (Koutsimani et al., 2019).

Methodology. We searched three databases (Web of Knowledge, PsycINFO, and PubMed) for peer-reviewed articles that investigated 'burnout symptoms' in adult working populations with a qualitative, quantitative, or mixed-method methodology. We used the R package 'litsearchr' to develop our search query and to remove duplicates. We imported resulting papers into Zotero to preliminarily screen the abstracts and titles, and then into 'asreview' (a software using active-learning AI techniques), to select articles for in-depth screening. For the screening process, five reviewers followed a predefined screening manual to identify relevant symptoms, considering content and quality of the studies.

Results : We are currently in the title and abstract screening phase. Results are expected to be ready in November 2022, after which we will start writing the paper. The results of this project will be ready to present well in time before the EAWOP 2023 conference.

Limitations. Many studies on burnout use cross-sectional data. Therefore, for those studies we will not be able to make deductions about the dynamics between symptoms. However, we will use the symptoms identified in this study to conduct future studies with an intensive longitudinal research design to identify those dynamics.

Conclusions – research and or practical implications/Originality/Value. With this study, we provide a comprehensive overview of symptoms associated with burnout and lay the foundation for developing a tool to measure burnout as a network of symptoms. By comparing symptoms in various stages of burnout development, we highlight the necessity to consider burnout from a dynamic

perspective. Advancing our understanding of this approach may lead to stronger and more adequate research methodology, e.g., more researchers may consider a more dynamic perspective on other work phenomena in their work. In practice, tools based on the dynamic approach may lead to more unambiguous diagnostic guidelines, while still considering a person's unique context. This may lay the foundation for person-centred interventions, which can contribute to treatment success and more long-term health behaviour changes (Visvikis-Siest et al., 2020; Goetz et al., 2018).

Relevance to the Congress Theme. We need to challenge the current conceptualization of burnout and consequently, how we measure burnout in our research (and) practice. The dynamic network approach of burnout may offer possibilities to accommodate more easily the constantly changing world of work and the diverse needs of individuals.

Relevant UN SDGs . This project contributes to the 'Good Health and Well-Being' and 'Decent Work and Economic Growth' UN SDGs, since it improves our understanding of burnout development in the working population.

*Keywords: Burnout, Employee Well-being, Temporal Dynamics*

## **Symposium S064**

### **Brave new world of work? Challenges and opportunities in hybrid work settings**

Christiane Stempel, FernUniversität Hagen

science

#### Aim and relevance

The topic of our international symposium are the challenges and opportunities of hybrid work settings in Austria, Switzerland, and Germany. Accelerated by the Corona pandemic, we have experienced a tremendous shift in the way we work together. The aim of our symposium is to investigate and discuss the implications of these changes from different perspectives.

Arabella Mühl and colleagues take a closer look at a major challenge people face when working remotely in teams: How to feel related to your co-workers when working apart? Drawing on a diary study among 795 remote workers, the researchers investigate the role of task-related clarity for the need for relatedness. The results not only demonstrate the complexity concerning the antecedents of relatedness satisfaction, but also suggest two practical learnings: first, organizations ought to increase role clarity to foster relatedness satisfaction; second, when fluctuations in clarity cannot be avoided, teams should intensify their team collaboration to circumvent loss of relatedness.

Magdalena Maatescu and colleagues focus on the organizational perspective, investigating the impact of working from home on the identification with the organization. Based on an empirical study, the researchers found that neither extend of home office nor the satisfaction with office design impacts the identification with the organization, but the frequency of contact within the organization does. Because identification is positively related to individual and team level performance potential, these results provide clear implications for organizations about what to emphasize when designing collaboration in hybrid teams.

Christiane Stempel and Sina-Dorit Groenewold shift the focus to the leader role and leaders working conditions in hybrid teams. Drawing on a qualitative approach, they identified various challenges leaders face in the increasingly digitalized work settings. However, the 33 leaders also reported a number of advantages. Furthermore, the analysis of the interviews suggests that leaders are more conscious about tangible aspects like technical or ergonomic equipment than psychological work design. Hence, it would be important to incorporate psychological work design in leadership development programs to address the challenges of hybrid work.

Finally, Hartmut Schulze and Andreas Urech take an external perspective on hybrid work settings, asking production workers how they perceive the increased flexibility for office workers, whether they feel appreciated and informed, and what opportunities for improvement they see. The group interviews reveal what kind of appreciation was considered especially valuable for the workers and how recognition can buffer short-term strain. Injustice was seen as a major problem and several problems were described regarding the cooperation between people on site and working from home. The participating workers developed ideas for improvement in four different areas of action.

Relevance to congress theme: All studies address emerging issues in hybrid work settings and therefore reflect not only a current but also a future development of work. The research in this symposium brings together perspectives from individuals, teams, leaders, and the organization itself. Additionally, we discuss an important social aspect because not all employees have equally access to remote working possibilities.

Research/practical implications: The insights from the studies not only contribute to broaden theoretical knowledge on hybrid work settings but also provide specific orientation for healthy and productive work design in practice. Mühl and colleagues as well Maatescu and colleagues point out specific aspects that need to be considered when designing successful collaboration in hybrid teams. Stempel and Gronewold underline the importance to implement work design in leadership programs in order to address the new challenges faced in digital leadership. The research by Schulze reveals challenges of flexibilized work for production as compared to office workers and offers specific possibilities for improvement.

Conclusions: The research presented in this symposium contributes by offering different perspectives on challenges and opportunities in hybrid work settings. Two studies investigate how we can improve collaboration among people who do not work in the same place. The study on the working conditions and role of leaders indicates steps that need to be taken to prepare leaders for the future developments in hybrid work settings. The perception of production workers on site on the topic of flexibilized work completes the picture by taking potential injustices between employee groups into account.

*Keywords: Hybrid Work, working conditions, well-being*

## Paper 1

### Feeling related when working apart: The inconsistent effect of lack of clarity on remote workers

Arabella Mühl, Christian Korunka, Eva Straus & Julia Schöllbauer | University of Vienna

**Theory:** Self-determination theory (Ryan & Deci, 2000) identifies the need for relatedness as a universal basic psychological need that is an important determinant of motivation, performance, and wellbeing. The need for relatedness refers to the innate desire to feel connected and part of a group or team and may be satisfied by maintaining close relationships and engaging in meaningful interactions with others. Need satisfaction, however, is strongly influenced by contextual factors, such as a lack of task clarity. This may be particularly true for remote workers because a lack of clarity regarding one's work tasks may emphasize their isolation. Remote workers who experience a lack of clarity may feel that colleagues or supervisors are failing to provide them with relevant information. We aimed to further understand the complex antecedents of relatedness satisfaction and to shed light on daily processes in remote work contexts. Based on Uncertainty Management Theory (Kramer, 2004) we argue that a lack of task-related clarity may also increase daily feelings of relatedness because it fosters team interactions, which is positively related to relatedness satisfaction. Consequently, we hypothesized an inconsistent mediation. We assumed that daily lack of task-related clarity would directly negatively affect daily relatedness satisfaction, while it would indirectly increase relatedness feelings via coordination with colleagues and supervisors.

**Method:** We conducted a daily diary study among 795 remote workers. We observed a direct negative relationship between lack of task clarity and satisfaction of the need for relatedness. Moreover, lack of task clarity was positively associated with coordinating with others, i.e., with increasing lack of clarity individuals increasingly coordinated with colleagues and supervisors. Coordinating with others, in turn, predicted satisfaction of the need for relatedness.

**Results:** The relationship between coordinating with others and the satisfaction of the need for relatedness was positive. Contrary to the direct effect on relatedness satisfaction and in accordance with our hypotheses, there was a positive indirect positive relationship between lack of task clarity and the satisfaction of the need for relatedness via coordinating with others. The total effect of lack of clarity on relatedness satisfaction was significant and negative.

**Conclusions:** Our results indicate that remote workers rely on others when they experience a lack of clarity regarding their work tasks, which in turn increases their feelings of relatedness. Moreover, we found empirical evidence for the hypothesized inconsistent effect of lack of clarity on relatedness satisfaction.

**Theoretical & Practical Implications:** Our results highlight the relevance of studying the antecedents of relatedness satisfaction and suggest that a lack of clarity, as an antecedent of relatedness satisfaction, has been neglected in research so far and needs to be studied further to understand its complex consequences. Particularly the circumstances under which remote workers increase coordination efforts warrant investigation. Nevertheless, practical implications arise. Organizations ought to increase clarity to avoid negative consequences for relatedness satisfaction. However, when fluctuations in clarity cannot be avoided, organizations should foster communication and collaboration to circumvent these consequences.

**Limitations:** Limitations of this study primarily pertain to the generalizability of our findings. Participants reported high levels of clarity. Our findings, thus, may only apply for individuals with a

basic level of clarity. Moreover, data was collected in March/April of 2020 during a time in which many employees unexpectedly shifted to full-time remote work, which may have affected our results. We aimed to reduce this unwanted influence by excluding participants without prior remote work experience.

Relevance for conference Theme: Remote work as a form of flexible work that allows or requires employees to work from locations other than their organization's premise, such as their own homes, has been increasingly implemented in the last years. Empirical research has identified various challenges and both positive and negative effects on work-related outcomes (for reviews see De Croon et al., 2005; De Menezes & Kelliher, 2011). Our study identifies a lack of clarity as a challenge and chance for remote workers' relatedness satisfaction, and in extension health and motivation, and, thus, contributes to the understanding of changing work conditions.

UN Sustainable Development Goals: Our research contributes to the achievement of the two sustainable development goals of good health and wellbeing and decent work . We identify relevant antecedents of relatedness satisfaction, which, in turn, is strongly associated with health, wellbeing, and motivation. We further and strengthen our understanding of daily challenges at work, particularly for remote workers. These findings allow us to shed light on how work places and daily work processes should be designed to enhance wellbeing.

*Keywords: task clarity, relatedness, remote work*

## Paper 2

### **Working anywhere and Identification with the organization and the team. Results from an empirical study.**

Dharneeka Jeyam, Andreas Urech, Hartmut Schulz & Magdalena Mateescu | FHNW University of Applied Sciences and Arts Northwestern

#### Research Goals

The dramatic rise in the number of employees working from home due to the corona-pandemic led to the need to reevaluate the effects of working anytime, anywhere. Positive effects on motivation, work-domain balance or productivity are well known, as are adverse effects such as social isolation, loneliness, and lack of informal communication (Gajendrah & Harrison, 2007). Less known is the effect of working from home on organizational identification. Our empirical contribution deals precisely with this context.

#### Theoretical background

Previous research on mobile-flexible work shows that a large part of communication is mediated by technology which for years has been seen as not well equipped to convey a sense of identification (Wiesenfeld, Raghuram, Garud, 1998). Therefore, organizational identification is expected to decrease with an increase in time spent away from the office, e.g., in the home office. In contrast, organizational identification is expected to strengthen with the increase in the on-site presence (Millward, Haslam, & Postmes, 2007; Albert, Ashforth, & Dutton, 2000). Physical co-presence and higher percentages of face-to-face interactions are considered pivotal for the emergence of organizational identification (Millward, Haslam, Postmes, 2007).

#### Method

We present an empirical study (N = 252; mean age = 48.05, 177 female) in which we deepened our understanding of the effect of the amount of time spent in the home office on identification with the organization, the department, and the team, while also considering the influence of the frequency of contact and satisfaction with the office design. The employed Structural Equation Model considers the consequences of working from home, contact, and identification on teams and individual performance potential.

#### Results

The results of our empirical study show that the extent of the home office has no impact on identification. What significantly matters is the frequency of contact within the organization. A further predictor of team identification was satisfaction with the office design. While satisfaction with the office design did not influence identification with the organization, it was found to play a role in the choice of the work location. A positively perceived atmosphere of the room could positively affect the frequency of work on site. While working from home had no influence on individual or team performance potential, we found positive relations between identification and individual and team performance potential. The results confirm previous findings, which found that the frequency and quality of contact are crucial for successfully working from anywhere in virtual teams (Maznevski & Chudoba, 2000).

#### Conclusion and Limitations

In conclusion, our study generates a series of practical implications. (1) Given the importance of contact for team identification, organizations need to advise teams on how to design their 'contact phases'. (2) The negative relation between the office design frequency of work from home might be essential to consider when looking for incentives in 'return to office' policies. (3) Measures to improve performance can profit from strengthening the identification with the team and the organization. Thus, it is essential to make sure employees who mainly work on-site understand that working from does not necessarily indicate a low amount of identification.

One limitation of the study is that we conducted the research in only one organization, a University of education. This limits the generalizability. Further studies must prove the transferability to other fields.

#### Relevance to congress theme

The study deals with the impact of remote working for the identification with the organization. This topic reflects a major challenge companies and organizations currently face. Against the background of a massive shortage of skilled workers and increasing flexibility of work place and time, identification with the organization is crucial for organizational strategies for the future.

#### Relevant UN SDGs

The topic of the study primarily targets SDG 3 of the UN named "good health and well-being" as well as SDG 8 on "decent work and economic growth", because it investigates the conditions that foster organizational identification.

*Keywords: organizational identification, remote work, performance potential*

### Paper 3

#### Digital Leadership: Challenges and Resources for Leading Hybrid

Christiane Stempel & Sina-Dorit Groenewold | FernUniversität Hagen

Research goals: Accelerated by the Corona pandemic, more people work in tele- or hybrid work settings. This development is not only accompanied by massive changes in the way people work together, but also entails new challenges and opportunities for leaders. To design healthy work environments and prepare leaders for the changing world of work it is necessary to investigate how leaders of hybrid teams understand their role and which leadership aspects they consider most relevant. Furthermore, this research takes a closer look at the working conditions that facilitate or hinder adequate digital leadership.

Theory: Drawing on the conservation of resources theory and the job demands resources model, it is assumed that personal and structural resources foster the establishment of successful digital leadership behaviors and a health-promoting hybrid work environment. In contrast, a lack of resources or excessive (new) demands might cause strain and obstructs leadership in hybrid teams.

Method: A qualitative approach was chosen to conduct an in-depth analysis of leadership in hybrid work settings. Semi-structured expert interviews with 33 direct leaders who work in hybrid teams were conducted. Leaders were asked about their hybrid work situation, perceptions regarding (changes of) their leadership role, and fostering/hindering work characteristics. The deductive categorization of work characteristics is based on the Questionnaire of Psychosocial Work Risk Assessment (FGBU) that covers the whole range of job demands and resources as outlined by the Joint German Occupational Health and Safety Strategy. Inductive categories were developed based on the transcribed material. Data was analyzed with qualitative content analysis.

Results: On the one hand, first findings suggest that leaders do not perceive significant changes in their role as leaders due to hybrid work settings. On the other hand, they report various challenges they face ranging from formal and informal communication and team cohesion to feedback culture and technical infrastructure. At the same time, leaders perceive several advantages of hybrid working for themselves and their followers such as more work flexibility and autonomy, reduced commuting, and better life-domain balance. When asked about working conditions, the most prominent topic mentioned was the technical and ergonomic equipment. Initial analysis indicates that leadership tasks regarding psychosocial work conditions, like work content, work organization, and social factors, seem less present and less reflected upon among leaders. More detailed results will be available at the beginning of next year.

Limitations : Even though the sample reflects a variety of occupations and is gender balanced (17 female, 16 male leaders), self-selection biases and the sample size limit the generalizability of the results. The interviews are based on a structured interview guideline but were conducted by four different interviewers.

Conclusions: The findings have implications for research and practice. Past research on leadership neglected structural aspects. It seems necessary to investigate the demands and resources of leaders as a prerequisite for adequate leadership. Here, the specific demands and resources associated with hybrid work settings seem a promising avenue for future research. In terms of practical implication, it seems necessary to include work design in leadership development programs, taking into account the special demands that are associated with hybrid work environments. Furthermore, it would be

important that leaders reflect on their role modelling, e.g., in terms of extended availability behaviors.

Relevance to congress theme: The study addresses leadership in hybrid work settings and therefore reflects not only a current but also a future development of work. To investigate personal and structural factors that enable constructive leadership in these new work settings, it is crucial to design healthy work environments and prepare leaders accordingly.

Relevant UN SDGs: The topic of the study primarily targets SDG 3 of the UN named “good health and well-being”. Addressing structural working conditions in hybrid work settings and developing adequate leadership programs help to ensure sustainable occupational health and safety. SDG 5 on “gender equality” and SDG 8 on “decent work and economic growth” are also topics that emerge in the interviews with the leaders and are important to consider when designing the hybrid work settings of the future.

*Keywords: Hybrid Work, Expert interviews, Working Conditions*

## Paper 4

### **Experiences of production workers whose job profile does not allow home office. Results of an interview study at an energy producer.**

Hartmut Schulze & Andreas Urech | FHNW University of Applied Sciences and Arts Northwestern

#### Research Goals

The aim of this interview study was to better understand the situation of production employees at different sites of an international energy producer in Switzerland during and shortly after the lockdowns in the wake of the Corona pandemic. Key research questions were how employees perceive the flexibilization of office staff in relation to their own situation, how they feel valued and informed, and what opportunities there are for improvement.

#### Theoretical background and qualitative interview study

In the debate about mobile-flexible work and home office, the perspective of employees in production areas whose presence on site is mandatory is often overlooked. Against the backdrop of organizational justice, however, it is obvious that those companies face major challenges, which have both “white” and “blue collar” workers. They want to introduce policies for their office employees on the one hand and do not want to neglect their blue-collar workers on the other.

#### Method

In order to answer these questions, a qualitative approach was chosen by means of data collection through qualitative, semi-structured interviews with employees. The survey was conducted in group interviews. The group interviews were based on a guideline consisting of open, narrative-generating questions and detailed follow-up questions. The group interviews with 67 production employees at 6 locations in Switzerland were conducted anonymously and the results were recorded based on an interview protocol. The analysis was carried out by coding the interview transcripts. The evaluations were carried out using the MAXQDA tool.

#### Results

The first key result was that most respondents take it for granted that their work with machines and systems cannot be done in a home office. They do not directly compare their work with that from the office. In the interviews, the positive value of working in production became very clear. The production employees interviewed particularly valued seeing the team on site and being able to leave the house. During the pandemic and the two lockdowns, this provided a welcome distraction as well as a way to compensate for the otherwise present Corona problem. Working on-site in production can thus be understood as a psychological resource.

However, negative experiences with on-site work during the pandemic were also reported. In particular, the employees interviewed stated that they lacked recognition and appreciation for their performance in maintaining production during the pandemic and the associated risk of infection. The work climate also suffered during the pandemic measures.

In terms of perceived appreciation, production employees, compared to those working in home office, expressed slightly lower appreciation on average. The positive and negative aspects mentioned in the interviews explain the impression of somewhat lower appreciation and will be

presented in the presentation. The interviews also showed that the feeling of being appreciated can buffer stresses that occur in the short term.

#### Conclusion and limitations

At the end of the group interviews, four areas for improvement were identified. These are improvement of working conditions, more appreciation for maintaining production, improvement of "factory-office" cooperation, and the transfer of flexibility aspects to production. In the topic of more appreciation, employees' wish for financial appreciation (e.g. bonus, benefits, discounts) but also for appreciation through attention (e.g. e-mail account, words of thanks) is found. This also includes transparent communication within the company. With regard to production processes, employees want to have technological tools at their disposal that provide them with the necessary information on an ad-hoc basis and regardless of location. When it comes to overarching information such as strategic corporate decisions, employees also want a tool that enables them to call up this information promptly as needed.

One limitation of the study is that we conducted the research in only one organization. This is at least partially compensated for by the fact that we were able to include production staff in both the German- and French-speaking parts of Switzerland and thus quite different cultural backgrounds.

#### Relevance to congress theme and relevant UN SDGs

In the study, the UN SDGs reduced inequalities and peace, justice and strong institutions are addressed. White and blue collar workers can be recognized as two different subgroups with different mindsets and cultures. Working from home further widens the gap between these groups. Therefore, the topic matches to the mentioned UN SDGs. Furthermore, the topic matches to the EAWOP Topic Area 19) Work patterns and conditions.

*Keywords: blue-collar, flexibilized work, interview study*

## Symposium S065

### **Promoting mental health in the workplace: From needs analysis to multilevel interventions in the H-WORK project**

Marit Christensen & Siw Tone Innstrand | Norwegian University of Science and Technology

science

What will be covered and why

Mental health problems are an increasing challenge in worklife as stress, depression and anxiety are the top three causes of illness among European workers and one of the leading causes to sick leave. For the future this is imposing a major burden on individuals, society, and the economy. To promote good mental health in the workplace we need knowledge about the implementation strategies of effective interventions. This symposium presents research from the H-work project, which aims to design, implement, and validate effective multilevel assessment and intervention toolkits to promote mental health in SMEs and public workplaces.

The H-work project builds upon four theoretical pillars: the multilevel approach (IGLO-model - Individual, Group, Leader, and Organisation), a participatory bottom-up approach, the JD-R model and application of digital technologies. This implies that we include all stakeholders in a participatory approach to the needs analysis, explore needs at different levels of the organization, and focus on both the health impairment and health promoting processes of mental health. To adapt to the challenges of a changing worklife, application of digital technologies is tested and offered. This symposium aims to present results on how: a) to conduct needs analysis targeting multilevel interventions for improving mental health, b) to adapt the needs analysis and action planning to online and hybrid settings, and show two practical examples of implementation of team level interventions in c) a school setting in Northern Italy, and d) a public organization in the Netherlands. By doing so we show the importance of a participatory approach to securing a fit between the needs analysis and the implementation of the organisational intervention. By presenting results from process evaluation of the intervention process we provide knowledge on what works, for whom, and under which circumstances.

This symposium consists of four presentations. Presentation 1 aims to give an overview of the development, application and utility of the H-WORK tool for needs assessment (HAT) for improving mental health and well-being and show how they inform the choice of interventions at multiple levels within the organisation (Christensen, et al.). Presentation 2 considers the opportunities and challenges of conducting mental health needs analysis and action planning in an on-line and hybrid setting (Axtell et al.). Presentation 3: describes the selection, implementation, and evaluation of a team-level intervention carried out in an educational institution (Paganin, et al.). Presentation 4 develops, implements, and evaluates the effectiveness of a brief team development intervention focused on improving team functioning and well-being in a large public organization (van den Heuvel, et al.). Together, these presentations suggests that the HAT function well as a participatory, multilevel tool for needs assessment for mental health and well-being in SME's and public organisations. In line with the changing world and new ways of working, digital solutions for conducting needs analyses show both opportunities and challenges. The evaluation of the implementation process reveals new insights on how the needs analyses aligns with the interventions. Further, the results show how the context, processes, and working mechanisms (e.g., organisational support, training transfer, acceptance, digital system usability) might affect the outcome of the intervention.

### Relevance to the Congress Theme

The present symposium aligns with the congress theme by offering knowledge and presenting tools for developing, implementing, and evaluating organizational interventions which show us how to act now to secure a sustainable, mentally healthy workplace for the future.

### Research/Practical Implications

The symposium offers a new theoretical approach on how to develop, implement and evaluate participatory multilevel organisational interventions. For research this will contribute to a more in-depth understanding on how the working mechanisms are triggered by the organizational context and leads to a positive mental health outcome. For the practices this will offer knowledge and tools on how to promote mental health in SME's and public workplaces. Overall, the results from the H-work project contribute to the SDG number 3 by offering knowledge on how to ensure healthy lives and promote well-being in working life.

### Overall conclusions

To secure a mentally healthy workforce for the future we need to act now. The results from the H-work project underline the need for a participatory and multilevel approach, and a focus on both promoting good mental health and preventing mental illness. In line with a changing worklife and the need for digital solutions we offer new and innovative tools which show promising results.

*Keywords: organisational interventions, mental health, multilevel*

## Paper 1

### **Needs analyses for targeting multilevel organizational interventions to improve mental health and well-being – the H-WORK needs assessment tool (HAT)**

Marit Christensen, Norwegian University of Science and Technology; Marco De Angelis, University of Bologna; Karina Nielsen, University of Sheffield; Carolyn Axtell, University Sheffield; Anne Iversen, Norwegian University of Science and Technology; Karoline Grødal, Arbeidstilsynet; Siw Tone Innstrand, Norwegian University of Science and Technology

#### Research goals

The objective of this presentation is to give an overview of the development, application and utility of the H-WORK tool for needs assessment (HAT) for improving mental health and well-being and show how they inform the choice of interventions at multiple levels within the organisation.

Standardized questionnaires for mapping the psychosocial working conditions in organisations is often used in organizations, however, it neither consider individuals' appraisals of working conditions nor the specific context of the workplace (Nielsen, Abildgaard & Daniels. 2014). The H-work needs assessment tool is taking a comprehensive approach in order to understand the needs of an organization with the aim of improving mental health and well-being.

#### Theoretical background

The conceptual background of the needs assessment tool builds on three pillars. First, it builds upon the IGLO model (Individual, Group, Leader, Organisational; Nielsen, et al., 2018) to tackle mental health and wellbeing at multiple levels in the organisations. Research has shown that organisational interventions with a multilevel approach (individual, group, leader, organisational) to mental health and well-being seems to be more effective than interventions only targeting one level (LaMontagne et al, 2014, Nielsen et al, 2018). Second, it is based on the Job-Demands-Resources theory (JD-R; Bakker & Demerouti, 2014) targeting both demands and resources in the work environment to facilitate a health reducing processes and health promoting processes. Examining both positive and negative dimensions of well-being is increasingly recognized as important for understanding effects of workplace change more comprehensively (Mäkikangas et al., 2016; Page & Vella-Brodrick, 2009). Third and finally, it follows a bottom-up and participatory approach where the employees themselves have an active part. A participatory approach throughout the intervention process is essential for successful implementation (Nielsen & Randall, 2012).

#### Design and methodology

HAT consists of (i) focus group interview, (ii) semi structured interviews, (iii) contextual measure, and (iv) a plan for a stakeholder meeting and action plan. A summary of these needs analyses makes the basis for a stakeholder meeting, which is a participatory process including representatives for all stakeholders within the organisation. The purpose of the stakeholder meeting is to prioritize which needs the stakeholders would like to preserve and improve and then to develop and decide upon an action plan and choice of multilevel organisational interventions for improving mental health and well-being. The needs analyses have been conducted in six intervention sites representing SMEs and public workplaces in different sectors around Europe. In addition, we have conducted a meta process evaluation by interviewing the researchers conducting the needs analyses in these six interventions sites about the process.

## Results

The preliminary results from the needs analyses and prioritization of areas to preserve and improve, reflected that these aspects differed naturally across organizations as they are all unique, with different perceived demands and resources. Based on these results different interventions were suggested at different levels as a result of the discussions in the stakeholder meeting. In total 26 interventions were planned to be implemented, most of these on the individual level, followed by group and leader level. Least interventions were suggested on the organizational level.

## Limitations

Due to the COVID-19 pandemic we had to conduct many of the interviews and stakeholder meeting through digital platforms. The digital approach might have influenced the communication and openness throughout the process of the needs analyses.

## Conclusions – research and or practical implications

Using IGLO as a guiding principle, the results showed that the choice the sites made of interventions was at multiple levels within the organisation. The results also shows that the participatory bottom-up approach secured that the employees were able to state there needs and that it was included in the decision made at the stakeholder meeting and further informed the choice of interventions. We can therefore conclude that the H-WORK needs assessment tool works for identifying the needs within organisations and informing the choice of interventions at multiple levels for improving and promoting mental health at work.

## Relevance to the congress theme

This study adds to the importance of understanding how the everchanging context of today, tomorrow and the future triggers the mechanisms which eventually leads to mental health and well-being at work. We add to this perspective by using a participatory perspective in order to understand the needs for interventions for mental health.

## Relevant UN SDG

HAT has the objective of contributing to good mental health and well-being among employees in small and medium-sized enterprises who cannot afford to hire expensive consultants. In this way HAT can contribute to balance social inequalities.

*Keywords: IGLO-model, needs analysis, organizational interventions*

## Paper 2

### **Adapting the Process of Mental Health Needs Analysis and Action Planning to Online & Hybrid Settings: Lessons Learned During Covid-19**

Marit Christensen, Norwegian University of Science and Technology; Josefina Peláez Zuberbühler, Universitat Jaume I; Susana Llorens Gambau, Universitat Jaume I; Beate Muschalla, Technische Universitaet Braunschweig; Ivana Šípová, Charles University; Martin Tušl, University of Zurich; Greta Mazzetti, University of Bologna; Marco De Angelis, University of Bologna; Machteld van den Heuvel, University of Amsterdam; Vince Pelzer, University of Amsterdam; Siw Tone Innstrand, Norwegian University of Science and Technology; Cristian Vasquez, University of Sheffield

**Research Goals:** This paper considers the opportunities and challenges of conducting mental health needs analysis and action planning in online and hybrid settings. It also seeks to understand how these opportunities and challenges inform process adaptations within the context of increased remote work within organisations.

During the Covid-19 pandemic, social distancing restrictions across Europe disrupted the usual face-to-face operations of many organisations. Working from home increased dramatically and will likely continue as many workers desire the flexibility this work arrangement allows. However, high levels of remote and hybrid working can create challenges for collecting information about employee needs.

**Theoretical Background:** Research on mental health needs analysis argues that active engagement and participation among stakeholders within organisations is required to better understand the situation and align the interventions with the organisational context and objectives (von Thiele Schwartz et al, 2021). Therefore, the use of engaging data gathering methods (such as interviews, focus groups and group-based workshops) may be required to fully appreciate the mental health needs and to plan actions to prevent risks and promote wellbeing at work. However, it can be challenging to use such methods when employees are not collocated.

Whilst technology-mediated communication and online video meeting tools offer the possibility to gather information from workers spread across different locations these methods do not have the same 'naturalness' and social cue availability of face-to-face communication (Kock, 2005) which can result in misunderstandings, impaired relationship building and increased cognitive load (Axtell, et al, 2004; Reidl, 2022). Conducting these activities on-line may be particularly difficult for sensitive topics like mental health, where the ability to build relationships as well as to see social cues and facial expressions may be especially important. However, there is limited academic research on the suitability of video calls for conducting information gathering exercises on such topics within organisations, and still less on the use of hybrid methods. This is a gap that the current research seeks to address.

**Method:** Data collection occurred as part of a large H2020 project (H-Work) focused on implementing mental health interventions in SME's and Public organisations. Due to Covid-19 restrictions, methods for needs analysis and action planning had to be quickly adapted from the expected face-to-face methods to either fully online or hybrid (with some participants face-to-face and others online). The methods used for needs analysis and action planning included dyadic/on-to-one interviews and group exercises/meetings using online meeting platforms.

Data for this current paper derives from nine focus group interviews with the project interventionists about their experiences of conducting needs analysis and action planning across ten

intervention sites in five European countries. Questions were asked about the opportunities and challenges experienced, how challenges were dealt with, and lessons learned. Interviews were transcribed and analysed in NVivo using template analysis.

**Findings:** Two opportunities and five challenges were identified. Opportunities related to time efficiency gains and increased openness, but these opportunities almost exclusively appeared during the dyadic 'one-to-one' activities conducted rather than group activities. The challenges were: problems with relationship building, conveying non-verbal and emotional cues, knowledge and information sharing, cognitive load, and technical difficulties. Mostly, these challenges occurred when conducting group activities or when trying to develop relationships with the wider organisation.

The extent to which these opportunities and challenges were experienced also differed depending on different contingencies operating in the individual, project, organisational, or wider omnibus contexts. Knowledge of these contingencies can inform improvements to the process, to enhance the likelihood of opportunities and reduce the challenges. Several mitigating actions were put in place to try and deal with the challenges identified. For example, to help mitigate difficulties with information exchange and cognitive load, engaging materials were developed to send in advance.

**Limitations:** Data was collected during the pandemic when activities were moved online with little preparation. Therefore, some of the challenges identified may be less prevalent in future circumstances, although still likely relevant given increasing hybrid working.

**Conclusions:** The opportunities provided by online methods may mean that the benefits outweigh the negatives for dyadic/one-to-one activities during mental health needs analysis. However, there are challenges related to group activities that require mitigating actions and adaptations.

**Relevance to Congress theme:** The changing world of work involves increased prevalence of online/hybrid working. This paper contributes to an understanding of ways of dealing with the challenges associated with these new ways of working.

UN SDG: Good health & wellbeing

*Keywords: Mental health, COVID-19, needs analysis*

### Paper 3

#### **Promoting mental health in the school setting: from needs analysis to a team-level intervention**

Giulia Paganin, Dina Guglielmi, Edoardo Pische, Alessandra Albani & Greta Mazzetti | University of Bologna

##### Research goals

The contribution aims to describe the selection, implementation, and evaluation of a team-level intervention carried out in an educational institution in Northern Italy as part of the EU-H2020 European project H-WORK. The added value of this implementation process lies in the link between needs analysis results and the plan and implementation of a digital-based intervention in the educational context, using a participatory approach and carrying out a process and effect evaluation.

##### Theoretical background and research question

Following a multilevel approach based on an integration between the IGLO model (Day & Nielsen, 2017) and the JD-R model (Schaufeli, 2017), job demands, and resources can be identified at four organisational levels (individual, group, leader, and organisation), negatively or positively impacting job well-being. A needs analysis process was conducted through interviews, focus groups and questionnaires. Based on the findings, workers were involved in a participative and bottom-up decision-making process that highlighted the need to address collaboration and communication in teamwork. For this reason, Sociomapping digital-based intervention was selected and adapted to the needs and constraints of the intervention site.

Sociomapping is a group-level intervention that, by analysing and working on interpersonal relationships, aims to increase cooperation and communication levels among colleagues, to enhance group performance and work climate. Sociomapping is theoretically built on the JD-R model and the Equilibrium Theory. In particular, the latter postulates that group members strive to preserve a balance between task-oriented and socio-emotional needs.

##### Design/Methodology/Approach/Intervention

The intervention site is an educational institution in Northern Italy, managing schools of different grades in four locations: 3 Nursery Schools, 4 Preschools, 2 Primary Schools and 1 Middle School.

A participatory needs analysis was carried out to screen workers' mental health with a contextualised approach. We conducted 12 interviews with senior and middle managers and two focus groups involving 12 employees (educators, teachers and administrative staff) to gather workers' mental health needs at the four IGLO levels. The research team discussed the findings with relevant stakeholders. Based on the needs analysis, the Sociomapping intervention was identified as a suitable intervention strategy. We conducted four sessions (one hour each) using a videoconferencing platform. Seven editions were conducted with 76 participants (100% female). During the intervention, participants were asked to complete questionnaires aimed at building Sociomap visualisations representing communication patterns within each team. These were then compared with maps showing ideal communication flows perceived by participants as necessary to work properly. The sessions aim to reduce the gap between current and desired team communication by discussing the communicative situation and developing an action plan to achieve the desired communication structure.

Longitudinal data collection is ongoing. The collected data will be analysed using ANOVA repeated measure.

#### Results expected

By adopting a realist evaluation framework (Nielsen & Abildgaard, 2013), we expect to be able to determine the effect of meaningful implementation aspects, such as context, processes, and working mechanisms (e.g., organisational support, training transfer, acceptance, digital system usability) of the intervention.

#### Limitations

Limited participant number and homogeneity of the sample working in the educational sector and completely composed of females.

#### Conclusions - research and or practical implications

Research implications are twofold, as the present contribution aims to advance the knowledge about (1) effective interventions to promote mental health and (2) the effectiveness of digital-based solutions to implement workplace mental health interventions.

The Sociomapping digital-based intervention can guide educational managers in designing, developing, and implementing multilevel intervention strategies to promote the mental health of people working within the school setting.

#### Relevance to the Congress Theme

The increasing complexity of the world of work and the unexpected challenges brought by the Covid-19 pandemic has made it even more imperative to analyse and tailor interventions for well-being promotion and stress risk prevention. Needs analysis and a participatory approach are crucial to implement interventions tailored to the workers' needs and to increase the chances of their effectiveness. Moreover, to gather more accurate and valuable information, it is essential to evaluate the implementation process, not only the effectiveness of the intervention itself.

Relevant UN SDGs: SDG 3-Ensure healthy lives and promote well-being for all at all ages.

*Keywords: Mental health, Intervention, evaluation*

## Paper 4

### **The strengths-based team crafting intervention for project teams: development, implementation and initial results**

Machteld van den Heuvel, Edwin van Hooft, Roy Sijbom & Vince Pelzer | University of Amsterdam

#### Research goals

The aim of the overall study is to improve well-being in a large public organization using an elaborate multilevel needs analysis, leading to tailored interventions at the group and leader-level (Di Angelis et al., 2020). Based on the insights from the needs analysis, we designed a team-intervention (and a leader-intervention) focused on improving well-being.

#### Theoretical background

Recent studies emphasized the importance of intervening at multiple levels in organizations to improve work-related well-being (De Angelis et al., 2020). Previously, emphasis has mainly been on the individual-level, while the group-level (teams) is underrepresented in intervention research (Van Woerkom, 2021). This is a shortcoming as teamwork and team social interactions are important sources of well-being (Mazetti et al., 2021). In this study, we aim to develop a multilevel intervention approach to improve well-being. Based on a multilevel needs analysis, our intervention approach focused on 1) the team-level (project teams) and 2) the leader-level (project managers; leadership micro-coaching intervention). In this presentation we focus on the team-intervention. To develop the intervention, we combined literature on team-interventions (Lacerenza et al., 2018) with insights from strengths-based interventions and job crafting approaches (Van den Heuvel et al., 2019). We expect that the strengths-based team crafting intervention will improve team and well-being outcomes (i.e. affective well-being, team crafting behaviors, strengths-use and knowledge, team reflexivity and team support).

#### Methods

In the first phase, the needs analysis used focus groups, interviews and a context measure with employees, line managers, project managers, senior leaders and HR representatives within a public organization in the Netherlands, to assess well-being related factors. The strengths-based team crafting intervention was designed as part of the recommendations from this needs analysis. The intervention consists of a day of team development activities, including team exercises and discussions, e.g. reflecting on team-cooperation, strengths-use and the team's purpose. The team draws up a team crafting action plan and after approximately 4 to 5 weeks, they meet again to evaluate progress. To analyze the data, we plan to use a mixed-methods approach, combining quantitative pre-post measures of team and well-being outcomes and thematic analyses of qualitative data from open-ended questions.

#### Results

The needs analysis showed positive findings regarding the availability of well-being resources as well as high levels of work commitment. Areas for development were awareness of organization-level resources, lack of autonomy and high workload. Results pointed towards a need to focus on well-being in the project-teams. Specifically, there was a need to discuss well-being and team-related processes that support well-being. Due to the organizational matrix-structure, the project managers seemed less equipped to deal with well-being issues in project-teams. Taken together, these findings

informed the design of the interventions. We have currently worked with six teams (N=50) and we aim to work with at least 4 more teams before starting the data analyses on the relevant outcomes mentioned. Final results are expected around July 2023.

#### Limitations

The matrix-structure of the organization has resulted in multiple team membership for most employees. This complicates and potentially limits the implementation and effectiveness of the intervention (Margolis, 2020). Team composition changes and employee turnover pose another challenge for the intervention's potential to transfer to daily work life in the longer term. The interval between the first session and the follow-up was not the same for each team due to scheduling issues. Small sample size may result in limited power for the quantitative analyses.

#### Conclusions

The evidence-informed strengths-based team crafting intervention may potentially be a relatively brief way to facilitate awareness of well-being-issues in otherwise highly content-focused project teams. The intervention is designed to stimulate positive behaviors and team processes to support well-being. Further analyses should focus on the impact of the leader-level intervention in combination with the team-level intervention.

#### Relevance to the Congress Theme

The study's context is the post-covid workplace where teams are struggling to collaborate effectively in a changed work-setting. The study focuses on how to optimize team-processes (and leadership) to ensure well-being in this changed environment.

#### Relevant UNSDGs

This study contributes to the development of the workplace as a source of human health & wellbeing (UNSDG 2 & 5), since the intervention aims to optimize team processes to create an optimal work environment for employees and the team as a whole.

*Keywords: well-being, team crafting, intervention*

## Symposium S067

### Workplace learning

Ellis S. Emanuel, University of Amsterdam

science

What will be covered and why?

The nature of work constantly changes due to technological innovations and globalization. To cope with these changes, it is essential that employees continuously engage in workplace learning. Workplace learning can be defined as the multiple ways through which employees learn in organizations (Jacobs & Park, 2009; Sadeghi, 2020). Workplace learning ensures that employees can frequently update and improve their competencies and employability (Van der Heijden et al., 2009), but also helps organizations to gain competitive advantage (Vaughan, 2008).

While already quite a lot is known about workplace learning, new developments and advancements also warrant new directions for research. For example, research has shown that knowledge sharing can facilitate workplace learning (e.g. Mura et al., 2016), yet we still know little about the dynamic processes underlying knowledge sharing. This requires a shift from a static to a more dynamic perspective on workplace learning. Also, competence and expertise are seen as valuable resources of employees (Paloniemi, 2006). However, we still know relatively little about employees' abilities to flexibly deal with new experiences and newly needed expertise. This symposium addresses these, more dynamic, processes and abilities regarding workplace learning by discussing (1) individual differences in employees' abilities to learn and (2) how and when employees share knowledge.

First, Frie and colleagues introduce 'Flexpertise' as an individual ability that determines workplace learning in a dynamic context. Flexpertise refers to the adaptive ability by which workers are able to meet new expertise needs within and across the boundaries of their working contexts and expertise domains. The researchers clarify when and how an individual's flexpertise can be fostered and discuss an agenda for future research.

Second, Hadiono and Okay-Somerville stress the importance of an employee's ability to learn from a different yet complementary perspective. They shed light on the construct of 'learning agility': dealing with new experiences flexibly and rapidly by trying new behavior and making quick adjustments in order to realize new learning when one does not know exactly what to do. Results show how some dimensions of personality are positively associated with learning agility in the workplace, regardless of organizational climate.

Third, Emanuel and colleagues argue that workplace learning, or more specifically, knowledge sharing, is an interpersonal dynamic process that fluctuates from day to day. Using a multilevel diary design, they focus on how supervisor and co-worker support within the organization may facilitate knowledge sharing. The results of their diary study confirm the importance of daily social support for knowledge sharing.

Fourth, Rinker and colleagues build further on the topic of knowledge exchange and uncover how another interpersonal process, namely social comparison, is involved in employees' decisions with whom to exchange knowledge. The results of their study show that social comparisons impact knowledge sharing and knowledge hiding and that this is moderated by age differences.

Following the presentations, Professor Dr. Beatrice van der Heijden, who is a renowned expert in the field of employability, expertise development, age stereotypes, and sustainable careers, will integrate the key takeaways from the presentations and will lead a stimulating discussion.

#### Relevance to congress theme

In a world in which work is changing rapidly, it is important that employees learn and develop new competencies. The four papers presented in this symposium address this by stressing the relevance of taking into account the individual abilities of employees when designing interventions and by discussing the importance of knowledge sharing for learning.

#### Research/Practical implications

The implications are twofold. First, the studies aim to understand individual differences and underlying processes related to knowledge sharing and acquiring new expertise. Second, from a practitioner's point of view, emphasis is put on bridging the theory with relevant HRM practices such as recruiting and creating learning climates. The knowledge presented here helps organizations to develop employee learning abilities (e.g., by focusing on highly agile learners and the need to shift their focus from expertise to flexpertise), as well as create a climate in which knowledge can optimally be exchanged.

#### Overall conclusions

The goal of this symposium is to gain a better understanding of the individual and contextual factors that influence workplace learning. The four papers aim to do this by adopting a dynamic rather than static perspective both in operationalization and research designs. In particular, the papers highlight how certain individual (e.g., learning agility, flexibility in learning) and contextual factors (e.g., organizational climate, social support) impact workplace learning.

discussant: Beatrice I. J. M. Van der Heijden, Radboud University Nijmegen

*Keywords: knowledge sharing, flexpertise, learning agility*

## Paper 1

### **Fostering flexpertise through workplace learning: An empirical study using Group Model Building**

Lonneke S. Frie & Ellen Sjoer | The Hague University of Applied Sciences; Hubert P.L.M. Korzilius & Beatrice I. J. M. Van der Heijden | Radboud University Nijmegen

#### Research goals

Flexpertise concerns the adaptive ability by which workers are able to meet new expertise needs within and across the boundaries of their working contexts and expertise domains (Van der Heijden, 1998). This ability is required given the volatile working contexts and expertise domains in which workers (collaboratively) function, and the shifting needs and expectations of their surrounding stakeholders (Frie et al., 2019; Grenier & Kehrhahn, 2008). However, meeting new expertise needs is by no means an easy process and not necessarily aspired and mastered by each worker (Van der Heijden, 2005). Research has shown that workers may develop inflexibility in their thinking, acting and motivation throughout their career (Dane, 2010; Feltovich et al., 1997), which can hamper the interplay of adaptation processes they need to manifest (Authors, manuscript under resubmission). On the long run, this may imply that an individual's employability becomes at stake when they are not able to reactively or proactively respond to shifting expertise needs (Van der Heijde & Van der Heijden, 2006; Van der Heijden, 2002). Thus far, we have a limited understanding of what individual workers and their stakeholders can do to (re)ignite the required interplay of adaptation processes. This dynamic system includes the redevelopment of expertise at the workplace in which workers develop new expertise within and across their domain boundaries (Grenier & Kehrhahn, 2008; Gruber & Harteis, 2018; Wallin et al., 2019). Therefore, in this study, we aim to empirically investigate the validity of a newly developed so-called dynamic model of flexpertise at the workplace.

#### Theoretical background

The dynamic model of flexpertise at the workplace that is based upon an integrative review of research regarding flexible forms of expertise (Authors, manuscript under resubmission), captures the interrelatedness of six clusters of adaptation processes that workers need to manifest in order to meet new expertise needs on an ongoing basis. These adaptation processes involve intra-individual adaptations over time, as well as social interactions with surrounding stakeholders. We use this model as our underlying theoretical foundation to increase our understanding of when and how adaptation processes can be hampered or impaired, and which individual factors and interventions may increase the effectiveness of these processes.

#### Methodology

By deploying a Group Model Building (GMB) process (Vennix, 1996), we aim to collect opinions of HR/D professionals regarding when and how in the dynamic model of flexpertise the individual's adaptive ability can be fostered. Through a structured group decision-making process, we collect their perspectives to fill lacunas in our understanding, and use their perspectives to build consensus on the leverage points and interventions to foster flexpertise at the workplace.

#### Results expected

Data collection will take place during Q4 2022. Data analysis will be done in Q1 2023.

## Limitations

The quality of the output of the GMB sessions will be highly dependent upon the experience of the participants regarding the flexpertise phenomenon and their understanding of system dynamics. By following the guidelines for GMB (Rouwette et al., 2011; Scott et al., 2016) and by making use of extensively evaluated workshop scripts (Scriptapedia, 2022), we safeguard the quality of the output of the GMB sessions.

## Conclusions

This research project is expected to set avenues for future research involving a dynamic perspective on expertise and employability development (Fugate et al., 2021). Such a perspective takes into account that, over time, workers need to engage in multiple exchanges with their surrounding contexts, and in doing so to build up flexpertise in order to safeguard their career sustainability (De Vos et al., 2020).

## Relevance to the congress theme

This study will further our understanding of how an individual can sustain their position as a worker with valuable and recognized expertise throughout one's career. This may require that organizations shift their focus from expertise to flexpertise development (Authors, under review). More specifically, our newly developed dynamic model of flexpertise is expected to provide the grounding for designing interventions that help to protect and enhance workers' career sustainability throughout the life-span.

## Relevance UN SDGs

The SDGs (UN, 2015) require sustainability transitions that necessitate workers to operate in multi-disciplinary teams, to develop innovative solutions, and to collaborate with stakeholders who have different expectations regarding the workers' expertise and contributions to practice (Belda-Miquel et al., 2020; Martins et al., 2019; Van Mierlo & Beers, 2020). This may necessitate that organizations need to upskill and reskill their workforce (WEF, 2020), which is easier said than done since it concerns adaptive and maladaptive processes of workers. As such, we would like to conclude that using our dynamic model for fostering flexpertise at the workplace will specifically help to realize the SDG 8 'Decent work and economic growth'.

*Keywords: flexpertise, adaptive ability, dynamic perspective*

## Paper 2

### The Interaction of Individual Differences and Motivational Climate using Trait Activation Theory

Belgin Okay-Somerville, Alvin Hadiono | University of Glasgow

The recent pandemic calls for large-scale organisational and work arrangement changes, in which managers and employees must adapt and maintain high performance within such context (CIPD, 2020). Being agile, innovative and able to consider multiple scenarios in these uncertain times, dealing with complexity and managing paradoxes have been long noted as some of the "in-demand skills" to have during such times of change (Oxford Economics, 2012).

This study investigates the construct of learning agility, i.e., the ability to deal with new experiences flexibly and rapidly by trying new behaviour and making quick adjustments so new learning will be realised when one does not know exactly what to do (Burke, 2016). Firstly coined by Eichinger & Lombardo (2000), learning agility is positively related to employees' performance during changing organisational contexts (Bedford, 2011), the potential for advancement (Miklos, Herb & Forbringer, 2013), being identified as high potential (Dries, Vantilborgh & Pepermans, 2012) as well as to leadership success (De Meuse, 2017). As a relatively new construct, the practitioner's interest in learning agility has been growing rapidly in the last decade beyond robust empirical substantiation (De Meuse, 2015). While the organisational implications of learning agility have been looked at in several research (De Meuse, 2017), our understanding of "who" demonstrates learning agility and "how" individual differences interact within the environment is still relatively scarce.

Responding to the call for empirical research on the role of context (DeRue, Ashford & Myers, 2012), the present study aims to understand the individual differences (i.e., personality and goal orientation) associated with learning agility in the workplace and the organisational climates that facilitate/hinder this relationship. Utilising Trait Activation Theory, we examined organisational motivational climate as a boundary condition within which the impact of individual differences on learning agility is strengthened or weakened. Agile learners might have a deeper appreciation of social realities around them and pay more attention to how those climates affect their behaviours (Hoff & Burke, 2017). In terms of value/originality of this study, it contributes towards a contextualised understanding of learning agility and achievement goal theory in the organisational context, as much of its supporting research was conducted in educational, sports and physical activity settings (Roberts, 2012).

This study is conducted within the context of Indonesia, Asia Pacific's third and South East Asia's most populous country and biggest economy. Using data from 1499 "high-potential employees" from 18 different organisations in Indonesia, the study employed Structural Equation Modelling to test a model of learning agility where personality (HEXACO) and learning goal orientation (mastery and performance orientations) were direct predictors and perceived organisational mastery vs performance learning climate was the moderator of these relationships.

The results show that Extraversion, Openness to Experience, and Conscientiousness are positively associated with learning agility, while Emotionality, Honesty-Humility and Agreeableness are negatively associated. Both goal orientations are also found to be significantly associated with learning agility. An examination of the interaction effects shows that the mastery climate facilitated learning agility due to Honesty-Humility, and Emotionality, while the performance climate facilitated learning agility due to Agreeableness. Unfortunately, no significant climate interaction is observed in relation to goal orientations. Further discussions regarding the valence of the personality-climate relationships and interactions were then elaborated using the lens of social adroitness in the context

of "high-potential employees" identification in the workplace (Ashton & Lee, 2007; 2005; Markey & Markey, 2006; Ashton, Lee and Son, 2000).

Intended for both academics and practitioners alike, the implications of this study are two-fold. Beyond using more updated and rigorous models of personality (i.e., HEXACO) and motivation than extant research, this study tries to extend the understanding of learning agility by taking trait activation and achievement goal theories into account, emphasising the role of motivational climates. From a practitioner's point of view (Rotolo et al., 2018), consistent conceptualisation, measurement and reporting back to the industry are important to prevent learning agility from becoming another management 'fad'. This study tries to do that by carrying forward Hoff & Burke's (2017) latest line of research and bridging the theory with managerial implications, i.e., relevant HRM practices on recruiting, developing highly agile learners and establishing a conducive learning climate.

Learning agile employees are 1.2x more capable of responding to a competitive environment, 3.2x more prepared to anticipate and react to nature and speed of change and eventually 4.6x more engaged with their organisations ("Global Leadership Forecast 2018," 2018). This research is foreseeable to be aligned with Goal 9 of the UN's SDG (Building resilience infrastructure, promoting inclusive and sustainable industrialisation and fostering innovation) as well as with the congress theme of "The Changing World of Work," as it primarily investigates individuals' experimentation and adaptive behaviour in order to keep learning and innovating during shifting organisational contexts and priorities (Harvey & De Meuse, 2021).

*Keywords: learning agility, individual differences, organizational climate*

### Paper 3

#### **Knowledge sharing at work: The role of daily work-based social support, learning goal orientation and task interdependence**

Ellis S. Emanuel & Matthijs Baas | University of Amsterdam; Jessie Koen, University of Amsterdam/TNO; Roy B.L. Sijbom, University of Amsterdam

#### Research goals

Knowledge sharing is a key source of competitive advantage in many industries (De Vries et al., 2006; Wang & Noe, 2009). Most research on knowledge sharing, however, examines differences in knowledge sharing between employees, implying that knowledge sharing is stable over a longer period of time and ignoring what causes individuals to share knowledge on one day, while sharing little to none on the next day. In this study we aim to unpack if daily fluctuations in employee knowledge sharing depend on daily work-based social support from one's supervisor and co-workers. In addition, we look at the moderating role of learning goal orientation and task interdependence.

#### Theoretical background

According to Social Exchange Theory (SET), employees continually have to consider if the benefits of sharing information outweigh the costs. Research shows that employees are more likely and better able to share knowledge if their environment invites them to. Knowledge exchange between employees is, on average, higher when employees feel supported and encouraged by their supervisor and co-workers (Cabrera et al., 2006; Kulkarni et al., 2006; Wang & Noe, 2009). The extent to which an employee engages in knowledge sharing can fluctuate from day to day. While social exchange theory explains how individuals exchange resources (e.g., reciprocity; Blau, 1964), the theory is less clear about fluctuations in exchanges over time. Typical leader behaviors, such as offering a challenging assignment or social support, may be more present (or more positive) on some days compared to other days affecting employees' knowledge sharing behavior to a greater or lesser extent. The same goes for the behavior of co-workers; the amount of perceived support from co-workers can differ per day, and receiving support on one day does not guarantee support on other days.

First, we expect positive relationships between daily supervisor support and daily knowledge sharing and between daily co-worker support and daily knowledge sharing. Second, we expect these positive relationships to be weaker for employees with higher levels of learning goal orientation compared to employees with lower levels of learning goal orientation. Finally, we expect these positive relationships to be weaker when task interdependence is high rather than low.

#### Methodology

A ten-day diary study was conducted among a sample of employed workers in the United Kingdom (n = 111) that were recruited via the online participant recruitment tool 'Prolific'. Participants filled out a daily survey at the end of each workday for a period of 10 consecutive work days, leading to a total of 829 measurement occasions. We performed multilevel analyses using Linear Mixed Models in IBM SPSS 26, with the repeated measures at day-level (n = 829 study occasions) and the individual participants at person-level (N = 111 participants).

#### Results

Our findings show support for the positive relationships between daily perceived supervisor support and daily knowledge sharing and daily perceived co-worker support and daily knowledge sharing. A significant interaction effect was found for learning goal orientation and daily co-worker support on daily knowledge sharing. The relationship between daily co-worker support and daily knowledge sharing appeared -contrary to what we had hypothesized- stronger for employees with higher levels of learning goal orientation compared to employees with lower levels of learning goal orientation. Results showed no significant interaction effect of learning goal orientation and daily supervisor support on daily knowledge sharing. Also, we did not find support for any effect of task interdependence.

#### Limitations

First, the results of this study are correlational in nature and therefore it is not possible to make any claims about causality. Second, the use of mere self-reports potentially increased the risk of common method variance.

#### Conclusions

In summary, this study emphasizes the importance of both supervisor and co-worker support for knowledge sharing in the workplace -regardless of employees' level of learning goal orientation and the degree of task interdependence. Especially employees with higher levels of learning goal orientation are likely to respond with knowledge sharing to the interest and support from co-workers mainly.

#### Relevance to the Congress Theme

By looking at drivers of employees' knowledge sharing on a daily basis, this study is a first step in shedding more light on the daily process underlying social exchange and collaboration in the workplace. In an ever changing world of work, it is extremely important that organizations focus on the sharing of knowledge within their organizations.

#### Relevant UN SDGs

Pursuing the UN SDG 'Decent work and economic growth' requires, in an ever-changing world of work, adaptability of both organizations and employees when it comes to the interpretation of jobs and tasks. Knowledge sharing can and should play a role in alleviating this required adaptability.

*Keywords: knowledge sharing, social support, daily fluctuations*

## Paper 4

### **Do you pose a Challenge or a Hindrance to me? A Dual Pathway Model of Upward Social Comparison and Employees' Knowledge Exchange Behaviors**

Laura Rinker, University of Hohenheim; Anne Burmeister, Erasmus University Rotterdam; Fabiola H. Gerpott, WHU – Otto Beisheim School of Management; Ulrike Fasbender, University of Hohenheim

Research goals and why the work was worth doing: Workplace learning, for instance in the form of knowledge exchange, is essential to organizational success. In particular, knowledge exchange between younger and older employees has generated increased research interest (Dietz et al., 2022). Knowledge exchange nurtures both older employees' efforts to keep up with new knowledge as well as younger employees' acquisition of specific organizational and job-related knowledge, which has been generated through experience and tenure. Because knowledge exchange requires employees to invest time and effort, they must choose with whom to exchange knowledge. Our study aims to shed light on the interpersonal processes involved in this decision, which have received little research attention so far. Thus, we consider upward social comparisons (i.e., employees' relative comparisons with colleagues who they perceive to be better than themselves; Buunk & Gibbons, 2007) as a decisive factor for (de-) motivating employees to engage in knowledge exchange (Reh et al., 2018).

Additionally, we consider the context of interactions between age-diverse colleagues, because different literature streams suggest opposite predictions regarding the hindering or facilitating influences that age differences between colleagues may exert on the mechanisms linking employees' social comparisons with their knowledge exchange behaviors (Fasbender & Gerpott, 2022).

Theoretical background: Our study integrates social comparison theory (Festinger, 1954) with the challenge-hindrance stress model (Cavanaugh et al., 2000). We conceptualize social comparisons as a work-related stressor (Greenberg et al., 2007) and propose that its stress appraisal shapes how employees engage in knowledge exchange. Accordingly, social comparisons can be appraised either as a demand involving potential gains (i.e., challenge appraisal) or as a demand that obstructs one's goal achievement (i.e., hindrance appraisal). We propose that appraising a social comparison as a challenge prompts an approach response, promoting knowledge exchange. In contrast, appraisal as a hindrance triggers an avoidance response, reinforcing behaviors inhibiting knowledge exchange. Because the perception of a stressor as a challenge or hindrance is not mutually exclusive, we expect that both pathways can occur simultaneously.

Yet, we suggest that this stress appraisal is shaped by the characteristics of the social comparison target (i.e., the colleague an employee compares oneself to). Drawing on Festinger's (1954) theory of social comparison, we argue that an age difference weakens the links between social comparisons and challenge and hindrance appraisals as people prefer to compare themselves to similar others. We assume that the age difference between an employee and their social comparison target thus also influences downstream knowledge exchange behaviors.

Research methodology: We conducted an online experiment using a 2×3 between-subjects design in which we manipulated the factors social comparison (upward vs. lateral) and age difference (older vs. same age vs. younger comparison target) by providing participants (N = 206) with randomly assigned bogus performance feedback on a cognitive ability test. We pre-registered our hypotheses at the Open Science Framework

([https://osf.io/26qxc/?view\\_only=889ab88b83d84c1882eb49accf0ed391](https://osf.io/26qxc/?view_only=889ab88b83d84c1882eb49accf0ed391)). To test our hypotheses, we utilized path analyses in Mplus 8.4. To investigate the indirect and conditional indirect paths, we simulated Monte Carlo confidence intervals for the indirect and conditional indirect paths in R.

Results obtained: Our findings show support for the proposed avoidance pathway, suggesting that upward social comparisons are negatively linked to knowledge sharing and positively linked to knowledge hiding via hindrance appraisal. As hypothesized, the age difference between participants and their social comparison target buffered these relationships such that the negative effect of hindrance appraisal on knowledge sharing and the positive effect of hindrance appraisal on knowledge hiding were weaker. We did not find support for the approach pathway via challenge appraisal.

Limitations: First, we were not able to capture the entire age spectrum in our sample, which may raise concerns regarding its representativeness and the generalizability of the results, especially to older age groups. Second, despite our experimental approach, we relied on the use of self-ratings to obtain the data, which may introduce common-method-bias.

Conclusions: In summary, our study highlights the benefits that age diversity can entail in terms of knowledge exchange as one type of workplace learning. At the same time, it cautions against the possible negative effects of social comparison.

Relevance to the Congress theme: Our study speaks particularly to the facets contribution and urgency embedded in the congress theme. By combining the topics of social comparison and knowledge exchange, our study examines how employees deal with competition and collaboration. Second, by exploring how age differences between colleagues shape interpersonal processes, our study addresses the urgency of the ongoing demographic change.

Relevant UN SDGs: Quality education, Decent work and economic growth

*Keywords: knowledge exchange, social comparison, age differences*

## Symposium S068

### Leadership and well-being in turbulent times

Judith Volmer & Philipp E. Otto | University of Bamberg, Germany

science\_practice

What will be covered and why (including the contribution of any discussant)

Leadership is a highly complex task that has become even more demanding due to continuously changing work environments, digitization, and current crises (e.g. the COVID-19 pandemic). This symposium provides researchers and practitioners alike with knowledge on how to create and sustain leaders' and employees' well-being in these turbulent times. The first paper (Güntner et al.) focuses on a multisource, longitudinal field study with three measurement points on leaders' well-being, their encoding capabilities, and their consequences on employees' well-being. The second paper (Otto & Volmer) examines in a treatment and waiting group design with 34 leaders from diverse companies the effectiveness of virtual executive coaching on affective, strategic, and behavioral changes. Third, the paper by Sedefoglu and Ohly investigates in an experimental study whether feedback framed to come from an AI can increase a leader's empathetic (virtual) communication in comparison with feedback from a human supervisor. Findings will add to the congress theme by focusing on the topic of human-computer interactions. The fourth paper constitutes a meta-analysis of the relationship between different leadership concepts and various operationalizations of employees' resilience, including studies of the last 20 years of research. Findings will shed light on how employees' resilience can be fostered.

#### Relevance of the Congress Theme

Coping with changes in the workplace, driving innovation, and understanding human-computer interaction is central to economic development. Several developmental goals are addressed in this symposium (e.g., "good health and well-being", "decent work and economic growth", and "leadership development"). Leaders shape the innovation of work and their own well-being and that of their followers can be considered a key driver to enable sustainable change. Central influences here need to be better understood and put into relation to each other.

#### Research/Practical Implications

The symposium investigates the question of how leaders can foster health at work from different angles with different methodological approaches. By combining the individual papers in the proposed symposium, the audience will better understand which cognitive, affective, and behavioral outcomes result from various leadership approaches. The symposium will also discuss critically how leadership research can be advanced theoretically and methodologically in the future. Practitioners will learn about best-practice strategies to create and maintain a healthy and sustainable workplace.

#### Overall conclusions

The proposed symposium provides insights into various opportunities to foster health at work in turbulent times. Leader well-being is as important as follower well-being, which are strongly interdependent. Ongoing turbulences provide novel opportunities for organizations to support leaders using (virtual) coaching and supporting tools. Besides the positive outcomes of leadership interventions, also potential drawbacks will be discussed. Positive as well as negative effects of changes in work need to be better understood together with success enabling moderators.

*Keywords: digital leadership, well-being, human-computer interaction*

## Paper 1

### Encoding the Room and Follower Needs: Understanding the Effects of Leader Well-Being on Follower Well-Being

Amelie V. Güntner & Martin Kleinmann | University of Zuerich, Switzerland; Pia V. Ingold, University of Copenhagen, Denmark

#### Research goals and why the work was worth doing

Organizations are challenged by continuously changing environments and vast technological advancements, knowledge, and globalization. Dealing with these challenges requires a productive yet healthy workforce, including leaders and followers alike. Although it is an increasingly prevalent assumption that leader well-being may positively affect their leadership skills and, in turn, follower well-being, to date, more empirical evidence supporting this view is required (Inceoglu et al., 2018). Specifically, extant literature primarily focused on leaders' behavioral skills while neglecting cognitive skills crucial for leaders' ability to accurately perceive situational demands in interactions with their followers, thereby allowing them to respond effectively to followers (Gottfredson & Reina, 2020).

#### Theoretical background

The present research links theoretical frameworks explaining well-being as a resource (e.g., conservation of resources theory; Hobfoll, 1989; broaden and build theory; Fredrickson, 2004) with theory on the relevance of individuals' situation construal (i.e., perception; Funder, 2016), to develop and test a serial mediation model of leader well-being. First, we propose that leaders with better well-being are a source of social support for followers, thereby directly benefiting follower well-being. Furthermore, leader well-being supposedly broadens their scope of attention and cognition, such as their situation construal accuracy. Situation construal accuracy can be defined as leaders' capability to encode (i.e., perceive) situational demands accurately to identify which leadership behavior is required from them in a given situation (Funder, 2016). In contrast, leaders with poor well-being may lack the resources to perceive situational demands accurately. Hence, we propose that better leader-well being increases leaders' situation construal accuracy. Thinking of situational demands in terms of the needs followers express to their leaders, research has acknowledged the critical role leaders play in followers' need fulfillment (e.g., Van Quaquebeke & Felps, 2018). Leaders with better well-being likely are better at accurately perceiving and responding to their followers' needs, which should result in higher need fulfillment as perceived by followers. That is, we expect leaders' situation construal accuracy to lead to an increase in followers' need fulfillment. Furthermore, given that the fulfillment of individuals' basic needs (i.e., need for autonomy, competence, and relatedness; Deci & Ryan, 2000) plays a key role in human functioning, including well-being (Patrick et al., 2007), we further assume that followers' need fulfillment increases their well-being.

#### Design/Methodology/Approach/Intervention

We tested our serial mediation model in a longitudinal field study with experienced leaders (N = 275) and their followers (N = 723). We asked leaders to report on their well-being (T1), and we asked their followers to rate their leader's situation construal accuracy (T1) and to report their need fulfillment (T2) and personal well-being (T3).

## Results obtained

Results showed that, first, leader well-being was positively, but not significantly related to follower well-being. Second, we found that leader well-being was significantly positively related to their situation construal accuracy as perceived by their followers. Third, results revealed that leader situation construal accuracy was significantly positively related to followers' need fulfillment. Followers reported higher need fulfillment when they attributed their leaders the capability to perceive situational demands accurately. Fourth, followers' need fulfillment was significantly positively related to their self-reported well-being. Lastly, results supported the proposed indirect effect of leader well-being on follower well-being. Specifically, in line with our assumptions, results indicated that this indirect effect was serially mediated by leader situation construal accuracy and follower need fulfillment.

## Limitations

Although our study results may be interpreted in a temporal direction due to the longitudinal design, no causal inferences can be drawn due to potential endogeneity threats. The longitudinal design is suitable to account for simultaneity or reverse causality, but omitted causes may still influence the study results.

## Conclusions – research and or practical implications

The present study contributes to research on leadership and well-being by illuminating the underlying mechanisms through which leaders' well-being influences the well-being of their followers. Our findings point at leader well-being as a resource that increases leaders' situation construal accuracy, thereby highlighting the relevance of leaders' cognitive skills in explaining the positive effects of leadership. We hope that our findings on the indirect, positive effects of leaders' well-being on their followers will inspire future research in the important realm of leader well-being, both regarding its effects on others, but also regarding its antecedents.

## Relevance to the Congress Theme: The Future is Now: the changing world of work

Our findings contribute to a better understanding of how leaders can use their resources to strengthen the well-being of their followers, thereby helping them navigate through the changing world of work.

## Relevant UN SDGs

Our research contributes to the SDGs of the UN, specifically to the goal of focusing on “good health and well-being” by offering evidence-based recommendations for policy and practice on well-being.

*Keywords: leader well-being, enoding, well-being*

## Paper 2

### Leadership coaching effectiveness: Evaluating affective, strategic, and behavioral changes in SMEs

Philipp E. Otto & Volmer Judith | University of Bamberg, Germany

A rapidly changing world requires quick adaptation to secure sustainable development. Here especially new forms of leadership need to be developed to cope with the novel work requirements. Coaching is the standard form for fostering self-organized change. Bavarian SMEs are used as a case study to evaluate coaching effectiveness in relation to work satisfaction and other concepts covering affective, strategic, and behavioral components. Theoretical background

Diverse studies illustrate the effects coaching has and consider various variables. Coaching increases individually reported well-being (i.e., Kraiger et al. 1993, Jones et al. 2016), where also specific effects on workplace well-being or work satisfaction are reported (Grant et al., 2009, Burt & Talati, 2017, Athanasopoulou et al., 2018). Positive effects are also reported for attitudes, coping, skills, and performance (see Theeboom et al. 2014). These are to be confirmed for leaders in small and medium enterprises. Potential moderators for longer-term coaching effects on reported work satisfaction and performance are self-esteem (Rosenberg 1965), career engagement (Hirschi et al. 2014), career resources (Hirschi et al. 2019), self-efficacy (Rigotti et al. 2008), resilience (Soucek et al. 2015), psychological safety (Edmonson 1999), leader-member-exchange (Liden & Maslyn 1998), attitudes (Schaufeli et al. 2006), personality (Rammstedt & John 2005), and working alliance (Wilmer et al. 2008). Furthermore, a combined evaluation over time could help to find dependencies and to isolate critical influences.

#### Design/Methodology/Approach/Intervention

Scientific coaching is offered for SME in Bavaria as part of an applied research project. In total 34 participants take part (29.4% females, 64.7 with coaching experience, and an average age of 43 years) equally divided into a treatment and a waiting group. Coachings are implemented as virtual one-to-one sessions with 5 monthly repetitions. The coaching of the waiting group begins after the coaching of the treatment group to distinguish the coaching effects over time. Before the start of the first coaching, demographics, personality, affective, strategic, and behavioral scales are retrieved. Furthermore, presumably less stable components are retrieved monthly and more stable components every six months over the whole duration of the project (5/2022 till 11/2023). Further details concerning the various measures and their retrieval frequency are provided in study's pre-registration at <https://osf.io/rbta7/>. The completeness of the data concerning the repeatedly requested questionnaires is 99% (as of 10/2022).

#### Results obtained or expected (2/2023)

Upon completion, the coaching effectiveness for SME leaders is to be documented on various scales. The repeated measures allow to infer causal relationships between personality, strategic, affective, and behavioral factors. First results indicate that the subscale "focused realization" of resilience (Soucek et al. 2015) increases through coaching and influences the affective work evaluation (here especially the item "absorption" from the work engagement scale of Schaufeli et al.). Also working alliance (Wilmer et al. 2008) strengthens over the coaching sessions and might be an important differentiating factor for coaching success.

#### Limitations

Given the size and specificity of the sample, the generalizability of the results is limited. Dependencies and changes over time could only inform future studies, but might provide valuable insights concerning the measurement of coaching effectiveness.

Conclusions – research and or practical implications

A better understanding of how coaching is effective could inform theory and practice alike. Which factors are influencing coaching results in what way over time could be an important source of information to understand how coaching becomes effective. Possibly more important though is that it could help design scientifically grounded coaching leading to a higher acceptance of coaching practice over the long term.

Relevance to the Congress Theme: The Future is Now: the changing world of work

The project represents a research application for a more systematic understanding of behavioral change and possible coping strategies for future work requirements. In this regard it fosters the imminent change in one of the key innovative drivers of the society: leaders of SMEs.

Relevant UN SDGs

SMEs are driving innovation and are central for economic development. This includes general growth, poverty reduction, improved health, as well as general wellbeing. SMEs usually feel more responsible for their employees and as partners in the respective goal attainment. Further developing the resources and capabilities of SME leaders helps to secure sustainable growth in the future. This builds on scientific knowledge transfer to achieve higher level education.

*Keywords: leadership coaching, evaluation, executives*

### Paper 3

#### **Can AI make leaders more empathetic? An experimental investigation on leadership communication and the influence of AI**

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##### Research goals and why the work was worth doing

In the contemporary business environment, a significant proportion of interactions between leaders and followers take place electronically. Communicating effectively in a virtual setting is particularly challenging for leaders because the physical distance from followers increases the difficulty of building relationships and trust (Marlow et al., 2017; Tuschner et al., 2022). Previous research suggests that leaders can create positive relationships with their followers using empathy – the ability to view things from another person’s point of view and understand their feelings (Holt & Marques, 2012). With this study, we aim to examine whether feedback framed to come from an AI can increase leaders’ empathetic (virtual) communication compared to feedback from a human expert.

##### Theoretical background

Empathetic communication is one of the central concepts of motivating language theory, which suggests that communicating support for followers’ feelings has positive effects on followers (Mayfield & Mayfield, 2018). Prior studies have linked empathy with perceived communication competence (Redmond, 1985) LMX (Mahsud, Yukl & Prussia, 2009), and job satisfaction (Kock et al., 2019). Although, there is evidence empathy can generally be trained (Teding, Berkhout & Malauff) most studies that examine improvements in empathetic communication through AI focus on healthcare professionals and student samples (e.g. Wambsganss et al., 2021).

Early research on the use of algorithms in decision-making revealed that individuals often discount advice from algorithms across different scenarios, even with knowledge of their superior performance – a tendency called algorithm aversion (Mahmud et al., 2022). Despite the accumulating evidence in favor of the concept, recent research found that individuals may also react the opposite way – under some circumstances, they may rely more strongly on algorithmic than human instructions, which researchers refer to as algorithm appreciation (Logg et al., 2019). While it is known that algorithms can generally increase the efficiency of workflows by offering fast and standardized results (Dietvorst et al., 2015; Duggan et al., 2020) it remains ambiguous whether leaders will dismiss or accept input and feedback from an AI regarding their empathy. On these grounds, we explore the effects of AI-based feedback on supervisors’ empathetic communication.

##### Design/Methodology/Approach/Intervention

To gain insights into the effectiveness of recommendations of an AI, we conducted an online experiment in which participants were randomly assigned to either feedback from a human or an AI. Participants were recruited via LoopsterPanel (German survey panel). In the experiment, the participants were introduced to a vignette that assigned them the role of a manager and described a fictional organizational situation, in which they got the task to write an e-mail to one of their subordinates. After finishing the task, all participants received the same feedback which advised them to be more empathic – in one condition, the feedback was framed to come from an AI and in the other from an expert. Subsequently, the participants got the opportunity to rewrite their emails.

Attention checks were included to ensure that participants read and understood their task. In the analysis, we will compare both conditions in terms of empathy improvement, including control variables such as demographics and prior use of AI.

Results obtained or expected (if not available, it must be made clear when they will be)

We expect that feedback from an AI will positively impact the use of empathy, but feedback from a human expert will be more effective. We collected data in January 2023 and will obtain the results until the conference.

Limitations

The external validity of our findings might be limited due to the experimental vignette approach of our study.

Conclusions – research and or practical implications

We contribute to research by showing whether AI can be useful to improve leadership communication in the workplace. The findings will provide important insights for leadership and communication management scholars, human resources practitioners, and organizational leaders. Further studies could focus on whether AI has indeed the potential of increasing the use of empathetic communication in the field, e.g. by introducing an intervention at a real organization.

Relevance to the Congress Theme

Our research adds to the congress theme by focusing on the topic of human-computer interactions and the use of technological advances to improve communications at work, which has and will increasingly become an integral part of workplaces of the future.

Relevant UN SDGs

Good Health and Wellbeing (SDG X).

*Keywords: Artificial Intelligence, experiment, empathy*

## **Paper 4**

### **Leadership and Resilience – First insights from a meta-analysis**

Miriam Arnold, Leibniz Institute for Resilience Research Mainz, Germany; Hannah Schäfer, Johannes Gutenberg University Mainz, Germany; Eva-Maria Schulte, Technische Universität Braunschweig, Germany; Thomas Rigotti, Leibniz Institute for Resilience Research and Johannes Gutenberg University Mainz, Germany

#### Research goals and why the work was worth doing

Research on workplace resilience is an ever-growing literature. In reaction to stressors, organizations aim for a resilient workforce which can cope with changes in the work environment. One aspect in the work environment which can contribute to resilience is leadership.

#### Theoretical background

Despite the wealth of primary studies linking different leadership concepts with various operationalizations of employees' resilience, up to date, there is no systematic integration of the results. Existing meta-analytical or review papers in this stream of research either focus on one specific leadership style or only mention leadership as one of multiple resilience promoting factors.

This paucity concerning a systematic integration of empirical evidence is of concern because these scattered results make it difficult to infer which leadership styles are especially suited to foster workplace resilience. A thorough meta-analysis of this relationship allows relevant practical implications for organizations based on empirical evidence.

#### Design/Methodology/Approach/Intervention

In conducting the literature search, we follow the PRISMA protocol. After defining the search string, relevant databases, inclusion and exclusion criteria, two independent raters decide on the inclusion or exclusion of primary studies. In the further process, relationships between various leadership styles and behaviors and resilience will be analyzed. Currently, we prepare the preregistration of the meta-analysis.

#### Results obtained or expected (if not available, it must be made clear when they will be)

Results of the meta-analysis are not yet available since we only started with the selection process of primary studies. However, results of the meta-analytical search will be available at the EAWOP conference.

#### Limitations

We expect that a majority of relevant primary studies will be cross-sectional and conducted as self-report surveys. This poses the risk of common method bias inflating the studied relationship. Another critical aspect is the proliferation of both, the leadership and the resilience literature. In both fields, a multitude of different operationalizations and definitions exist, thus making it difficult to meaningfully merge them for the meta-analysis. This also leads to the limitation that the number of primary studies for specific leadership concepts or specific operationalizations of resilience might be very small, thus limiting the strength of empirical evidence for these aspects.

#### Conclusions – research and or practical implications

This project contributes to the literature by organizing the available literature on the relationship between leadership and resilience. The meta-analysis will cover approximately 20 years of research

on the relationship between leadership and resilience. It is a first attempt to systematically summarize empirical findings on resilience and leadership. There is a high demand for training and workshops, especially in leadership development. Therefore, the question of how leaders can support, and influence employees' resilience is of high practical relevance. The topic of resilience for personnel development has even gained increased attention during the pandemic and the dynamic changes this brought to the organization of work. To answer these practical questions with strong empirical evidence, the field is in urgent need of a meta-analysis on the relationship between leadership and resilience.

#### Relevance to the Congress Theme

Workplace resilience can be seen as an integral aspect of coping with changes in the workplace and beyond. Especially in crises such as the COVID-19 pandemic or the trouble of the power supply industry resilience becomes relevant. However, also coping with daily hassles at work requires resilient strategies.

#### Relevant UN SDGs

This study can be located at the intersection of sustainable development goal 3 'good health and well-being' and goal 8 'decent work and economic growth'. We posit that the working environment, which is (amongst others) shaped by the leader is a relevant aspect pertaining to the health of employees.

*Keywords: leadership, resilience, meta-analysis*

## Symposium S069

### Sustainable careers across age, time, and life domains

Claire Leeming & Ieva Urbanaviciute | University of Lausanne

science

What will be covered and why. This symposium includes four presentations that address different elements of the sustainable career framework using various samples and methodological approaches. The first presentation adopts a meta-analytical approach to investigate the impact of key stakeholders in different life domains (private and work) on career sustainability in terms of health, happiness and productivity. Results show that supervisors, coworkers, and spouses (or cohabiting partners) influence the development of sustainable careers of focal individuals, thereby confirming the important role of significant others in enhancing one's capacity to sustain employment. The second presentation uses 7 years of longitudinal data and growth mixture modelling to investigate trajectories of within-person change of work-leisure goal interference and the subsequent impact on well-being, while also accounting for the impact of career adaptability. Results show clear trajectories of work-leisure goal interference, with those in the low interference group displaying higher well-being, with career adaptability acting as protective resource against high levels of interference. The third presentation adopts a more contextual approach and investigates the effect of short-time work compensation schemes on career sustainability through career insecurity. While the results for this presentation are not yet available, the authors expect to find that short-time work compensation schemes, in comparison to redundancy, are more favorable for career sustainability. The fourth presentation investigates future time perspective profiles of younger and older workers and their relation with goal orientation and training motivation, with continued learning being a key element in the maintenance of sustainable careers. Results show that different future time perspective profiles are identified in older and younger workers and that depending on the profile different relationships are found in goal orientations and training motivations, suggesting that future time perspective, in addition to age is an important consideration in the design of Human resource policies and practices. The combination of these four studies makes a holistic contribution to our understanding of what contributes to sustainable careers on an individual and contextual level, as well as across time. Our discussant will conclude the symposium by providing some summarizing insights across the presentations and offer some reflections on questions raised by the symposium and suggestions for further exploration. He will also respond to questions.

Relevance to the congress theme. The topic of sustainable careers is highly relevant for the congress theme of "The Future is Now: the changing world of work". The world of work has already changed due to influences linked to globalization, the climate crisis, the migration crisis, more flexible social and labor market structures, and technological evolution. The world of work will continue to change, becoming increasingly characterized by a de-standardization of career paths, more frequent career transitions, increased vulnerability for some groups, and the desire to have meaningful careers. In this perspective, the sustainable career framework offers a helpful paradigm for understanding how individuals maintain careers that are characterized by health, happiness, growth, and productivity while taking into account the impact of individual and contextual factors, as well as time and processes of dynamic adjustment.

Research / practical implications. On a theoretical level, all these presentations contribute to theory development of the sustainable career framework. Given the recency of the framework, our results help us to understand the factors that contribute to sustainable careers. The collection of presentations in this symposium also show how different methodological approaches can be used

while investigating sustainable careers. Our results have implications for individuals, career guidance counsellors and practitioners, as well as for organizations and HR policies and practices.

Overall conclusions. Overall, this symposium shows the importance of considering different life domains in combination with individual factors while adopting a temporal perspective to understand sustainable career development. We show the importance of key stakeholders in different contexts; the role of protective resources such as career adaptability; the necessity to consider the institutional context and HR policies, and the requirement to consider different factors for different age groups.

discussant: Jos Akkermans, Vrije Universiteit Amsterdam

*Keywords: Sustainable careers, well-being, life domains*

## Paper 1

### A Meta-analysis of Health, Happiness, and Productivity Crossover

Ngoc Nhu Y “Chloe” Nguyen, Vrije Universiteit Amsterdam; Cort. W. Rudolph, Saint Louis University; Svetlana. N. Khapova & Jos Akkermans | Vrije Universiteit Amsterdam

**Research Gaps and Goals.** Sustaining careers in which individuals are healthy, happy, and productive has become a salient concern for individuals and organizations in today’s context of rapidly changing and unpredictable work environments. This has led to the scholarly emphasis on the preservation of career sustainability. Research in this regard has explored multiple individual and contextual factors that could contribute to establishing sustainable careers. However, the ongoing discussion has left out an important aspect - the influence of key people such as spouses, supervisors, and coworkers, who share a great part of their lives with the individuals. We argue that it is critical to consider stakeholders and their interpersonal effects because individuals’ careers might be undermined when partners experience unfair treatment at work or adverse health symptoms. Therefore, the aim of this paper is to investigate the relations between stakeholders and individuals’ health, happiness, and productivity.

**Theoretical Background.** The process that occurs when the experience of stress and strains of one person leads to stress and strains being experienced by another person is defined as crossover (Bolger et al., 1989). Scholars have discovered negative crossover (e.g., depression, job burnout, time theft) and positive crossover (e.g., work engagement, job crafting) between spouses, coworkers, and leaders and followers. These existing findings on crossover have led us to expect that stakeholders might exert their influence on individuals’ health, happiness, and productivity via the crossover process. Therefore, in this paper, based on previous crossover findings, we examined the associations between a set of stakeholders’ variables (i.e., personal resources, job demands, job resources, work-family conflict, family-work conflict, work-family enrichment, family stressors, marital satisfaction, spousal commitment to employee’s organization, life satisfaction, career sustainability indicators) and individuals’ health, happiness, and productivity.

**Methods.** Using a dataset of 96 published and unpublished primary studies, we performed zero-order correlation meta-analysis and meta-analytic path analysis to test the proposed hypotheses in R. The main analysis was followed by the test of publication bias using the triangulation method and moderator analysis, including subgroup analysis and meta-regression, to detect possible moderators (i.e., dyadic relationship, age, relationship length, and number of children).

**Results.** Stakeholders’ personal resources, work-domain variables (i.e., job demands and resources), cross-domain variables (i.e., work-family and family-work conflict, work-family enrichment), family-domain variables (i.e., family stressors, marital satisfaction, spousal commitment to employee’s organization), life satisfaction, occupational health, happiness, and productivity were related to the development of individuals’ sustainable careers. Age and relationship length did not affect the intensity of the crossover process. The number of children weakly moderated crossover. Among different types of dyadic relationship, organization members (i.e., supervisors and coworkers) has a greater effect on the crossover of happiness than spouses.

**Limitations.** First, the small number of primary studies per relationship may make second-order sampling error a problem in our study. Second, our meta-regression analyses are likely to have low statistical power, undermining our ability to obtain accurate and significant findings. Third, our

study's generalizability might be negatively affected because of the large percentage of cross-sectional studies (i.e., 73%) in our dataset. As such, the causal conclusions in this paper should be carefully interpreted.

**Conclusions.** The most important finding of this meta-analysis lies in the dependence of individuals' health, happiness, and productivity on the presence of a sustainable climate in which supervisors, coworkers, and spouses (or cohabiting partners) of the focal individuals are flourishing instead of being dysfunctional, thereby confirming the important role of significant others in enhancing one's capacity to sustain employment. Evidence in this paper suggests that career sustainability management practices should be designed to include stakeholders for a successful delivery. This means organizations should look beyond the work context and take other domains such as family and various stakeholders into consideration.

**Relevance to the Congress Theme.** The fast-changing and unpredictable world of work threatens individuals' employability. Thus, to ensure continued employment, it is important to not only maintain a good level of health, happiness, and productivity but to sustain them over time. This makes the notion of sustainable careers more salient to individuals, organizations, and society as a whole. By studying career sustainability, we address the changing world of work and provide more insights into how to promote individuals' capacity to run long in their careers.

**Relevant UN SDGs.** Our study emphasizes the promotion of occupational health, happiness at work, and productivity, thereby contributing the UN Sustainable Development Goals of Good Health and Wellbeing.

*Keywords: crossover, stakeholders, well-being*

## Paper 2

### Trajectories of work-leisure goal interference and sustainable careers

Claire Leeming, Jérôme Rossier & Ieva Urbanaviciute | University of Lausanne

Research goals and why the work was worth doing. This research investigates the trajectories of within person change in work-leisure goal interference over time, adopting a sustainable careers perspective. In recent years, increasing attention has been given to the role of non-professional factors in career development. One approach, the sustainable career framework, suggests that individual, temporal, and contextual factors (e.g., influencing factors from other life domains) should be considered in the development and maintenance of sustainable careers, as evidenced by health, happiness, and productivity. Given the recency of this framework, there is a need for longitudinal research in this area. Similarly, to date, most research on work-life issues has adopted cross-sectional approaches or diary studies, and the longitudinal studies that do exist tend to have limited measurement points over a shorter time frame. In addition, work-life research has mostly focused on the family domain, to the exclusion of other domains, such as leisure.

Theoretical background. The sustainable career framework is focused on the individual, who is considered as the central, career-oriented stakeholder. However, it adopts a systemic and dynamic approach to explain the multiple factors (context and stakeholders) and changes over time which can influence the sustainable aspect of the career. The framework suggests that on a context level, one needs to consider the impact that other life domains may have on sustainable career development. In this study, we consider how trajectories of work-leisure goal interference relate to indicators of sustainable careers. The sustainable career framework also highlights the importance of individual proactivity and ability, and to this end we also investigated the role of career adaptability in the experience of work-leisure goal interference. Taken together, we sought to answer the following research questions, 1) can we observe distinct trajectories of within-person change in work-leisure goal interference? 2) what impact does career adaptability have on these trajectories? and 3) are trajectories of work-leisure goal interference related to indicators of sustainable careers, notably in terms of well-being?

Method . To address our research questions, we used 7 years of longitudinal data from the “Career Paths” panel survey based on seven yearly measurement points. The survey was carried out within the framework of the Swiss National Centre of Competence in Research—Overcoming Vulnerabilities: Life Course Perspectives (LIVES) and includes a large sample of professionally active adults that is representative of the German- and French-speaking population in Switzerland. Our analytic sample consisted of 1225 participants (50.2% women, mean age at T1 = 42.41, SD = 8.43). Growth mixture modelling was used to analyze the data.

Results . Our findings revealed the following trajectories characterizing within-person change in work-leisure goal interference over time: “stable high interference” (58.8% of the sample), “stable low interference” (22.6%), “gradually increasing interference” (9.4%), “gradually decreasing interference” (9.2%). Those with higher career adaptability resources were less likely to experience a persistently high work-leisure goal interference. Furthermore, outcome analyses showed that workers with persistently low or decreasing work-leisure goal interference reported the highest well-being at the end of the study. Notably, most outcome indicators (except life satisfaction) also showed some temporal dynamics (i.e., T1-T7), with the most marked decrease in job satisfaction and an increase in life stress among workers experiencing an increasing trajectory of goal interference.

Limitations . Our analyses are specifically focused on work-leisure goal interference and do not cover other work-life goal aspects.

Conclusion . Trajectories of stable low and decreasing work-leisure goal interference were the most favourable in terms of employee well-being and sustainable career development. Career adaptability seems to be an important resource for balancing work and non-work goals.

Relevance . The changing world of work takes a toll on the work-life interface, posing numerous risks for employee well-being and career sustainability. Adopting a novel methodological approach, our findings show the potential long-term implications of goal support vs. interference on selected outcomes, which highlights the current study's relevance to the congress theme and UN SDG 3 (Good health and well-being)

*Keywords: work-life interference, sustainable careers, well-being*

### Paper 3

#### The Effects of Short-Time Work on Career Sustainability: The Lesser Evil Option?

Charlotte Rodriguez Conde, KU Leuven and UC Louvain; Hans De Witte, KU Leuven ; Florence Stinglhamber, UC Louvain; Nele De Cuyper, KU Leuven

Research goals and why the work was worth doing . Short-Time Work (STW) compensation schemes (“temporary unemployment” in Belgium, or “furlough” in the UK) are public programs that allow companies facing a temporary reduction in demand to suspend the execution of employment contracts while providing employees with unemployment benefits (EC, 2020). During the COVID-19 pandemic, European employers made unprecedented use of STW. Such job-retention policies remain topical in the current economic climate: one may expect a severe recession in Europe due to the energy crisis and hence a renewed increase in the use of STW. Surprisingly, scholars have paid limited attention to the impact of STW on careers so far (Stuart et al., 2021; Zheng et al., 2022). Yet, there is a need to examine how this alternative to redundancy relates to career development in the longer run: both redundancy and STW are disruptive events for employees but redundancy is perhaps even more so. Filling this gap, this study (1) investigates how STW compared with no change in employment conditions potentially undermines career sustainability after more than one year, (2) via perceptions of career insecurity. To examine to what extent STW represents a lesser evil option, (3) the effects of STW on career insecurity and career sustainability are compared with the effects of a job loss.

Theoretical background. Sustainable careers refer to sequences of work experiences that are characterized by continuity over time in terms of health, satisfaction, and productivity (De Vos et al., 2020). Based on the Conservation of Resources theory (Hobfoll, 1989), we hypothesize that STW and redundancy (vs no change in employment conditions) are negatively associated with three types of indicators characterizing career sustainability: well-being, career satisfaction, and work engagement. Our argument is that sustainability and continuity require the constant generation and preservation of resources (Pak et al., 2020), whereas STW and redundancy rather signal a threat to resources.

More concretely, we expect these relationships to be mediated by career insecurity and four of its dimensions: worries about career opportunities, unemployment, undesired transitions, and work-nonwork interactions (Spurk et al., 2022). Indeed, by highlighting uncertainty in the job market and the resulting scarcity of resources, STW and redundancy reveal the likelihood that one’s career might develop in an unwanted manner (Spurk & Straube, 2020). In addition, these experiences are likely to challenge the role played by work as a meaning framework and cause a shift in life priorities (e.g. Mandeville et al., 2019), which may emphasize concerns regarding the way work interacts with other life domains. Career insecurity and the related feelings of lack of control over resources may, in turn, negatively affect well-being, career satisfaction, and work engagement (Spurk et al., 2022).

Consistently with the view that STW is a lesser evil option, we finally assume that STW is associated with lower levels of career insecurity, leading to higher levels of well-being, career satisfaction, and work engagement, in comparison with redundancy. As a matter of fact, STW implicitly means that one represents a valuable asset, less likely to be affected by the unfavorable job market than dismissed workers.

Design and Methodology. We will test our hypotheses using a cross-sectional design and SEM. The sample (N=600) will consist of three groups of workers with different employment statuses during

the pandemic: STW, redundancy, no change in employment conditions. Data will be collected on Prolific.

Results Expected. Data collection will start in November—after the approval of the Ethical Committee.

Limitations. This research counts three main limitations, which will be partly addressed in a follow-up study involving new data collection. First, cross-sectional associations based on data collected after the shock provide limited evidence for causal inference. Second, the sample might include workers exposed to different implementations of STW, affecting career sustainability in a way that is difficult to assess. Third, our model tends to disregard individuals' adaptability, by focusing on losses of resources exclusively.

Implications. While job-retention policies tend to be seen as a lesser evil in the face of adversity, this research explores for the first time to what extent they make employees less vulnerable in the job market than redundancy. In that respect, it contributes to the existing literature on career sustainability by showing a concrete example of the influence of the institutional context on career development.

Relevance to the Congress Theme. In a European society threatened by repetitive economic recessions, this study on a job-retention policy fuels the Market-led VS State-led restructuring debate and paves the way for further reflections on how to better preserve career sustainability.

Relevant UN SDG. Well-being, Decent work & Economic growth

*Keywords: short-time work, sustainable careers, career insecurity*

## Paper 4

### **Career Sustainability of Young and Older Workers: Future Time Perspective Profiles and their Relationship with Goal Orientation and Training Motivatio**

Isabel Raemdonck, UCLouvain (BE); Ruth Kanfer, Georgia Tech – School of Psychology; Michaël Parmentier, UCLouvain (BE)

Research gaps and goals. The current changes in retirement policies that raise the legal retirement age to 65 (OECD, 2019) imply a need for the promotion of sustainable careers that enable workers to extend their working lives through actions that take a developmental approach (van der Heijden et al., 2020). This is valid for the careers of both young as well as older workers. A sustainable career is only possible if workers themselves have the tendency to think in terms of the future (the psychological time). When their future time is perceived as open, workers see many opportunities in front of them. Different researchers (see review Henry et al., 2017; Kooij et al., 2018) showed that Future Time Perspective (FTP) is more limited in older workers compared to younger workers as older workers become increasingly aware that their time is running out. Other researchers such as Carstensen and Lang (1996) demonstrated that an open FTP is associated with the pursuit of goals related to growth and development. Pursuing goals related to knowledge acquisition and training motivation are both key factors in developing a sustainable career. It is therefore important to explore the relation between FTP, goal orientation and training motivation in both young and older workers. Our main objective is to examine if different profiles of FTP exist in young and older workers and if there are differences in goal orientation and training motivation depending on the FTP profile.

Research questions:

Do distinct profiles of FTP emerge in the data among young and older workers?

To what extent do young and older workers display similar profiles?

What are the differences across profiles in terms of goal orientation and in training motivation?

Theoretical background. Profiles of Future time perspective: In the literature, two conceptualizations of FTP exist (Betts, 2013). The concept is analyzed on the life level, which is called 'General Future Time Perspective' (GFTP, Carstensen & Lang, 1996), and on the work level, which is named 'Occupational Future Time Perspective' (OFTP, Zacher & Frese, 2009). Older workers, for example, might see OFTP as limited but still have an open GFTP because many opportunities still await once they will retire. Other older workers might perceive both OFTP and GFTP as limited. Different goal orientations (GO) are distinguished: performance approach, performance avoidance, learning approach, and learning avoidance approach. Training motivation is operationalized as training intention and perceived utility for a leadership training and software training. Based on de Lange et al. (2010) and Kooij and Zacher (2016), we expect different relationships with GO and training motivation depending on the FTP profile. Especially, cumulating both high OFTP and high GFTP should be associated with the highest levels on learning GO and training motivation.

Method. A sample of 630 workers, of which 363 young workers (< 35 years old) and 267 older workers (>50 years old), completed a self-report online questionnaire including demographics, GFTP (Carstensen & Lang, 1996), OFTP (Zacher & Frese, 2009), goal orientation (Janssen & Van Yperen, 2004) and training motivation. Group-specific latent profile analyses were performed among young

and older workers separately. Differences in goal orientations and in training motivation between profiles were then examined using the BCH option in M plus.

Results. A 3-profile solution was identified in the junior sample, and a 5-profile solution in the senior sample. Among young workers, overall differences in goal orientations between juniors' profiles were found for learning approach and learning avoidance. Differences were also found for intentions to participate in leadership training and for perceived utility of leadership and of software training. Among older workers, significant differences between profiles were only found for learning approach, with the profile cumulating both GFTP and OFTP exhibiting the highest scores. However, more significant differences were systematically found for training intentions and perceived utility, as profiles exhibiting high GFTP or high OFTP (or both) reported higher intentions and perceived utility compared to profiles with lower GFTP and OFTP scores.

Conclusion. Based on the FTP profiles, we conclude that older workers are a heterogeneous group. We should therefore adopt HR measures for sustainable careers to the FTP profile one belongs.

Limitations. Replications with adequate power and within-person longitudinal studies are necessary.

Relevance to congress theme. In the changing world of work sustainable careers become increasingly important for all ages.

Relevant UN SDG. goal 8 promote sustainable work for all

*Keywords: Future time perspective profiles, goal orientation, training motivation*

## **Symposium S070**

### **Working time organisation for a sustainable working life**

Anne Marit Wöhrmann, Federal Institute for Occupational Safety and Health (BAuA), Dortmund, Germany; Leuphana University of Lüneburg, Germany

science

What will be covered and why

Working time organisation determines employees' time for recovery and private life. These in turn are crucial aspects for employees' work ability and work motivation and, thus, for a sustainable working life. Keeping employees in the workforce healthy and motivated becomes increasingly important in times of demographic change as well as current and future crises. In this symposium, empirical findings on how working time should be organized to enable sustainable working lives are presented.

The first presentation takes on a systems perspective on working time organisation in the context of shift work and recovery in the health care sector. A series of studies including semi-structured interviews, actigraph measurements, and a recovery intervention give insights into how multiple levels within an organisation need to be involved to create sustainable working times. The following three presentations address the role of different aspects of working time organisation for employees' exhaustion taking on different methodological approaches. The second presentation of the symposium gives insights into an intervention study conducted in seven organisations. In this study, employees' availability for work outside regular working hours was redesigned to reduce their exhaustion. The following presentations deal with working time organisation during the work day. Findings from an employee survey, that is representative of the German workforce, reveal the extent of work break violations in terms of skipping and shortening of breaks as well as their relation with employees' exhaustion. Afterwards, findings from a five wave longitudinal study shed light on idle time at work, defined as a period during which employees cannot work on their core tasks for reasons beyond their control. The authors investigate effects of idle time on employees' exhaustion and engagement considering other working conditions. In the final presentation of the symposium, a study based on nearly 8000 older employees is presented in which the role of different aspects of working time organization for the relationships between work demands and older employees' expected ability and motivation to work until regular retirement age is explored.

Relevance to the Congress Theme

Investigating the role of working time organization for sustainable working lives is at the core of the congress theme "The future is now: The changing world of work". The current times create an increasing need to keep employees healthy and motivated in the workforce. Every employee is affected by their working time organization which is therefore key to address. Also, working time organization and with it recovery opportunities are affected by changes in technology and altered needs in times of different crises. Thus, there is an urgency to ensure occupational safety and health with regard to working time to ensure sustainable working lives. Findings presented in the symposium can contribute to this, amongst others, by demonstrating possibilities for interventions on different levels. In terms of delivery, it will be important to communicate the findings in political contexts as well as to make them accessible for practice.

Research/Practical Implications

The research presented in this symposium gives insights into the impact of working time organization for sustainable working lives, more specifically, on employees' recovery, exhaustion, and motivation. Thus, amongst others the findings extent research on work design and recovery. For practice, in the symposium different possibilities for a sustainable working time organization addressing different levels are demonstrated. They range from individual level recovery interventions to recommendations for shift scheduling on an organizational level as well as regulatory needs with regard to extended availability and work breaks. The findings also point out the need for employers to be mindful of contextual working conditions when organizing their employees' working time.

#### Overall conclusions

The findings presented in the symposium underline the important role of working time organisation with respect to employees' recovery, exhaustion, as well as motivation, and thus, sustainable working lives. Amongst others, recommendations with regard to shift scheduling, extended availability, and work breaks can be drawn from the studies presented. As the world of work is changing, it is important to continue to monitor trends with regard to working time organization and to be prepared to tackle arising challenges with interventions on individual, organisational, and societal levels.

*Keywords: working time, sustainable working life, mixed-method*

## Paper 1

### **Work hours and recovery – a systems perspective on future challenges and solutions for a sustainable working life**

Anna Dahlgren, Department of Clinical Neuroscience, Karolinska Institutet, Solna, Sweden

#### Aim

This research aims to understand I) which factors in the health care system promote or hindered sustainable work hours and recovery, both before and during the Covid-19 pandemic; II) the effects of interventions supporting recovery; and III) how different shifts arrangements affect recovery, cognition and health.

#### Theoretical Background

Work stress or demanding work hours do not need to have a negative impact on health and well-being if the employee achieves recovery (Geurts and Sonnentag, 2006). Recovery can take the form of either sleep or recovery behaviors that enable psychophysiological deactivation. Shift work is often associated with impaired recovery due to interference with circadian rhythms and homeostatic processes for sleep. Fatigue and sleep deprivation have been linked to several negative outcomes such as poor health, reduced cognitive executive function, impaired emotion regulation and increased risk of accidents. Thus, the organization of work hours and promotion of recovery during and between shifts are of importance for production as well as employee well-being and safety.

#### Design and methods

The studies adopted a mixed methods approach. Semi-structured interviews with HR-representatives, ward managers, scheduling assistants and employees were conducted and subjected to a thematic analysis. To examine the effects of different shifts, participants were followed with diaries and actigraphs for one week and analyzed using ANOVA. An intervention involving a group-administered recovery program supporting recovery in relation to shift work and work-related stress was evaluated in a RCT (99 participants in the intervention group, 108 participants in the control group). Measurements were obtained using questionnaires, diaries and actigraphs before the intervention, and one and six months afterwards. Participants were either recruited via the introduction programs for newly graduated nurses or via HR-departments. Data were analyzed with longitudinal analysis of mean response profiles, using the mixed model procedure.

#### Results

Interviews revealed several factors for achieving sustainable work hours within the context of participatory scheduling. Amongst others, it was observed how ward managers and scheduling assistants sought to ensure sustainable working hours by weighing the balance between production and staffing needs, individual preferences, and protection of health and safety. Interviews also highlighted how HR representatives managed the interplay between work hours, staffing and recovery during the pandemic. During this time, high demands for patient care were met by the frequent scheduling of overtime work double shifts and irregular shift patterns, as well as interrupted vacations. This resulted in nurses experiencing insufficient recovery.

Analysis of actigraphy data showed that quick returns (QR; < 11h between shifts), had an especially negative impact on recovery, with participants losing an average of 1h sleep per QR. Moreover, they reported more fatigue and increased risk of making mistakes. However, QRs also facilitated taking reports from patients and planning work, as these tasks were more often rated as 'very easy' following a QR compared to other shift combinations. Thus, QRs seem to benefit continuity in work processes, but may do so at the expense of recovery and safety.

The results from the intervention study, supporting newly graduated nurses' strategies for recovery in relation to work related stress and irregular working hours, showed that participants used the strategies in the recovery program. Moreover, there was a preventive effect on somatic symptoms for the intervention group as well as less burn-out and fatigue symptoms, increased sleep quality and less thoughts about work during free time.

#### Limitations

The presented studies have all been conducted in Sweden and may not be generalizable to other national contexts.

#### Conclusions

Improvements to the scheduling process should involve managers, scheduling assistants and employees, while simultaneously organizations should work towards sufficient staffing. Quick returns should be minimized. Future work scheduling interventions should consider contextual factors and work processes. As well as improving work schedules, organizations can support individual employees through interventions that support their strategies for recovery in relation to irregular work hours and work-related stress. In sum, sustainable work hours and recovery needs to be addressed at multiple levels within the organization.

#### Relevance to the Congress Theme

This research is relevant to the congress theme "the future is now" as it contributes to knowledge about future challenges and directions for interventions supporting sustainable work hours and recovery in health care. This is of importance as health care faces several challenges due to demographic changes, lack of nurses and high turnover of staff.

#### Relevant UN SDGs:

Our findings suggest that a systems view is needed to create a sustainable work environment in the health care setting. This could help fulfill the SDGs good health and wellbeing and decent work and economic growth.

*Keywords: work hours, recovery, interventions*

## Paper 2

### Redesigning extended availability – An intervention study

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#### Background

Studies that investigated the effects of availability for work (extended availability) outside regular working hours found that extended availability is associated with impaired well-being. However, the identified mean effects are rather small and longitudinal studies that distinguished between within- and between-person effects find considerable between-person variance in the effects. Based on these results, a variety of boundary conditions and specific characteristics of availability have been identified that may increase or decrease the detrimental effect. Building on these results we developed an intervention to systematically redesign extended availability demands in order to reduce the negative effects of availability while simultaneously preserving its potential positive flexibility gains for the employees.

#### Intervention

The starting point of the intervention was a survey to systematically analyze the demands for extended availability and the design characteristics of the experienced extended availability that moderate its effects on well-being. After the survey a workshop was conducted to feedback the survey results to the participants, to inform about the optimal design of availability and to compare this with the specific design of the currently realized availability. After that, participants were asked to propose redesign measure to improve the current design of availability, i.e. reducing the expectations of supervisors, customers or co-workers or to optimize the boundary conditions, i.e. increase the own control on calls or to optimize flexibility gains for the workers. Finally, an implementation plan for employees, supervisors and management was adopted to realize the proposed redesign measures.

#### Method

To evaluate this intervention, we conducted a study within 7 organizations. 181 employees participated in a pre-post longitudinal study. We measured exhaustion, availability demands. and the design characteristics predictability of calls, control of calls, availability regulation, technical equipment adequacy, flexibility gains, and legitimacy of availability before and six months after the design workshop. We conducted repeated measurements ANOVA with workshop participation and time independent variables and exhaustion and the availability characteristics as outcomes. Furthermore, we used path analyzes to analyze parallel changes of availability characteristics and exhaustion.

#### Results

The ANOVA results revealed that the participation at the design workshop was associated with changed in the design of extended availability. Workshop participation was associated with a decrease of availability expectations and reported calls to work outside regular working hours. Furthermore, workshop participation was associated with an increase in flexibility gains and the perceived legitimacy of extended availability. Independently, of the workshop participation we found that changes in the availability design characteristics between t1 and t2 were associated with changes in exhaustion.

## Limitation

The intervention aimed at finding and implementing structural changes in the design of extended availability rather than individual strategies to cope with availability. Therefore, the intervention effects should not only have affected the workshop participants. Due to organization constraints it was not possible to clearly distinguish survey participants that were affected by changes and those that were not affected. In the current study we only use the workshop participation as the separator between intervention and control group which is not optimal to analyze the effect of the intervention. Furthermore, the results could have been affected by a significant number of dropouts between t1 and t2. Finally, the reported relationship between intervention, design criteria and outcomes are mainly correlation of parallel changes. Therefore, we have to be careful to draw on causal relationships.

## Discussion

The results support assumption of prior studies that characteristics of extended availability may vary and the characteristics may moderate to the effects of extended availability on impaired well-being. Other than prior cross-sectional studies this study demonstrated in a longitudinal design, that changes in characteristics of extended availability may be associated with changes in impaired well-being. Furthermore, this study demonstrated that the design of the extended availability on a specific work place can be changed by systematic intervention to optimize the design of extended availability. For workplaces that highly rely on employee flexibility and availability also outside regular working hours, organization should systematically analyze the specific design of the extended availability and find derive measures to optimize the availability design in a way that is non-detrimental.

## Relevance to the Congress Theme

Our research topic is especially relevant to the congress theme “the future is now”, because we have to expect a further development of information and communication tools and increasing demands for flexibilization. In this new and future works of work, we have to find design solutions for healthy workplaces.

## Relevant UN SDGs

Our findings could help fulfill the SDGs good health, wellbeing and decent work in an increasingly flexible world of work.

*Keywords: availability, intervention, flexibility*

## Paper 3

### Work break violations and employees' exhaustion

Laura Vieten, Anne Marit Wöhrmann, Alexandra Michel & Johannes Wendsche | Federal Institute for Occupational Safety and Health (BAuA), Dresden, Germany

#### Research goals and why the work was worth doing

Work breaks are an important opportunity for at-work recovery. Previous studies have found that work breaks are related to reduced fatigue and improved health. However, many studies focused on specific occupational groups. Thus, there is little knowledge about the prevalence and health effects of work breaks across occupational groups, which would be needed to identify implementation gaps and to better understand work breaks' potential for health protection in general. Furthermore, many previous studies examined different work break characteristics (e.g., frequent break skipping and work break duration) in isolation, although they may be correlated. Hence, the single and combined relations between different work break characteristics and employee health are still masked. Therefore, this study contributes to literature by using data from a nationally representative study of the German working population and examining three organizational work break characteristics, namely skipping work breaks, interruption of work breaks, and duration of the meal break. This study aims, first, to investigate the distribution of these work break characteristics among German employees in general and different employee groups, and, second, to examine their relationships to employees' exhaustion.

#### Theoretical background

According to the effort-recovery model (Meijman & Mulder, 1998), fulfilling work tasks requires effort and hence causes load reactions such as fatigue or an accelerated heart rate. Recovery is needed to mitigate these load reactions and prevent their accumulation, which could result to chronic reactions such as prolonged fatigue or exhaustion in the long term. Since work breaks are an important recovery opportunity, we hypothesize a positive relationship between frequent skipping and frequent interruption of work breaks and employees' exhaustion as well as a negative relationship between the duration of employees' meal breaks and their exhaustion.

#### Methodology

Data from the BAuA-Working Time Survey 2017, a nationally representative study of the German workforce were used. We restricted the sample to full-time dependent employees aged 18 to 65 years, resulting in a final sample of 5979 participants (63% male, average age: 48.34 years). The distribution of the three work break characteristics was examined calculating percentage shares, mean values, and standard deviations. To test the relationships between work break characteristics and employees' exhaustion logistic regression analyses were used. We used three exhaustion complaints as dependent variables: (1) general tiredness, faintness, or fatigue, (2) physical exhaustion, and (3) emotional exhaustion.

#### Results

We found that 29% of the employees reported frequent skipping of their work breaks, and 16% reported frequent interruptions. Meal breaks lasted about 35 minutes on average. There were significant positive relationships between frequent skipping of work breaks and all three exhaustion

complaints and between frequent interruptions of work breaks also. The duration of the meal break had a significant negative relationship with physical exhaustion.

#### Limitations

Limitations are, for example, a limited generalizability to other countries due to the German sample or the fact that no further work break characteristics, such as activities during work breaks or recovery experiences, were examined. Besides, there are some methodological limitations due to the cross-sectional and self-reported nature of the data.

#### Conclusions

Although German legislation mandate work breaks, our data indicate that many employees frequently skip their breaks and experience break interruptions. In line with previous research and the assumptions of the effort-recovery-model, we found that the three examined work break characteristics, especially skipped and interrupted work breaks relate to employees' exhaustion. Thus, employers and employees should try to avoid skipping and interruptions of work breaks.

#### Relevance to the Congress Theme

This study's topic is relevant to the congress theme "The Future is Now: the changing world of work", since against the background of an increasingly flexible world of work and increasing performance and time pressure, employees' recovery and thus also the organization of their work breaks plays a vital role.

#### Relevant UN SDGs

Our study reveals that work break organization relates to employees' exhaustion and thus health. Hence, study results might help to fulfill the UN SDGs of good health and well-being (goal 3) and of decent work (goal 8).

*Keywords: occupational health, recovery, rest breaks*

## Paper 4

### Idle time – demand or resource?

Martin Zeschke & Hannes Zacher | Wilhelm Wundt Institute of Psychology, Leipzig University, Germany; Laura Venz, Leuphana University Lüneburg, Germany

#### Research goals and why the work was worth doing

Idle time at work is a period during which employees cannot work on their core tasks for reasons beyond their control. For example, they have no customers, are finished with their work but cannot clock out, or have to wait for feedback from others. Idle time is a frequent experience at work and was shown to have detrimental effects on employees.

We argue that idle time is a complex situation that unfolds different (negative but also positive) consequences, depending on the individual work circumstances. For example, job demands and job autonomy (as a job resource) may influence how employees experience idle time. Moreover, the effects of idle time may differ when working from home or not, which has become an increasingly important work circumstance in recent years.

The goal of this study is two-fold. First, we aim at identifying general effects of idle time on employees over time, considering exhaustion and engagement as negative and positive outcomes. Second, we want to identify under what circumstances (moderators), when (within-person level), and for whom (between-person level) the different effects of idle time show.

#### Theoretical background

We use the job demands resources model to research whether idle time is more of a demand, a resource, or both by studying exhaustion and engagement as outcomes. Additionally, we test moderators in these relationships, namely job resources (autonomy), job demands, and remote work, to understand under which circumstances idle time might function as a resource rather than a demand.

#### Methodology

We conducted a 5-wave longitudinal study over the course of one year (October 2020 – October 2021) with over 1,000 employees at T1. Participants were at least 18 years old and worked 20h/week or more. We conducted a hierarchical mixed model multiple linear regression to analyze the data.

#### Results

We found that idle time was common for employees and that it had negative effects on them: It was associated with higher emotional exhaustion and lower emotional engagement. We found a crossover interaction effect of work demands on the relationship between idle time and emotional engagement, such that the negative relationship was stronger when demands were low and turned positive when demands were high (between level). Autonomy unexpectedly strengthened the negative relationship between idle time and emotional engagement, such that the relationship was stronger when autonomy was high and weaker when autonomy was low (within and between level). We found no moderating effects of remote work (both with a binary predictor (no vs. yes) or with days/week) and no moderating effects on exhaustion.

#### Limitations

We used self-reports relating to periods of three months which may lead to common-source and hind-sight bias. We did not focus on the antecedents of idle time, which makes it difficult to prevent idle time from occurring. We did not assess whether employees worked from home voluntarily, which may influence whether the effects of remote work are beneficial or not.

#### Conclusions – research and or practical implications

Our research shows that idle time has uniformly detrimental effects for employees, clearly placing it as a job demand that should be prevented. The negative effects of idle time may be buffered by demands and strengthened by autonomy, which has implications for work design. We found no effects of remote work on the relationship between idle time and the outcomes, which could be further investigated in future studies, for example on a daily level.

#### Relevance to the congress theme

This research contributes to answering the question how we want to work in the future with focus on individuals and their work day. In an increasingly flexible working world, it is important to know how idle time affects employees and companies in order to prevent negative effects.

#### Relevant UN SDGs

This research contributes to UN SDGs “good health and well-being” and “decent work and economic growth”. Because idle time was shown to have detrimental effects for employee engagement and well-being, idle time is detrimental to said goals. People are active beings who want to engage with their environment and actively contribute to society. During idle time, this is not possible for many. Simultaneously, idle time is not only an individual problem. Companies lose money when paying employees to be idle and should help employees to prevent it or to make use of it. It may be time to take a proactive approach to managing idle time: allowing employees to engage in activities other than their actual job duties or to take time off work.

*Keywords: idle time, demands, resources*

## Paper 5

### The role of working time conditions for the relationship between job demands and retirement

Anne Marit Wöhrmann, Alexandra Michel & Julia Fähnrich | Federal Institute for Occupational Safety and Health (BAuA), Dortmund, Germany

#### Research goals and why the work was worth doing

Early retirement can have numerous disadvantages for employees, organizations and society. Creating suitable working conditions to maintain employees' willingness and ability to work until regular retirement age thus appears increasingly important.

Working conditions should not be too demanding, as previous research has shown, that high job demands might contribute to early retirement. However, certain job demands – for example physical demands as heavy lifting and carrying, or psychological demands as high work intensity – may be inherent to a job due to its characteristics and the job tasks that need to be accomplished. This is why they cannot be easily adapted to employees' needs.

In this case, organizational framework conditions under which the work is conducted may be especially important. A central framework condition is the working time regime as it determines how long and at which times employees are exposed to possibly adverse working conditions. Hence, the goal of this study was to shed light on how physical job demands and psychological job demands are related to the anticipation of being able to retire at regular retirement age and the willingness to do so. Primarily, we were interested in how this relationship differs under different working time conditions.

#### Theoretical background

According to conservation of resources theory (COR theory; Hobfoll, 1989) employees lose resources when coping with high physical and psychological job demands. This resource loss intensifies, when they are simultaneously confronted with working time demands. For that reason, we assume that these job demands are negatively related to the anticipation of being able to retire at regular retirement age (vs. early retirement) and the willingness to do so. Furthermore, we hypothesize that demanding working time conditions – more specifically, excessive working hours, frequent changes in working hours and night shift work – as a moderator strengthen this negative relationship. According to COR theory, providing resources might compensate for resource losses. This is why we expect that designing resource-friendly working time conditions, more specifically work time control, might buffer the assumed negative relationships.

#### Design/Methodology

We used data from the BAuA Working Time Survey 2015 – a representative employee survey. The sample included 7859 German employees aged 50 to 65 years. Around 61 % of these employees anticipated that they were not willing and 69 % anticipated that they were not able to work until regular retirement age. We conducted hierarchical logistic regression analyses to examine main and interaction effects of job demands and working time characteristics. For this purpose, we computed one model each for the willingness and for the ability to remain employed until regular retirement age.

#### Results

Physical job demands were related to the anticipated ability, but not to the willingness, to remain employed until regular retirement age. Work intensity was negatively related to both dependent variables. Night shift work strengthened the negative relationship between physical job demands and both dependent variables, and frequent changes in working hours strengthened the negative relationship between work intensity and the anticipated ability to work until regular retirement age. The remaining moderation effects were non-significant.

#### Conclusions for research

We identified risk factors for early retirement that might arise from an unfavorable combination of job demands and working time conditions. From our results, it can be concluded that physical job demands and work intensity increase the risk of early retirement, especially when they occur in combination with night shift work or frequent changes in working hours. Contrary to expectations, work time control did not have a buffering effect.

#### Relevance to the Congress Theme

Our research topic is especially relevant to the congress theme “the future is now”, because due to demographic change the proportion of older employees is expected to grow enormously in the following years. An early exit from the work force might thus have severe consequences, for instance the overburdening of welfare systems, loss of know-how in companies or old age poverty. This is why there is a need for action to prevent early retirement by designing working (time) conditions that better meet the aging employees’ needs. Our research contributes to the understanding of how the choice of suitable work design measures can help keep older employees in the workforce.

#### Relevant UN SDGs

Our findings suggest that early retirement could be avoided by providing adequate working conditions. This could help fulfill the SDGs no poverty , reduced inequalities , good health and wellbeing and decent work and economic growth .

*Keywords: working time, retirement, job demands*

## **Symposium S071**

### **Team features and processes supporting innovation**

Nicola Cangialosi, Università degli Studi di Firenze

science

What will be covered and why

Most of the research on workplace innovation has traditionally focused on personal aspects, uncovering several individual-level antecedents and inhibitors. Nevertheless, much of innovative ideas at work are carried out by teams, and teamwork, in general, has been a growing feature of present organizations (Bell et al., 2018). Modern organizations increasingly rely on their teams to increase their levels of innovation by entrusting them with the resolution of difficult problems or the development of new procedures and products. Hence, understanding what factors affect innovation in teams is very important for organizational and managerial research and practice. For this reason, researchers are bringing increasing attention to team characteristics and processes that lead to innovation. The goal of this scientific symposium is to showcase cutting-edge team research on innovation.

This symposium consists of four distinct empirical studies that examine the new topics within the team realm and extend our understanding of the antecedents of innovation.

The first study “Uncovering the potential of team faultlines to boost team innovation: Relationship between team faultline strength, team innovation and social learning” examines the relationship between team faultline strength and team innovation, and the mediating role of social learning in such a relationship.

The second study “Voice climate, perceived team support, individual voice, and innovation: a cross-level study” examines the role of voice climate, perceived team support, Individual Voice, and innovation drawing from social exchange theory and change and innovation perspectives. This study proposes a model that investigates both individual and team level mechanisms leading to innovative behaviors.

The third study “Consideration of Future Consequences and Innovative Work Behaviour: a multilevel view” presents a multilevel model cross-level hypothesis which proposes that the Consideration of Future Consequences impact Innovative Work Behavior, both at the individual and at the team level of analysis.

The fourth study “Team personality composition for innovation, a fsQCA approach for building innovative teams” examines the role of different personality traits in teams for innovation. By employing fuzzy set qualitative comparative analysis this presentation will explore optimal configurations of personalities for promoting team innovation.

Relevance to the Congress Theme

The relevance of this symposium is due to the role of innovation in the dynamics of the future of the world of work. Indeed, the world of work is changing shaped by powerful forces, so that organizations can keep pace and proactively intervene in an ever-changing environment is key to being able to constantly innovate. For this reason, innovation is a fundamental characteristic for shaping the future of the world of work.

Research/Practical Implications

This symposium offers several implications, from a research perspective it provides several perspectives to advance our knowledge of the team-level characteristics that can influence the innovation process. From a practical point of view, it offers guidance to organizations, leaders or HR professionals who aim to strengthen employee-driven innovation by highlighting specific team features.

#### Overall conclusions

The belief that the work of teams naturally produces more, and better ideas is a common misconception (Coursey et al., 2018). Research has repeatedly shown that teams produce fewer and worst new ideas, when compared to a similar number of non-interacting individuals (Mullen et al., 1991). Contextually, when teams are appropriately composed and successfully managed, they can push individuals to accomplish more than they can on their own (Bell et al., 2018). For this reason, finding ways to best design and lead teams is paramount for organizational studies and although great progress has been made over the past years, there is still much to understand.

*Keywords: Team, Innovation*

## Paper 1

### **Uncovering the potential of team faultlines to boost team innovation: Relationship between team faultline strength, team innovation and social learning**

Marco Pena Jimenez, Université Paris Nanterre

science

#### Research goals

In a growingly diverse world of work, team faultlines, or the symbolic dividing lines which create homogenous subgroups within the same group based on their attributes (e.g., social, informational) (Lau & Murnighan, 1998), has become a key research line to seize the opportunities of teams to foster innovation. While numerous studies have shown the negative effects of team faultlines on team outcomes (e.g., team performance, creativity), considering the social nature of innovation, other more nuanced effects of team faultlines must not be overlooked through examining different team processes such as social learning (e.g., Liu et al., 2021; Mitchell et al., 2022). In this regard, the research goals were the following: 1) to examine the relationship between team faultline strength and team innovation, and 2) to evaluate the mediating role of social learning in such a relationship.

#### Theoretical background

Social Distance Theory (SDT; Brewer et al., 1993) posits that different subgroups can coexist within a group, where team members from a subgroup experience a psychological distance from team members from other subgroups. That is, SDT theorizes two underlying aspects of a group dynamic (i.e., within-subgroup, inter-subgroup) that can help to reveal different facets of team faultlines. Regarding goal 1, several studies have shown that team faultline strength is positively associated with task and relationship conflict, and negatively related to team cohesion and performance (Thatcher & Patel, 2012). In accordance with SDT, and from an inter-subgroup view, faultlines strength may create inter-subgroup frictions, thus negatively impacting team innovative behaviour (i.e., teams generating, promoting and implementing new ideas; Amabile & Pratt, 2016). As regards goal 2, recent studies have also shed light on the complex relationship between faultlines strength and innovative-related behaviours at a team level, and more precisely how social learning behaviours (i.e., sharing information, knowledge acquisition) mediate this relationship (e.g., Chen et al., 2019; Liu et al., 2021). According to SDT, and from a within-group angle, team faultlines may positively relate to social learning since members from the same subgroup can learn from others (e.g., leaders, colleagues), which in turn may positively impact team innovation.

#### Design/Methodology/Approach/Intervention

Based on the above, a cross-sectional study was carried out in 73 teams (N = 2096) from the Italian Airforce. By using a cluster-based approach (Meyer & Glenz, 2013), this study explores the relationship between informational faultlines strength (through three attributes: team tenure, organizational tenure, age) and team innovation through social learning.

#### Results

The current findings revealed that faultlines strength, in the form of informational-based faultlines, was negatively and directly related to team innovative work behaviour. In addition, this study showed the positive indirect relationship between team faultlines strength and team innovative behaviour via social learning.

## Limitations

The present work is not exempt from some limitations. First, the present study focused on faultlines related to informational differences, further studies might therefore consider exploring other attributes (e.g., education, expertise). Second, team faultlines were measured through a strength approach, organizational scholars are thus encouraged to study other approaches (e.g., distance, temporal alignment). Last, considering the study design, no causality can be inferred.

## Conclusions – research and or practical implications

Current findings have two main practical implications. On the one hand, organizations might consider acknowledging the value of informational or work experience differences (e.g., organizational and team tenure), rather than other demographic characteristics (e.g., sex, race). On the other hand, HR and leadership strategies enabling social learning (e.g., promoting information sharing, feedback seeking) seem to be able to counterbalance the detrimental effects of faultline strength.

## Relevance to the Congress Theme

As regards its relevance to the congress theme, considering that organizations are increasingly changing and diverse environments, this study provides new insights to unlock the potential of team faultlines to develop innovation via social learning, thus benefiting from team diversity in the workplace.

## Relevant UN SDGs

This study responds to the call of the UN SD goal 8 (decent work and economic growth), and more specifically, creating supportive environments to foster creativity and innovation in the workplace.

*Keywords: faultline strength, social learning, team innovation*

### **Paper 3**

#### **Consideration of Future Consequences and Innovative Work Behaviour: a multilevel view.**

Jan Schmutz, University of Zurich; Mirko Antino & Alejandro Diaz Guerra-Romero | Universidad Complutense de Madrid

science

Research goal and why the work was worth doing:

This research aims to test a multilevel model cross-level hypothesis which proposes that the Consideration of Future Consequences might impact Innovative Work Behavior, both at the individual and at the team level of analysis. This approach extends previous research on team composition and innovation, as well as, on individual level of innovation.

Theoretical background:

The Consideration of Future Consequences (CFC: the extent to which individuals consider, and are influenced by, the potential immediate and distant outcomes of their current behaviour), is an individual characteristic with relationships with several behavioural domains (health, finance, work, etc.). Within the work domain, literature shows that having higher levels of CFC leads to a better quality of job performance and job safety, reduces intergroup conflict and increases Organizational Citizenship Behaviours (OCBs). However, to date, no research has investigated how team members' CFC differences could impact group-level outcomes, like group-level Innovative Work Behaviour (IWB). Then, analysing this issue from an Equity Theory point of view, we predicted that, although having higher levels of CFC will foster individual IWB in the short and mid-term, the intra-group CFC variance will have a negative impact on group-level IWB in the long-term, since these high CFC team members will scale back the effort they put in IWB as they perceive that it is not accompanied by their less innovative co-workers.

Design/Methodology:

We are collecting data from a public Hospital in Switzerland, with multilevel data structure (i.e.: professionals, units, hospitals) over three time waves. Multilevel models were used to test level 1 (individual level CFC – individual level IWB) besides level 2 (team level CFC differential - team level IWB) relationships. Data collection is still ongoing and will be ended in 2022.

Results Obtained:

Preliminary results obtained through a subsample show a positive relationship between individual level of CFC and individual level of IWB ( $r = .23, p < .05$ ). We will present results differentiating short and mid-term time intervals (data are currently not available for the third wave), in order to understand differential effects according to different time frames.

Conclusions:

Preliminary results support our hypothesis at level 1, but do not support our hypothesis at level 2: CFC influence individual-level outcomes, while group-level CFC differences do not seem to impact team-level outcomes (Hypothesis 2 was tested using the same time frame as for Hypothesis 1 - long term effect will be tested once data collection ends).

Limitations:

This research is not free from limitations. The main limitation is that we are currently showing preliminary results for a subsample and only with two waves of collection. The second limitation is the specific time frame that was chosen (4 weeks interval between each measurement), this will be discussed according to the results.

Relevance to the Congress Theme:

For scholars, this study extends prior research in Innovation literature, showing an individual characteristic – not considered until today in the specialized literature - which fosters individual-level IWB. At the same time, it advances our knowledge of team composition in terms of individual differences, investigating how having partners with similar or dissimilar levels in certain traits – CFC, in our case – could impact group-level outcomes. For HR practitioners, especially those in the healthcare sector, it highlights the importance of considering CFC and teams' CFC composition in understanding individual and team-level IWB.

Relevant UN SDGs:

This research might be framed in the 8 th objective of the 2030 agenda (decent work and economic growth) as it generates knowledge about individuals and teams' performance, especially considering Innovative Work Behavior as an outcome.

*Keywords: Consideration of Future Consequence, Innovative Work Behaviour*

## Paper 4

### Team personality composition for innovation, a fsQCA approach for building innovative teams

Nicola Cangialosi & Carlo Odoardi | Università degli Studi di Firenze

science

#### Research goals

The present study sets up to analyze the personality composition of teams and its link to team innovation. The research goal is to identify specific combinations of the five personality traits conducive to team innovation and to highlight substitutive and/or synergistic mechanisms thanks to the use of the fuzzy-set qualitative comparative analysis (fsQCA). The obtained results offer a contribution to the literature by delivering a finer-grained perspective capable of addressing the synergistic effects of personality characteristics in teams.

#### Theoretical background

Organizations are increasingly relying on team-based work systems to increase their levels of innovation (Mohrman, et al., 1995), consequently, both researchers and practitioners have strived to find ways to design innovative teams by identifying the factors that promote team innovation (West, 2002). Including the right mix of people in the team is critical to the team's success and its ability to innovate (Mathieu et al., 2014), yet little is known about how to effectively build innovative teams (Chatzi et al. 2020) and only a few studies have examined the relationships between personality composition in teams and innovation (e.g., Den Hartog et al., 2020). Personality represents the structures and propensities that reflect the unique patterns of an individual's thoughts, emotions, and behaviors (Funder, 2001). Historically, the most used model to describe an individual's personality is that of the Big Five (McCrae & Costa, 1987), including openness, conscientiousness, extraversion, agreeableness, and neuroticism as key traits (LePine, et al., 2011). Team personality composition represents the aggregation in team-level indices of the average of everyone's personality trait scores (e.g., Barrick et al., 1998). Thus, team personality composition is a concept where the different personality traits are combined so that different team members contribute to the team with their different and unique personalities (Kozlowski & Klein, 2000). The elevation of personality traits in teams has received considerable attention as a predictor of team innovation (Chatzi et al., 2020) and previous research suggests that teams composed of members with different levels of each of the five personality dimensions have the potential to exhibit high team innovation (e.g., Robert et al., 2004). Specifically, while some studies suggest that composing teams of individuals high on extraversion or openness to experience may incentive high levels of innovation (Driskell et al., 1987), others have stressed the importance of assembling teams composed primarily of individuals low on conscientiousness (Moynihan & Peterson, 2004). Nevertheless, other research advises that agreeableness and neuroticism may also be relevant when composing teams that have the potential to produce creative ideas (Goncalo & Staw, 2006). The results mentioned above are based on studies focusing on single personality characteristics, but teams are necessarily made up of a blend of all five traits. In this regard, the effects of group trait configurations, or joint effects between traits, have so far been unexplored although such analytical approaches seem necessary for further advances in the field. The present research aims at filling this gap by examining specific configurations of personality traits in teams that are associated with team innovation.

#### Design/Methodology/Approach/Intervention

The research question is addressed through a two-wave self-report survey of 69 teams and 379 employees of two Italian manufacturing company by adopting a fuzzy-set qualitative comparative analysis (fsQCA).

#### Results

Results reveal five compatible configurations of team personality composition leading to high levels of team innovation.

#### Limitations

All data were collected with self-reporting measures which may lead to the common method bias in observed relationships. However, for dealing with this issue, the study adopted the statistical recommendations of Podsakoff et al. (2012).

#### Conclusions – research and or practical implications

This research is one of the first to empirically test the relationship between team personality composition for team innovation using a configurational approach. By doing so it contributes to the literature by advancing the notion that innovative endeavors are determined by the holistic effects of different interdependent configurations of personality within teams. Additionally, presented results offer guidance for managers and organizations that aim to strengthen team-driven innovation by offering different recipes of team personality composition.

#### Relevance to the Congress Theme

This work is relevant to the theme of the congress "the Future is Now: the changing world of work" as it offers specific ways to implement innovative teams, and these are key factors in the ability of organizations to adapt to the continuously changing world of work.

#### Relevant UN SDGs

This study is relevant to the UN SD goal 8 aiming at generating awareness about teams' innovation as means to both decent work and economic growth.

*Keywords: Team personality composition, innovation, fsQCA*

## Symposium S072

### A matter of trust: Collaborating with Artificial Intelligence at Work

Anna-Sophie Ulfert-Blank & Sonja Rispens | Eindhoven University of Technology

science

Over recent years, artificial intelligence (AI) has become increasingly competent, reliable, and autonomous. By assisting employees in decision-making tasks or by taking over dirty or dangerous work, the implementation of AI systems is transforming work across industries (Parker & Grote, 2020). Although human-AI work collaboration is promising, transitioning to a wider implementation of AI brings challenges (Berkers et al., 2019; Ulfert, et al. 2022). Recent studies show that employees have ambivalent reactions toward AI: some people are reluctant to rely on and accept decisions made by AI, whereas others rely too much on the system, decreasing their situation awareness (Kaplan et al., 2021). For human-AI work collaboration to become a success, it is pivotal that human workers perceive the system as trustworthy and develop trust towards it (Langer et al., 2022; Ulfert & Georganta, 2020). Building on theories of organizational and team trust as well as trust in technology, the papers presented in this symposium shed light on the distinct factors that affect the development of trust towards AI-systems in the work setting.

This symposium hosts four empirical studies that investigate trust and trust development in human-AI collaboration at work. The first study, by Kares and colleagues, examines human-AI collaboration in personnel selection. Specifically, it investigates the question of whether moving towards more hybrid human-automated decision support systems can be beneficial for trust development. The second empirical study, by Hunsicker and Langer, explores people's preferences regarding the trade-off between transparency and accuracy of AI systems and their trust in the system. The last two contributions move towards trust in human-AI team settings. Erengin and colleagues focus on how an individual's beliefs about the reliability, dependability, and competences of an AI agent depend on a third, human, party. Georganta and Kaut investigate interpersonal and team trust, comparing human-AI and all human teams when working on different task types.

Together, the findings of these studies suggest that, overall, people are inclined to have more trust in fellow humans than in AI systems. This may be particularly the case when the AI system functions highly autonomously. Hybrid systems - with both humans and AI systems involved in task processing - are likely to increase employees' trust. However, this effect may depend on the task and social contexts. The implications of this novel research will be discussed by Sonja Rispens, who is an expert on collaboration processes at work, including human-AI collaborations. She will invite the audience to engage in the discussion of the theoretical, methodological, and practical implications of these studies in light of current organizational change.

Relevance to the conference theme : The world of work is changing; technological innovations such as AI are expected to play a larger role in many if not all, work processes. Understanding what constitutes effective human-AI collaboration is pivotal to safeguarding high-quality work for human workers and aiding the promise of augmented performance.

Research/Practical Implications :

To develop and design effective AI systems and human-AI collaboration, it is important to gain a better understanding of how human-AI collaboration differs from more traditional collaboration settings. The findings of this symposium aim to contribute to the literature by highlighting the significant role of trust for effective collaboration. Further, it investigates the impact of the AI's and

the user's characteristics, the task and social context, and performance outcomes on trust. The line of research presented in this symposium will ultimately provide insights for the development and implementation of AI-systems in work processes such that the quality of work remains high.

To enable effective human-AI collaboration, we propose to consider both the system's as well as the user's characteristics when implementing AI systems at work.

discussant: Sonja Rispen, Eindhoven University of Technology

*Keywords: Artificial Intelligence, Trust, Collaboration*

## Paper 1

### Trust in Hybrid Human-Automated Decision-Support

Felix Kares, Markus Langer, Clea Protzel, Richard Bergs & Cornelius J. König | Saarland University

Research goals and why the work was worth doing: Although there is extensive research on trust in, both, human and automated support, little is known about trust in an automated system and a human decision-maker working together. We explore these kind of hybrid collaborations as they reflect a likely implementation of automated systems in future high-risk decision-making processes such as personnel selection given that ethical guidelines (e.g., the European Commission's Ethics Guidelines for Trustworthy AI, 2019) and proposed legislation (AI Act, 2021) call for keeping humans in the loop.

Theoretical background: Automated decision support (DS) systems are realizations of mechanical combination of data that can increase the validity of job performance prediction compared to holistic data combination methods (Kuncel et al., 2013), even if scientific evidence regarding validity automated DS is just emerging (Hickman et al., 2021). Although there is potential for high perceived trustworthiness for automated decision-support, people might not necessarily perceive automated systems as capable of high-quality personnel selection (Langer, König, & Busch, 2021). We hypothesize that depending on whether the task is more suited for automation or humans, the respective agent is perceived more favorably. Additionally, hybrid DS might combine the positive aspects of both agents and achieve favorable attitudes in both contexts.

Methodology: We conducted two experiments where participants received a preselection of applicants from a DS. The task context was personnel selection (Study 1, N 1 =170), a task presumed to be more suited for humans, and the selection of employees to receive a bonus payment (Study 2, N 2 =154), presumed to be more suited for automation. The preselection was produced either by a human, an automated, or a hybrid human-system DS. Participants then had to decide whether they accept the preselection and had to rate trustworthiness and trust towards the decision-support. We additionally examined a possible trust violation by presenting one group of participants a preselection that included predominantly male candidates, thus reflecting possible unfair bias. This resulted in a 3 (DS type: human, automated, hybrid)×2 (gender balance: predominantly male, balanced) between-subjects design.

Results: The main findings of our studies are that (a) hybrid DS led to higher trust and trustworthiness perceptions than automated support and was on-par with human DS, (b) the impact of trust violations did not differ based on DS type, and (c) the context of application alone did not elicit different perceptions between DS types. We also did not find a greater difference in trust and trustworthiness of balanced compared to unbalanced preselections for human relative to automated DS.

Limitations: First, our experiments only involved a simulation of selection tasks, the selection situation may thus not be perceived as involving any risk for our participants. The higher risks in real decisions could affect how HR managers perceive different types of DS, for example when it comes to the perceived ability of support or importance of the task. Second, the dynamic nature of trust is not reflected in our studies because participants only completed a single round of a selection process. We were thus only able to evaluate initial trust in DS. Attitudes could change after repeated

interactions and in cases where decision-makers have to live with the consequences of decision-support.

Conclusions – research and or practical implications: Our studies demonstrate that, whereas fully-automated decisions involve possible negative reactions, the level of trust in hybrid DS, consisting of a human and a system closely collaborating, may be no different than the level of trust in human-only support. To implement DS that benefits from the possible advantages of automated systems without having to fear possible negative reactions by important stakeholders, organizations could therefore consider human oversight for high-risk decisions instead of implementing full automation.

Relevance to the Congress Theme: The world of work is changing, automation is becoming more ubiquitous and with it the calls for regulation to ensure accountability for and trust in automated outcomes. A likely implementation of this is human oversight in the form of increasing interactions between humans and systems, thus creating hybrid DS systems.

Relevant UN SDGs: By keeping a human in the loop, we believe that our work can contribute to the sustainable development goal of furthering technological innovation. The acceptance of human system interaction will be crucial to ensure a future in which automation can be introduced in a responsible way that minimizes adverse impacts.

*Keywords: Trust, Decision Support Systems*

## Paper 2

### **Unexplainable accuracy or explainable faultiness? Investigating the accuracy-transparency trade-off of AI-based systems**

Tim Hunsicker & Markus Langer | Saarland University

Research goals and why the work was worth doing: The choice between different algorithmic approaches underlying AI-based systems is accompanied by the fact that the approaches yielding the most accurate outputs are often the least transparent and the most transparent ones are the least accurate. Therefore, when choosing between approaches in everyday use contexts, there is an accuracy-transparency trade-off. The aim of this study was to shed light on the decision-making and weighing process considering this trade-off from a psychological perspective.

Theoretical background: When choosing between different AI-based systems, the decision can be influenced, for instance, by information about system performance, by the role of the person who chooses the system within the decision process in terms of accountability and the context of application. Since AI-based systems and their properties can be described in various ways, we expected that the choice of a system, which involves trade-offs between performance and transparency, may be influenced by framing effects. Specifically, the performance of systems could either be framed as accuracy rate or as error rate. In the context of the accuracy-transparency trade-off, different framing effects could occur: goal framing could influence system choice, because system performance information is weighted more strongly when it is displayed as error rate compared to when it is presented as accuracy (Levin et al., 1998). At the same time, attribute framing suggests that there may be a higher perceived competence and ultimately a higher level of trust when system performance is framed positively (ibid.). Transparency, in terms of the understandability of a particular model or explanations of how its decisions are arrived at, provides clarity and can be a facilitating key factor for accountability (Lepri et al., 2018). So, we expected, that participants are more likely to make a system choice with a preference for transparency when they are required to be accountable for their decision. We additionally explore the hypothesis that the context of application (e.g., medicine, in management) may affect the choice between system transparency and performance.

Methodology: In a between-participants online study (N = 383), we investigated whether framing of the prediction performance of these systems (positive framing as accuracy rate vs. negative framing as error rate), accountability (decision-makers were informed that they need to explain their decision vs. that they do not need to) and the context of use (medicine, personnel selection, finance, law) affect the choice between different versions of systems underlying the accuracy-transparency trade-off. Additionally, we examined whether the experimental manipulations and the system choice affected trustworthiness and trust perceptions.

Results: Contrary to the assumptions, framing and accountability showed no significant effect on system choice. The use context affected system choice. As predicted, there was a preference for high performance and low transparency in medical contexts. Furthermore, the results supported the assumed relationship between system choice and different trustworthiness facets as well as the stronger perceptions of system trustworthiness and trust in the positive framing condition.

Limitations: Participants were recruited via Prolific and there was no real interaction with a system. Furthermore, it remains unclear whether the accountability manipulation worked as intended or

whether the unexpected results are due to participants understanding accountability differently than intended (accountability for system choice vs. accountability for subsequent system decisions).

Conclusions – research and or practical implications: Results showed that the context of use is critical for human preferences regarding system accuracy and transparency. This highlights the importance of applying context-specific and user-centered approaches to realize AI-based systems that are supposed to be used in the real world. Additionally, framing effects can influence system perceptions. This finding is important as it emphasizes the necessity to be careful when designing communication about system properties. For practice, our findings indicate that it is possible to influence perceived trustworthiness and trust in AI-based systems with minimal effort (e.g., without changing the system properties) just by reframing the description of the system properties.

Relevance to the Congress Theme: The present work contributes to the emerging topic of Artificial Intelligence and Human-machine-systems within the field of technology.

Relevant UN SDGs: On the one hand, our work aims for technological progress as described in the SDG regarding industry, innovation and infrastructure. On the other hand, the developments of AI and the efficient use of technology and AI-based systems contribute to the SDG of responsible consumption and production.

*Keywords: Artificial intelligence, Trust, Accuracy-Transparency-trade-off*

### Paper 3

#### **Do you trust me enough to trust the AI? Examining third-party influence on cognitive trust towards an AI team member**

Türkü Erengin, Roman Briker & Simon B. De Jong | Maastricht University

##### Goals

With recent improvements, Artificial Intelligence (AI) has moved from being merely a tool to acting more as a capable team member. Yet, to fully utilize AI's potential as a team member, it is imperative that human team members trust their AI colleagues. In line with other studies on trust in technology, we particularly focus on cognitive trust (CT) (i.e., an individual's beliefs about a trustee's reliability, dependability, and competence). Existing research has revealed various antecedents of human trust in AI, mainly focusing on the characteristics of the human trustor (e.g., propensity to trust, experience with AI, personality traits) and the AI trustee (e.g., reliability, transparency, and tangibility). Although these insights are important, we argue that a limitation was the limited dyadic focus on the AI and its direct user, treating human-AI relationships as occurring in social isolation.

##### Theory

The main aim of this study is to expand contemporary theoretical and empirical insights on how employees develop CT in their AI team members by taking a triadic perspective to assess third-party influences on this relationship. For this novel perspective on the human-AI teams, we integrate Heider's Balance Theory (1958) with a focus on the importance of "balance" within a triad (i.e., consistency between the attitudes of others and oneself). In particular, we build and test the hypotheses that; (A) human team member's CT in AI positively affects the focal employee's CT in AI; and (B) that the focal employee's CT in the human team member positively strengthens this relationship.

##### Design

We test these hypotheses in a mixed experimental design with a sample of 364 observations of 182 working individuals across Europe, North America, and Australia. Participants were presented with an online vignette and asked to envision a situation where they were starting a new team project as consultants and were required to work with both a human team member and an AI team member, having similar positions and responsibilities. Utilizing common conceptualizations of CT, we experimentally manipulated the CT of human team member towards the AI as a within-subjects factor and the focal employee's (i.e., participant's) CT toward their human team member as a between-subjects factor. We measured the dependent variable using subjective ratings of a focal employee's CT towards the AI at two points in time.

##### Results

Analyses obtained from multilevel modeling supported our hypotheses. Particularly, a human team member's CT to AI was positively related to the focal employee's CT in the AI. Importantly, this positive relationship was strengthened such that it was stronger when the focal employee's CT towards the human team member was higher, and weaker when it was lower. Results from two additional, incentivized experiments to further test our predictions will be available in late 2022.

##### Limitations

In line with prior research, we focused on one form of trust (i.e., CT), yet future research could explore other types of trust. Also, future research could investigate bigger teams with different numbers of human and AI members and utilize different experimental designs or datasets from non-Western cultures.

#### Conclusion

Overall, the present study provides new insights into the previously ignored role of the social context on trust in AI, providing initial evidence on the key role of human third-party stakeholders. We also showcase how classic theory on balance in triads can be extended toward human-AI interactions and expand contemporary research by going from a dyadic to a triadic team setting. Our research also has practical implications for organizations and teams that plan to include AI team members. We recommend organizations be aware of the importance of third parties and how they might shape the trust evaluations of employees towards AI. Therefore, to create a positive impact on human-AI trust, organizations should develop new ways of increasing AI readiness and other exposures to AI. Such efforts are crucial for employees to evaluate AI as a colleague rather than a tool and foster positive attitudes toward it as a team member.

#### Relevance to the conference theme

Combining the trust and human-AI interaction literatures with a classical social psychology theory results in a new perspective and understanding of the underlying mechanisms of human-AI teams. With organizations' increased interest in technology, AI's new role as a team member is a highly relevant subject that requires more attention from researchers.

#### Relevance to SDGs

Tackling human-AI interaction is imperative to promote new ways of sustained and productive employment, making this study an important step in contributing to the UN's SDGs.

*Keywords: Trust, Human-AI Team, Artificial Intelligence*

## Paper 4

### Disentangling Trust in Human-AI Teams: Does the type of task matter?

Eleni Georganta & Mira Kaut | Technical University of Munich

Even though trust is an essential mechanism for effective collaboration between humans and Artificial Intelligence (AI), our understanding of trust towards AI as teammates and human-AI teams, and how this might differ from trust towards human teammates and human-only teams is limited. At the same time, it remains unclear whether specific circumstances might shape these relationships. The goal of the present study is to investigate differences in trust towards a teammate (interpersonal trust) and trust towards the team as a whole (team trust) when having an AI compared to a human teammate. Given that task type impacts the relationships between team inputs and outcomes, we also explore whether the relationships between team composition (human vs. AI teammate) with interpersonal and team trust might change depending on task type (social or administrative). We integrate work on trust in human teams and trust in autonomous technologies while considering possible boundary conditions of trust in human-AI teams.

#### Theoretical Background

Similar to human teams, we expect that interpersonal trust towards an AI teammate (cognitive and affective) and team trust - the shared psychological state towards the human-AI team - contribute to successful collaboration and team effectiveness. However, previous evidence has shown that humans have difficulties trusting intelligent technologies, even when AI systems have the same roles as humans. Consequently, we expect interpersonal and team trust to be lower when having an AI than a human teammate. Due to previous experiences and expectations, one might feel less familiar with an AI than a human teammate, resulting in lower levels of trust. At the same time, we argue that differences in interpersonal and team trust might change depending on the type of task that the teammate (AI or human) is executing. Specifically, we expect that differences in interpersonal trust and team trust are weaker when the teammate is executing an administrative than a social task. Although no clear guidelines on whether a specific task should be executed by a machine or a human exist, AI systems have mostly been assigned to administrative responsibilities. Consequently, we believe that when an AI teammate executes an administrative rather than a social task, the human-AI collaboration is perceived as more familiar; thus, differences in trust towards an AI than a human teammate are weaker.

#### Methodology

Using a mixed-subjects design, 106 participants were randomly assigned to one of two conditions (human-AI or human-only teams). Participants were informed that they were members of a medical team that either consisted of a human and an AI teammate or two human teammates (between-subjects factor). In both conditions, participants were presented with two online scenarios describing either an administrative or a social task that the team was executing (within-subject factor). The order of the scenarios was counterbalanced. After each scenario, participants completed an online questionnaire assessing interpersonal trust and team trust. In the last questionnaire, demographics were assessed.

#### Results

In contrast to expectations, task type did not moderate the differences in interpersonal and team trust when having an AI than a human teammate. For both social and administrative tasks, interpersonal trust (cognitive and affective) was lower when having an AI than a human teammate. Interestingly, team trust was lower in human-AI than in human-only teams only for the administrative task; no differences were found for the social task. Having human teammates in addition to an AI teammate might have been perceived as an important equalizer for the team to be able to respond to its social responsibilities. Another possible explanation is that the social capacities of the AI teammate might have been positively surprising, leading to acknowledging that the human-AI team as a whole can perform successfully a social task.

#### Limitations

We only investigated the perception of one individual and not of a complete team and explored the proposed relationships within a fictional scenario that did not require actual teamwork. Participants might have also experienced difficulties imagining an AI as a teammate.

#### Conclusions

We found that trust is lower towards an AI than a human teammate, no matter the type of team task executed. Our findings may inspire future human-AI research and help understand possible challenges when introducing AI teammates.

#### Relevance to the Congress Theme

Considering the relatively unknown nature of trust in human-AI teams and the limited research at hand, our work can contribute to supporting organizational success in the human-AI age.

#### Relevant UN SDGs

We adopt a human-centered approach and provide initial evidence to ethically support interpersonal relationships between human and AI teammates.

*Keywords: Human-AI Team, Trust, Artificial Intelligence*

## Symposium S073

### **New directions in work design research: Understanding mechanisms between work characteristics and their antecedents in the changing world of work**

Katharina Klug, University of Bremen, Germany; Anne Casper, University of Mannheim, Germany  
science

What will be covered and why

There is ample evidence on what constitutes good work: among other things, having a variety of engaging, meaningful tasks, high autonomy, and manageable demands. However, while the literature has accumulated evidence on how work should be designed to foster employee motivation, performance, and well-being, poorly designed work persists – yet it is unclear why: Despite the longstanding tradition of research on work design, evidence about the antecedents of essential work characteristics is still scarce. Additionally, long-term trends like the digital transformation and immediate disruptions like the Covid-19 pandemic put pressure on organizations to adapt, which profoundly impacts employees' working conditions. To varying degrees, employees are exposed to fast-paced changes and intensifying workloads, while not all of them have the necessary resources to cope with their demands. So when and why do good or bad working conditions come about? How can organizations mitigate repercussions of the transformation of work for their employees' work? The goal of this symposium is to advance research on the mechanisms of work design. To this end, we present a collection of studies focusing on different pertinent work characteristics (e.g., task variety, autonomy), on different levels (e.g., at the organizational or unit level), and using different methodologies (e.g., experimental studies, qualitative approaches, and survey studies).

Starting at the organizational level, Handke, O'Neill, McLarnon and Kauffeld ask whether introducing telework can improve working conditions or whether good working conditions enable engagement in telework. In a quasi-experimental field study, they take a closer look at the causal relationships between part-time telework and essential work characteristics such as autonomy and interruptions. At the unit level, three studies address leaders as essential organizational actors who design work for their employees: Van den Broeck, Sarmah, Germeys and Proost draw on the theory of planned behavior to investigate leaders' intentions and behavior to provide autonomy for their employees. They use a mixed-methods design, consisting of a qualitative inquiry and a survey study, to develop and validate a questionnaire to measure leaders' attitudes, perceived control, and subjective norms as predictors of leaders' autonomy-providing intentions and behavior. Casper, Klug, Andrei and Parker investigate leaders' efforts to improve employees' work design in terms of enriching tasks and solving organizational problems based on principles of work design. Drawing on the job demands-resources model, they test whether time pressure leads to poorer work design decisions via increased cognitive load and reduced perspective-taking in a scenario-based online experiment. Klug, Casper, Andrei and Parker draw on the same experimental paradigm to investigate workload and autonomy as situational antecedents of leaders' work design decisions, as well as strain-based and motivational intervening mechanisms. Tackling the individual level, Scharp and van Zoonen focus on interruptions and ways to help employees mitigate their negative effects. They evaluate the effectiveness of an intervention to reduce exhaustion by decreasing attentional residue in a daily diary design.

Relevance to the congress theme

Work design has long been and will continue to be one of the essential building blocks for research and practice in work and organizational psychology: As organizations adapt to everchanging environments and an uncertain future, employees experience the consequences (both positive and negative) in their immediate work environment – for example, as employers introduce telework, as immediate supervisors translate organizational strategies into everyday tasks, or as the increased use of information and communication technologies increases interruptions during the workday. Therefore, the present symposium addresses a highly important topic at the core of the conference theme.

#### Research and practical implications

Collectively, the contributions highlight that work characteristics are not fixed entities once a job or task is created. Instead, work design is a process which unfolds in the everyday practice and decisions of executives, managers and individual employees. To arrive at a comprehensive understanding of these dynamics of work design, the symposium offers fruitful avenues for more research into the antecedents and moderators of work characteristics at the different interrelated levels. The resulting evidence can enable organizations to take a proactive role in creating the future of work, from creating structural resources to improving leaders' and employees' everyday practices.

#### Overall conclusions

In conclusion, the symposium highlights how work design research and practice can benefit from shifting the focus from employee reactions to antecedents and moderators of work characteristics at different levels.

*Keywords: work design, job characteristics*

## Paper 1

### What Goes Around Comes Around – The Relationship between Part-time Telework and Work Design

Lisa Handke & Simone Kauffeld | Technical University Braunschweig, Germany; Matthew McLarnon, Mount Royal University, Canada; Thomas O’Neill, University of Calgary, Canada

#### Research goals and why the work was worth doing

Part-time telework (PTT), which allows employees to spend some of their work hours to work away from their central workplace, is clearly emerging as an expectation of many employees. Effective organizational PTT programs can allow employees to redesign their work, such as by giving them the freedom to choose where and when to perform their tasks, or enabling them to work in an environment with no interruptions from their colleagues (e.g., Grant et al., 2013).

However, although the effectiveness of PTT theoretically functions through improvements to employees’ work characteristics, we still lack evidence that supports this mechanism. Specifically, prior research largely relies on cross-sectional designs that measure telework and work characteristics at the same time. These designs are thus inherently confounded, as they may include that PTT improves job autonomy (and other work characteristics), but the alternative, reversed relation could be just as likely. Accordingly, we have yet to determine whether PTT is an effective measure of work (re-)design or whether it is not employees with an optimal work design that engage in PTT to begin with (or a combination of both).

The present study aims to shed light on this “chicken and the egg” issue through using a quasi-experimental research design that captures actual changes in work characteristics through PTT while simultaneously considering the effect of pre-intervention work characteristics on PTT engagement. As such, our study not only offers important insights regarding the relation of PTT to work (re-)design but also promotes a better understanding of the preexisting conditions necessary for employees to engage in PTT in the first place.

#### Theoretical Background

The actual effects of organizational levers of work redesign (such as PTT policies) on employees’ work characteristics not only occur on more local levels but also demonstrate a certain degree of circularity (e.g., Clegg & Spencer, 2007; Parker et al., 2017). That is, even though work redesign may be initiated at the organizational level (i.e., by introducing a PTT policy), the actual changes will depend on whether employees have the opportunity and motivation to actually engage in PTT. At the same time, employees’ opportunity and motivation to enact changes to their work is simultaneously influenced by how their work is designed in the first place. For instance, while higher levels of autonomy give employees the opportunity to craft their jobs, the motivation to do so typically arises as employees are faced with job demands that they would like to reduce (e.g., Tims & Bakker, 2010).

Accordingly, we argue that PTT affords employees the flexibility to improve their work design – particularly with regards to characteristics reflective of employees’ workflow and work environment (e.g., autonomy, time pressure). At the same time, we assume that these very same work characteristics will also impact employees’ PTT engagement.

#### Design/Methodology/Approach/Intervention

Employing a quasi-experimental research design, we collected data on perceived autonomy, demanding work conditions, workflow interruptions, and time pressure from 699 white-collar workers at a German car manufacturer pre and post the introduction of an organizational PTT program. We used latent change score modelling to analyze how PTT engagement relates to changes in employees' work characteristics as well as how pre-intervention work characteristics influences the likelihood of PTT engagement.

#### Results obtained

Our analyses show that PTT engagement lead to a reduction in all three job demands (demanding work conditions, workflow interruptions, and time pressure), yet not to an increase in autonomy. Conversely, autonomy and workflow interruptions (yet not demanding work conditions and time pressure) predicted engagement in PTT.

#### Limitations

Data was collected in a single company and before the Covid-19 pandemic, which may limit its generalizability. Moreover, teleworkers and non-teleworkers were also not independent from one another, meaning that PTT may have indirectly also affected the non-teleworkers.

#### Conclusions

Our results show that the factors that drive PTT are not necessarily those that result from it, with high autonomy acting as a main driver, and a reduction in job demands (e.g., workflow interruptions) being the main consequence. This suggests that organizational PTT policies can improve job demands but that these benefits may only be reaped by a select group of employees.

#### Relevance to the Congress Theme

We believe that the insights from these findings can inform future research and practical interventions aimed at improving individual work design and should encourage scholars to develop a more sophisticated understanding on how HRM practices such as PTT translate into more proximal processes of work redesign.

#### Relevant UN SDGs

Good health and well-being; Decent work and economic growth

*Keywords: telework, work characteristics, field experiment*

## Paper 2

### **When do managers provide autonomy to their subordinates? Insights from a theory of planned behavior (TPB) based model**

Anja Van den Broeck, Karin Proost, Filip Germeys & Pallavi Sarmah | KU Leuven, Belgium

#### Research goals and why the work was worth doing

Autonomy at work refers to “the extent to which a job allows freedom, independence, and discretion to schedule work, make decisions, and choose the methods used to perform tasks” (Morgeson & Humphrey, 2006, p. 1324). Decades of research has shown that providing autonomy to employees facilitates numerous positive outcomes such as increased employee motivation, work-engagement, job satisfaction, and wellbeing (Parker, Morgeson et al., 2017). However, many jobs continue to provide limited autonomy (Holman, 2013). To explore why such autonomy-deficient jobs continue to exist, researchers investigated various antecedents that could influence the creation of work (Parker, Van den Broeck et al., 2017). In doing so, they highlighted that managers are among the key stakeholders who may directly influence their subordinates’ work (Parker, Van den Broeck et al., 2017). Yet, research tapping into the role of managers as designers of the work of employees is still scant and there has been little focus on examining the underlying decision-making processes that shape such managers job design endeavors. As such, the extant literature lacks in explained variance and requires a comprehensive examination that (1) explores a wider range of antecedents, and (2) highlights the processes by which such factors may relate to managers’ work design behaviors like granting autonomy.

#### Theoretical Background

We aim to advance our understanding of managers’ job design behaviors by relying on the theory of planned behavior (TPB; Ajzen, 1991), which is a socio-psychological theory that allows an in-depth examination of a wide range of personal (e.g., individual’s attitude), social (e.g., subjective norms) and non-volitional (perceived control) determinants of intended behavior. TPB facilitates the defining and measuring of such factors by contextualizing them specifically to the behavior in question while also highlighting their relationship with a particular behavior via intention. Additionally, it also allows us to dig deeper and explore the underlying beliefs that explain how such factors relate to variances in behavior. As such, TPB is well-suited for examining how antecedents such as managers’ attitudes, perceived behavioral control, subjective norms, and the underlying beliefs thereof, relate to their job design behavior, and to their intentions and actions to provide autonomy in particular.

#### Design/Methodology/Approach/Intervention

First, we started off by conducting a qualitative enquiry to elicit managers’ salient beliefs about their attitudes, behavioral control, and subjective norms about giving autonomy to subordinates. Second, we used these insights to develop a questionnaire that allowed us to test the assumptions of TPB towards managers’ autonomy providing behavior. Finally, we administered the questionnaire on another sample of managers to test our hypotheses.

#### Results obtained

Findings of our qualitative inquiry inform the work design literature that, managers’ hold salient beliefs that giving autonomy to their subordinates has many positive (e.g., better productivity) and negative consequences (e.g., managers losing control). They also highlight that while some factors

may facilitate managers' to give autonomy (e.g., managers' own autonomy), others may hinder them in doing so (e.g., conflicts and unhealthy rivalry in the workplace). Results of the survey highlighted that (a) managers' beliefs about the consequences of granting autonomy, and their evaluation of whether or not those consequences were favorable, were positively related to their attitude towards giving autonomy, (b) the more managers believed that they had powerful facilitators (and less hindering factors) that enabled them to give autonomy, the more likely they were to perceive having control over providing autonomy to their subordinates, and (c) when managers believed that important people (both within and outside of their organization) favored giving autonomy, they were more likely to think it is normative for them to give autonomy as well. Managers' perceived control was the strongest predictor of managers' intention to give autonomy, followed by managers' attitude and subjective norms.

#### Limitations

Future research may aim to expand this line of work towards other job characteristics and examine managers' actual job design behavior in real life.

#### Conclusions

This study showed that in line with the tenets of TPB, managers' attitude, perceived control, and subjective norms— as shaped by their underlying beliefs— relate to managers' intention to provide autonomy, and consequently also their autonomy providing behavior.

#### Relevance to the Congress Theme

We believe that the insights from our study may help managers to design better work for their employees in the future, which is important in face of new technology, digitalization and crises.

#### Relevant UN SDGs

Good health and well-being; Decent work and economic growth

*Keywords: work design decisions, autonomy, leader behavior*

### Paper 3

#### Work-design decisions under time pressure: An experimental approach

Anne Casper, University of Mannheim, Germany; Katharina Klug, University of Bremen, Germany;  
Sharon Parker & Daniela Andrei | Curtin University, Australia

##### Research goals and why the work was worth doing

The goal of the present study was to examine how stressful working conditions may impair work-design decisions. Work-design decisions refer to decisions on how to design a job as a whole as well as to solving work-related problems based on principles of work design (Parker et al., 2019). Specifically, including different tasks when designing a job results in varied rather than monotonous jobs and therefore represents an enriched work-design decision. Similarly, solving a work-related problem such as low productivity by making changes in work organization refers to problem-solving by work design principles. While past research has established how work should be designed in order to maximize employee well-being, motivation, and performance, much less is known about how work is designed by decision-makers in organizations. In the present study, we argue that stressful working conditions such as time pressure impair enriched work-design decisions. We integrate the literature on job stress and the nascent literature on work-design decisions by examining how time pressure influences work-design decisions in an experimental setting.

##### Theoretical background

Based on the job-demands resources model, we hypothesized that time pressure leads to poorer work-design decisions via increased cognitive load and impaired perspective-taking. Time pressure depletes energetic resources, therefore resulting in increased cognitive load and impaired ability to take the perspective of others. Increased cognitive load and impaired perspective taking, in turn, will result in poorer work design decisions. Specifically, we hypothesized that time pressure results in poorer work-design decisions when designing a new job (Hypothesis 1) and in choosing fewer work-design based strategies when solving work-related problems (Hypothesis 2). Moreover, we hypothesized that increased cognitive load (Hypothesis 3a) and reduced perspective-taking (Hypothesis 3b) mediate the relationships.

##### Design/Methodology/Approach/Intervention

We conducted an online experiment with a student sample (major: psychology) and scenario-based work-design tasks. Students were randomly assigned to a time-pressure or no-time-pressure group. All students had to do twelve tasks. The four work-design tasks were embedded between eight distractor tasks of similar design but different content. The time-pressure group had to do the tasks as quickly as possible and should not take longer than twelve minutes. They saw a running timer on each survey page that indicated the remaining time. The no-time-pressure group did not have a time limit. After the tasks, participants answered items measuring time pressure for the manipulation check as well as the mediating variables.

##### Results obtained or expected (if not available, it must be made clear when they will be)

The time-pressure group reported more time pressure than the no-time-pressure group ( $t(98) = 11.4, p < .001, d = 2.3$ ), thus the manipulation check was successful. Analyses of variance showed that the time-pressure group designed less enriching jobs ( $F(1, 83) = 7.35, p = .008, \eta^2 = .08$ ) and chose less work-design focused strategies for dealing with work problems ( $F(1, 90) = 7.38, p = .008, \eta^2 =$

.08) than the no-time-pressure group. The time-pressure group reported more cognitive load than the no-time-pressure group, but the difference failed to reach significance (  $F(1, 98) = 3.47, p = .065, \eta^2 = .03$ ). The time-pressure group did not report impaired perspective-taking compared to the no-time-pressure group (  $F(1, 98) = 0.799, p = .373, \eta^2 = .01$ ).

#### Limitations

The main limitation of our study is low ecological validity of the experiment and our use of a student sample. However, students majoring in psychology may likely hold managerial positions in the future and are therefore a relevant population when studying work design decisions. Nevertheless, Future studies should replicate our results in a field study with managers, directly assessing work-design decisions.

#### Conclusions – research and or practical implications

Our research shows that work-design decision can be impaired when they are made under time pressure, suggesting that managers' own working conditions may influence the work-design decisions they make for their employees. For practice, our results imply that managers should not make work design decisions under time pressure but rather take their time when making these decisions. Specifically, managers may want to allocate specific time slots for their leadership tasks. Organizations should ensure that managers have sufficient time for their 'leadership tasks' such as distributing tasks and managing their employees.

#### Relevance to the Congress Theme

In rapidly changing working conditions, managers have an important role in designing the work for their employees. The current study addresses this topic by examining decision-making with regard to work design.

#### Relevant UN SDGs

Well-designed work is an important factor for health and well-being. Focusing on how decisions regarding employees' working conditions are made contributes to the UN SDG of "Good health and well-being".

*Keywords: work design decisions, quantitative demands, perspective-taking*

## Paper 4

### **When do we design good work for others? An experimental approach to situational antecedents of individual work design decisions**

Katharina Klug, University of Bremen, Germany; Sharon Parker, Curtin University, Australia; Daniela Andrei, Curtin University, Australia; Anne Casper, University of Mannheim, Germany

#### Research goals and why the work was worth doing

It is well documented what constitutes good work design based on how job characteristics relate to employee outcomes. However, research on antecedents of job characteristics is scarce. Defining and allocating tasks, leaders frequently make decisions with repercussions for their employees' work design, for example in terms of task variety, workload, or autonomy. Leader behavior thus emerges as an important work design antecedent on the meso- and microlevel, but little is known about how leaders make these decisions. The goal of this research was to investigate leaders' own working conditions as situational antecedents of their work design decisions in an experimental setting. We focus on workload and autonomy as antecedents and argue that less favorable working conditions for leaders will lead to poorer decisions about their employees' work design.

#### Theoretical background

Drawing on the Job Demands-Resources (JD-R) Model, organizing work can be construed as part of leaders' job performance. Accordingly, high demands would impair work design decisions via strain, whereas resources would improve work design decisions via motivation. Broaden-and-Build Theory would suggest that positive affect resulting from a high level of resources should broaden leaders' thought-action repertoire, whereas negative affect resulting from high demands would narrow this repertoire. Leaders in a positive affective state would take a more holistic approach and make more favorable work design decisions. This study is based on two operationalizations of work design behavior: 1) designing jobs by allocating tasks (enriching task allocation) and 2) applying principles of work design in solving organizational problems (enriching work strategy selection). We expect 1) workload to predict less enriching task allocation and less enriching work strategy selection, and 2) autonomy to predict more enriching task allocation and more enriching work strategy selection. We also expect 3) strain and negative affect to mediate negative effects of workload, and 4) engagement and positive affect to mediate positive effects of autonomy.

#### Design

We designed two online experiments in which students (majority: business) take the perspective of a department leader in organizational scenarios. Five scenarios assess work design decisions as described above. In Study 1, participants are randomly assigned to a low workload condition with a generous time limit to complete the work design scenarios, versus a high workload condition where they complete the work design scenarios, plus ten distractor tasks in the same time limit. Study 2 consists of a low autonomy condition where the work design scenarios are presented in random order with a specific time limit per scenario, and a high autonomy condition where participants choose the order of the scenarios and receive an overall time limit for all scenarios.

#### Expected results

Two pilot studies served to test the design: Pilot 1 (N = 61) tested the workload manipulation and found a large difference in perceived workload between the two groups as expected ( $F(1, 59) =$

49.57,  $p < .001$ ,  $\eta^2 = .46$ ). Pilot 2 ( $N = 38$ ) tested the autonomy manipulation and found moderate to large differences in perceived scheduling autonomy ( $F(1, 36) = 70.36$ ,  $p < .001$ ,  $\eta^2 = .66$ ) and decision-making autonomy ( $F(1, 36) = 4.63$ ,  $p < .05$ ,  $\eta^2 = .11$ ). The design thus seems suitable to test the hypotheses. The main data collection has started in February 23, so that first results will be available by the time of the conference.

#### Limitations

The external validity of this study may be limited due to the student sample. On the other hand, many students may later take leader positions without being specifically trained in work design. Assessing their decisions as “naïve” work designers is thus of practical relevance. Further replication with leader samples will still be required, as well as field studies to investigate work design decisions in organizational settings.

#### Conclusions – research and practical implications

Our studies contribute to the emergent literature on individual work design behavior and underline the importance of investigating the antecedents of work design decisions: Antecedents in leaders’ work environments, such their own workload and autonomy, can play an important role in shaping the work environment of their employees. This implies for organizations that their leaders should be equipped with adequate resources to design good work for others.

#### Relevance to the Congress Theme

In rapidly changing environments, organizations have to adapt quickly. Leaders are key actors on the team level, implementing organizational strategies and at the same time reacting to immediate problems. Their everyday decisions about how to organize work thus play an important role in shaping employees’ experience of the changing world of work.

#### Relevant UN SDGs

Decent work and economic growth; good health and well-being

*Keywords: work design decisions, quantitative demands, autonomy*

## Paper 5

### **Managing Daily Work Intrusions and Exhaustion: A Ready-to-Resume Field-Experiment**

Yuri Scharp, Tilburg University, Netherlands; Ward van Zoonen, Erasmus University Rotterdam, Netherlands

#### Research goals and why the work was worth doing

“Hey, do you have a minute?” is a question most of us hear at least a few times a day. This question exemplifies a work intrusion, which refers to an unexpected encounter initiated by other people that completely and temporarily halts an ongoing task. Such intrusions have proliferated as a consequence of the vast adoption of information-communication technologies in society. Indeed, we are more ‘connected’ than ever before. Unsurprisingly, work intrusions are described as “ubiquitous in organizational life.” An office worker is interrupted approximately every 3 to 11 minutes. We may conclude that an uninterrupted workday is a rare luxury. The prevalence of such intrusions is not without consequence. They demand the expenditure of self-regulatory resources. Thoughts about the preceding task persist while working on the interrupting task (i.e., attention residue) and this lingering activation depletes energetic resources (i.e., exhaustion). However, eliminating intrusions is impractical. They often represent a vital part of organizational functioning. Hence, rather than trying to root out the sources of these intrusions, the present study aims to elucidate how organizations and employees may mitigate the negative implications of work intrusions (i.e., attention residue and exhaustion).

#### Theoretical Background

We draw on the tenets of attention residue and self-regulation theory to formulate our hypotheses. The literature on self-regulation suggests that devoting cognitive energy to focus attention on one task while mentally lingering on another drains important and finite cognitive resources. Specifically, having two tasks—the interrupted and interrupting task—mentally activated concurrently creates an additional cognitive load that exhausts regulatory resources. Hence, we expect frequent intrusions to promote attention residue and, therefore, increase exhaustion. In contrast, the duration of intrusions may limit attention residue and, therefore, the expenditure of regulatory resources. Namely, the memory for goals theory posits that the moment an individual starts a new task, the activation of the preceding task starts to decay (Altmann and Trafton, 2007). Thus, intrusions that last longer should relate to less attention residue and exhaustion than brief intrusions. However, we posit that a writing exercise may disrupt these processes by freeing regulatory resources. Specifically, we posit that participants who record details regarding the progress on the interrupted task will decrease lingering thoughts (attention residue) and limit the expenditure related to these thoughts (exhaustion).

#### Design/Methodology/Approach/Intervention

We conducted a daily diary study among 50 employees working in the Dutch branch of a global technology consulting company (n = 200 days). Participants were randomly assigned to the intervention (n = 25) and control group (n = 25). The participants occupied a diverse set of roles, including customer success (34.0%), human resources (20.0%), technology and innovation (18.0%), global finance (12.0%), and product engineering (10.0%). We conducted multilevel analyses and controlled for the autoregressive effects of attention residue and exhaustion. Therefore, the coefficients represent unique daily changes in attention residue and exhaustion.

## Results obtained

As expected, on days when intrusions were more frequent, participants experienced more attention residue and exhaustion (level-1). In addition, the ready-to-resume intervention decreased overall attention residue (level-2 association) and partially inhibited the daily association between attention residue and exhaustion as hypothesized (cross-level interaction). However, in contrast to our expectations, the duration of intrusions was not related to attention residue or exhaustion (level-1). Another unexpected finding was the positive effects of the ready-to-resume intervention on overall exhaustion (level-2). Limitations

Data collection was conducted in a single company, which may limit generalizability. Hence, future research may replicate in different settings to establish external validity.

## Conclusions

Our findings advance our understanding of interruptions in several ways. First, the findings suggest that the frequency of interruptions is more important for attention residue than their duration. Second, the findings suggest that writing plans may mitigate the effects of exhaustion. Thus, writing down progress on tasks appears to disrupt health-impairing processes. Therefore, integration of writing plans through organizational ICTs such as Google docs or Outlook may represent a fruitful avenue for organizations. Importantly, the findings complement cross-sectional findings and research conducted in laboratory settings (Leroy & Glomb, 2018). Nonetheless, future research should investigate how to limit the direct association of the intervention with exhaustion.

## Relevance to the Congress Theme

Technologies have made work intrusions a typical feature of most workplaces. While eliminating intrusions in the future is improbable, we can develop evidence-based strategies to navigate this landscape. Our research pinpoints what changes are desirable and how organizations may help employees achieve these changes.

## Relevant UN SDGs

Good health and well-being; Decent work and economic growth

*Keywords: interruptions, self-regulation, intervention*

## Symposium S075

### **Crafting Jobs and Beyond: How Crafting Is Linked with Changes Across Contexts**

Arianna Costantini, University of Trento

science

What will be covered and why:

By crafting their job, employees shape their work experiences to fit their needs better. To date, much research in work and organizational psychology has investigated how employees' efforts to shape their jobs can impact work-related outcomes. More recently, research has started to pay attention to how these proactive efforts can unfold and have consequences beyond organizational boundaries and the work domain. Indeed, the positive and negative implications of crafting may have ripple effects beyond the job itself, that is, on aspects of people's experiences that go beyond the primary aim of redesigning the job and extend over the workday, across different contexts and domains. However, our knowledge of the processes and mechanisms through which crafting may exert its influences beyond the (current) job is still scarce, and we have yet to form a precise understanding of how these proactive behaviors may be involved in shaping individuals' choices and experiences of well-being across domains and contexts.

This symposium aims to provide new insights into how crafting drives changes across work experiences and domains, stretching beyond the workday and work-related outcomes. To do so, we present a collection of four empirical works conducted across Europe – i.e., in the Netherlands, Italy, Germany, and Switzerland – with a variety of longitudinal designs.

We begin by zooming into how job crafting can set in motion a process leading to voluntary job change. Addressing the timely topic of the “great resignation”, the first contribution presents a two-wave longitudinal study on the role of job crafting in the voluntary job change process. This study proposes job crafting as a mechanism influencing intentions to quit and actual job changes and investigates the role of employees' career need for challenges as a boundary condition influencing voluntary job change. The second contribution examines the role of daily job crafting in influencing psycho-physiological states at the end of the day. Assuming job crafting as a process promoting adjustment and hence better regulation of one's energies, this 10-day diary study examines whether job crafting can boost the positive effects of morning personal resources on better physiological and psychological functioning when the day is over. The third contribution switches the focus to off-job crafting and presents a daily diary study investigating how different demands impact employees' need for competence satisfaction at the end of the workday, eventually influencing how individuals craft for mastery during their off-job time. Finally, further extending the study of crafting processes across life domains, the fourth contribution adopts ecological momentary assessment to investigate how crafting aimed at satisfying psychological needs develops daily over weekdays and weekends and how these proactive efforts are related to daily work-life balance.

Relevance to the Congress Theme:

Drawing on the key role of agentic change to shape and alter actions and circumstances, this symposium contributes to our understanding of the processes and outcomes of different proactive changes that extend beyond the (current) job experience. By examining the role of different types of employees' crafting as mechanisms of change, this symposium expands our knowledge of how crafting efforts are involved in shaping changes beyond current organizational boundaries and the

work domain, providing indications on which proactive changes may be desirable to promote health and well-being and how.

Research/Practical Implications:

The contributions in this symposium extend the proactivity literature by depicting a nuanced perspective of how different forms of crafting efforts are involved in shaping employees' choices, psycho-physiological well-being, and the interplay between work and personal aspects. As such, the studies offer practical implications on how organizations and individuals can leverage proactivity to achieve positive outcomes and drive the changes they desire to achieve in optimal ways.

Overall conclusions:

Employees' proactive efforts to change the circumstances and experience better fit and higher need satisfaction are key ingredients of different change processes. When considering voluntary job change, job crafting can lead to quitting intentions, but the way in which employees craft their jobs (approach- or avoidance-oriented) influences whether they will follow up with enacting their intentions or not. At the day level, approach-oriented job crafting seems to be important for employees to adjust the work conditions and make room for the expression of their personal resources such that they can positively regulate psycho-physiological states. Finally, proactive efforts expressing employees' agency can be determined by the types of demands employees encounter at work and can have consequences for their daily work-life balance.

*Keywords: Job crafting; Proactivity; Self-regulation.*

## Paper 1

### **From Job Crafting to Job Quitting? Exploring the Role of Crafting Strategies and Career Needs in the Voluntary Job Change Process.**

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#### Research aims and theoretical background:

Job crafting is frequently mentioned in the debate on the “great resignation” that many organizations are currently witnessing. This term has been used in the popular press to refer to the growing number of employees who voluntarily quit their job, in order to find more meaningful work (Klotz, 2021). Instead of quitting their jobs directly, employees may try to initiate small changes in the characteristics of their work (i.e., job crafting), in order to achieve a better fit with their needs, values, and abilities. Yet, it is also conceivable that job crafting sets a voluntary job change process in motion. This scenario may occur when job crafting attempts remain unsuccessful or when employees use job crafting strategically to enhance their employability, in preparation for future job changes. The aim of the present study is to bring more clarity to the puzzling role of job crafting in the voluntary job change process by examining the relationships of this behavior with (a) quit intentions and (b) actual voluntary job changes.

We clarify this empirical puzzle in three ways. First, we investigate the role of different behavioral strategies in terms of approach-oriented and avoidance-oriented job crafting. According to meta-analyses (Rudolph et al., 2017), avoidance-oriented job crafting aimed at reducing job demands is positively associated with quit intentions, while relationships with approach-oriented job crafting aimed at seeking job resources and challenges are mixed. Approach-oriented job crafting has been linked to higher quit intentions in some studies (e.g., Bruning & Campion, 2018) and to reduced quit intentions in other studies (e.g., Debus et al., 2020). Here, we revisit these relationships longitudinally, while prior studies were restricted to cross-sectional data.

Second, we further clarify the relationships between approach-oriented job crafting and quit intentions by drawing from career needs perspectives (Sullivan & Baruch, 2009). Specifically, we hypothesize that employees with a high career need for challenge are more likely to use approach-oriented job crafting strategically, in preparation for future job changes. Hence, we expect that relationships between approach-oriented job crafting and quit intentions are more likely to turn positive for employees with a high (vs. low) career need for challenge.

Third, we investigate how job crafting moderates the relationship between quit intentions and actual voluntary job changes. Approach-oriented job crafting helps employees to acquire new resources and to stay attached to their job, especially when they experience tough times (Wang et al., 2018). In contrast, avoidance-oriented job crafting is a withdrawal strategy that is less likely to create the necessary changes that help employees to stay attached to their job. Thus, we expect that approach-oriented job crafting (but not avoidance-oriented job crafting) weakens the link between quit intentions and actual voluntary job changes.

#### Method and results:

Data were collected from 575 employees of a large public organization in the Netherlands with two measurement moments three months apart. Results indicated that approach and avoidance-oriented job crafting were positively associated with quit intentions at both time points. As predicted, need for challenge strengthened the relationship between approach-oriented job crafting and quit intentions, but did not moderate relationships between avoidance-oriented job crafting and quit intentions. Finally, approach-oriented job crafting weakened the relationship between quit intentions and actual voluntary job changes, such that employees who engaged in approach-oriented job crafting were less likely to act on their quit intentions (i.e., remained in their current job).

Conclusion, limitations and future directions:

The present study portrays a more nuanced perspective on the role of job crafting in the voluntary job change process. While approach-oriented job crafting may engender more thoughts about job quitting among employees with a high need for challenge, engagement in this proactive behavior may simultaneously keep employees attached to their current job. In contrast, avoidance-oriented job crafting is unlikely to create the necessary changes to prevent voluntary job changes. Given that the data of this study were collected pre-COVID, replications may be necessary to ensure generalizability to the post-pandemic context.

Relevance to the Congress theme:

In the future of work, employees are increasingly operating as active crafters of their careers, while organizations are struggling to retain talent. This study addresses these developments by investigating the role of job crafting in the voluntary job change process.

Relevant UN SDGs:

The study would be relevant for the UN SDGs: “Good health and well-being” and “Decent work and economic growth”.

*Keywords: Job crafting; Need for challenge; Job change*

## Paper 2

### **Off to a Good Start? How Job Crafting Moderates the Influence of Morning Personal Resources on Evening Psycho-Physiological States.**

Arianna Costantini, Michela Vignoli & Lorenzo Avanzi | Department of Psychology and Cognitive Science, University of Trento

Research goals and why the work was worth doing:

A sizable body of research investigated how employees' job crafting relates to work-related positive and negative outcomes. Despite research recognizing that work proactivity can influence experiences in different domains, we have yet to fully understand how proactive behaviors may be involved in changes in daily psychological and physiological states at the end of the day. The current research addresses this question using a 10-day diary study with three measurement points per day. To better understand the role of proactivity for optimal human functioning, this research examines how approach-oriented job crafting alters the relation between personal resources and daily psychological (burnout, fatigue) and physiological (heart rate, blood pressure) states. Understanding how the enactment of job crafting can impact individuals' health and well-being is paramount given the centrality of proactive behaviors in the future of work.

Theoretical background:

We draw on coping theory (Lazarus & Folkman, 1984) and the process of allostasis (McEwen, 1998) to examine how daily job crafting moderates the influence of morning personal resources on evening psychological and physiological responses. In our model, we propose that daily personal resources – individual differences improving the ability to manage stressful events and shown to be tied to lesser distress and better health outcomes – promote allostasis by providing a positive psychological state at the onset of the day. Moreover, we examine job crafting as a manifestation of approach-oriented coping processes unfolding at work to promote a balance in job characteristics through change, hence promoting adjustment and boosting the effects of personal resources to improve further the adaptation of the individual to the circumstances of life, eventually influencing health and well-being.

Design/Methodology/Approach:

We used daily diary data (preliminary data  $n = 217$  observations) collected from full-time employees. Participants filled out an initial online survey measuring demographics, dispositional, and control variables. Approximately 2 weeks later, participants filled in three daily surveys for 10 consecutive workdays: the first, measuring personal resources, had to be completed in the morning before going to work, the second measured job crafting at the end of the workday, and the third survey assessed psychological and physiological states in the evening at bedtime. In our multilevel regression analyses, demographics and baseline physiological parameters (Level 2) were controlled for and were grand-mean centered. Within-person predictors (i.e., personal resources and job crafting) and daily control variables (i.e., number of working hours and whether employees worked remotely during the day) were group-mean centered.

Results:

Data collection is still in progress; the following findings are provisional.

Results showed that self-efficacy in the morning was negatively associated with diastolic pressure only on days when people sought fewer resources. Self-efficacy was also associated with increased heart rate in the evening only on days when people sought fewer challenges at work. A higher state of recovery was associated with increased systolic pressure in the evening only when people sought fewer challenges at work. Higher self-efficacy and optimism were related to lower burnout only on days when employees increased their resources more often. Similarly, higher self-efficacy resulted in lower fatigue at the end of the workday only when employees also sought challenges at work more often.

#### Limitations:

The sample size for the preliminary findings is small ( n = 25 employees), so the results should be interpreted with caution. We are currently collecting more data and expect to have a larger sample size for the time of the Congress, which will also allow us to have more power and test all the paths in a single overall model.

#### Conclusions:

The present study suggests that job crafting contributes differently to psychological and physiological states at the end of the day. For physiological conditions, the lack of proactive behaviors at work prevents the realization of the gains of personal resources in terms of improved physiological states. For psychological states, it is the higher occurrence of proactivity that is linked to less negative states.

#### Relevance to the Congress Theme:

The strong focus on proactivity calls for a deeper understanding of its implications for employees' health and well-being. This study addresses these aspects by investigating how job crafting interacts with personal resources and influences daily psycho-physiological states.

#### Relevant UN SDGs:

This research contributes to the UN SDGs: "Good health and well-being" and "Decent work and economic growth".

*Keywords: Job crafting; Personal resources; Heart rate.*

### Paper 3

#### Do employees search for challenges outside work when hindered at work?

Svenja Leimbach, Thomas Rigotti, Miriam Schilbach & Hendrik Isenbart | Johannes Gutenberg-University Mainz; Institute for Psychology – Work, Organizational, and Businesspsychology

Research goals and why the work was worth doing:

Extant research shows that job stressors impair recovery (e.g., Sonnentag, 2018; Steed et al., 2021). When looking at differential effects of challenge versus hindrance stressors however, a meta-analysis has shown that when controlling for challenge stressors and job resources, hindrance stressors were positively related to the recovery experience of mastery (Bennett et al., 2018). To better understand this finding, we aimed to uncover its underlying mechanism. This could contribute to advance and refine interventions which aim at facilitating mastery.

Theoretical background:

Recovery does not simply happen to individuals. Instead, employees can proactively shape their environment to fulfill their needs. We focused on crafting as we were interested in what individuals actively do. Such crafting efforts are aimed to resolve perceived needs discrepancies (De Bloom et al., 2020). In general, stressors can cause such needs discrepancies. However, with regard to mastery this should only be true for hindrance stressors. Challenge stressors typically represent the opportunity to personally grow and to experience mastery; whereas hindrance stressors block goal attainment and do not offer the chance for personal development (e.g., Lepine et al., 2005). Hence, hindrance stressors should be related to more crafting for mastery due to a low satisfaction of the need for competence. Challenge stressors however should be unrelated to or even reduce crafting for mastery as they already fulfill the need for competence.

Design/ Methodology:

In order to investigate the proposed relations between work stressors and crafting for mastery via need satisfaction of competence, we conducted a daily diary study. We assessed job complexity (i.e., challenge stressor) and illegitimate tasks (i.e., hindrance stressors) as well as current need satisfaction of competence after work, and crafting for mastery during the evening, before going to bed. We analyzed our hypotheses with path models including job complexity and illegitimate tasks as predictors, need satisfaction of competence as mediator, and crafting for mastery as outcome. They were modeled simultaneously on the day- and person-level using latent aggregation.

Results:

The final sample included 70 employees (204 occasions) who indicated to work more than 20 hours per week. Path analyses revealed that only illegitimate tasks were negatively related to need satisfaction of competence on the day-level. That is, on days when individuals experienced more illegitimate tasks, they reported lower need satisfaction of competence. No relationships emerged between the stressors and crafting for mastery. Moreover, need satisfaction of competence was unrelated to crafting for mastery at the day-level. At the person-level need satisfaction of competence positively related to crafting for mastery. Across levels of analyses, no significant indirect effects were found.

Limitations:

Due to the study design, we cannot draw firm causal conclusions. Further, we did not control for job resources which might have influenced the relations.

Conclusions:

We did not find evidence for the hypothesized indirect effects from hindrance stressors to crafting for mastery via need satisfaction of competence. At the day-level, need satisfaction of competence at the end of the workday did not reduce the following crafting for mastery; not indicating an “enough is enough” mechanism in the short-term, and thus not supporting our assumption. At the person-level, need satisfaction of competence was positively related to crafting for mastery which may point at a gain spiral.

Relevance to the Congress Theme:

This study contributes to the understanding of the interplay of work and home. In particular, it advances the knowledge on how job stressors relate to employees’ off-job recovery.

United Nations Sustainable Development Goals (UN SDGs):

Good health and well-being.

*Keywords: Challenge hindrance stressors; Recovery; Diary study.*

## Paper 4

### Need-based crafting and work-life balance during the day

Nanxi Yan, University of Groningen; Jessica de Bloom, University of Groningen / Tampere University; Philipp Kerksieck, University of Zurich; Merly Kosenkranius, University of Groningen

#### Research goals:

The relationship between work and non-work life—work-life balance—has been a topic of interest in both public discourse and academic research in recent decades (Kelliher et al., 2019). Work-life balance can be defined as employees' attitude toward their life situation—specifically their satisfaction with balance between different areas of life, different roles, and goals (Syrek et al., 2011). One essential antecedent to work-life balance is psychological needs satisfaction, e.g., autonomy, belonging, and competence (Warner & Hausdorf, 2009). In addition to the top-down approach—providing employees with a need supportive environment, employees can also proactively engage in needs-based crafting (i.e., proactive self-management of need-based experiences, de Bloom et al., 2020). Needs-based crafting has the potential to help employees obtain health and wellness outcomes. Current research mainly examined the relationship between crafting and work-life balance at the trait level (Kerksieck et al., 2022; Sturges, 2012) but very little is known regarding how this relationship unfolds within the day. An enhanced understanding of need-based crafting trajectories and how it relates to work-life balance at the day level can provide new, fine-grained insights into individuals' crafting behavior in their natural environment.

#### Theoretical background:

The theoretical backdrop of this study is the needs-based crafting model (de Bloom et al., 2020) which proposes that individuals' crafting efforts satisfy their psychological needs: detachment, relaxation, autonomy, mastery, meaning, and affiliation (DRAMMA) across life domains is related to beneficial health and well-being outcomes. Crafting efforts have been categorized into approach-focused (i.e., expansion-oriented, aiming at approaching or adding desirable aspects) and avoidance-focused (i.e., contraction-oriented, aiming at avoiding or reducing negative aspects) crafting which provides a more nuanced understanding of crafting behavior and aligns with recent meta-analyses on crafting (Zhang & Parker, 2019).

#### Methodology:

We collected ecological momentary assessment (EMA) data for four measurement days, two weekdays and two weekend days in Spring 2021. Participants worked at least 24 hours per week, had no planned holidays nor shift work during measurement days/weeks. 110 employees completed at least one EMA survey (in total, we collected 2,358 observations nested in 396 days). The average age of participants was 40.4 years (SD =14.2), 44.5% were female, 70% received higher education, 53.6% lived in Germany, followed by 29.1% in the Netherlands. On average, they worked 39.5 hours per week (SD =8.2) with 70.9% had a permanent contract. The measures we used including needs-based crafting, work-life balance, energy, work engagement.

#### Results:

Using the NLME library in R, we specified growth curve models to investigate change trajectories of needs-based crafting across the day and the role of day-level work-life balance as a predictor of change in the needs-based crafting trajectory. Our preliminary analyses confirmed that needs-based

crafting followed an inverted U-shaped trajectory during weekend day and U shape during weekday. Work-life balance contributed to these change trajectories that people with high work-life balance also crafted more. We present the complete results during the conference.

#### Limitations:

The study limitations including the use of self-report measures raising concerns about common method biases. Also, there might be some between and within-level third variables cannot be ruled out (e.g., life events, yesterday's negative emotions) in this study.

#### Conclusions:

Taken together, this research of crafting and work-life balance at the day level contributes to the understanding of the micro-temporal process of this relationship; and it also contributes to research on boundary crossing (Ashforth et al., 2000) between life domains that employees' crafting efforts fluctuates from time to time, and from one domain to the other. In terms of practical implications, briefly speaking, the research findings can inform organizations' work design and policy making (e.g., providing crafting support, awareness, etc.).

#### Relevance to the Congress Theme and UN SDGs:

Need-based crafting, as a self-management skill, is an important toolkit for employees to become more prepared and resilient in today's ever-changing work and non-work life. It is related to UN SDGs: "Good health and well-being" and "Decent work and economic growth".

*Keywords: Need-based crafting; Work-life balance; Ecological momentary assessment.*

## Symposium S125

### Ensuring the health and well-being of health care workers after the pandemic: reflections and comparative research on protective factors

Silvia Platania, University of Catania, Italy

science\_practice

The situation caused by the COVID-19 pandemic required healthcare workers to operate on an emergency status to ensure care and safe measures for people who had been exposed to the virus and to limit the spread of this infection. In addition to these initial problems, additional psychological difficulties arose related to the fear of becoming infected and infecting relatives, and a general sense of helplessness towards patients' losses. The COVID-19 emergency exposed healthcare workers to multiple challenges and threats over time, causing symptoms of anxiety, exhaustion and stress, and even the development of depression, as confirmed by some findings on Chinese, Turkish and Spanish healthcare workers. As reported by Chen and colleagues, more than 40 percent of healthcare workers reported experiencing anxiety symptoms; more than 46 percent reported depression, 32 percent insomnia and 69 percent high levels of stress.

According to Folkman and Lazarus, the greater the stress perceived by the subject, the greater the possibility of manifesting symptomatic states that cause a lower ability to manage the situation, experienced as excessive and lower perception of one's own management skills. As previous researchers investigating healthcare workers engaged in the SARS and MERS pandemics reported, acute distress levels are associated with other psychopathological symptoms, such as anxiety, depression and secondary traumatic stress. The occurrence of post-traumatic symptoms combined with stressful situations is inclined to negatively impact on employee satisfaction and promote a decline in coping skills.

The theoretical reflections presented so far lead us to stimulate the debate on what is one of the main themes of the conference and which is fully inserted within what is one of the main themes of 2030 Agenda for Sustainable Development „Good health and wellbeing „. The workers who most suffered the burden and stress deriving from the pandemic were health care workers. The four contributions that will be presented within the symposium will allow to identify both different theoretical points of reflection on what is the perception of the safety and psychosocial climate by health organizations, and to identify the protective factors that the worker is able to field in the face of emergency situations. Furthermore, important points for reflection will emerge on the practical interventions that can be implemented to promote the well-being of workers.

For this purpose, therefore, the symposium will include the presentation of four empirical research contributions. The first contribution entitled „The effect of dispositional resilience on the relationship between professional quality of life and psychological distress factors of healthcare workers during the pandemic: a three-wave longitudinal study” will address the issue of dispositional resilience as a fundamental protection factor in longitudinal key; in the second study „The effect of Psychosocial safety climate on psychological distress of healthcare workers during the pandemic: a multilevel analysis”, the effect of the psychosocial climate of safety will be addressed by comparing the perception both at individual and group level; in the third study „The effect of psychological stressors on Job Satisfaction of Healthcare Workers during COVID-19: the mediation role of psychological capital”, the mediating effect of psychological capital between stressors and job satisfaction will be discussed; finally, in the fourth study „Safety Climate and Service Access during COVID-19: a

preliminary study in healthcare sector”, the overview will conclude with the analysis of the safety climate through a qualitative analysis.

*Keywords: well being; protective factors; climate*

## Paper 1

### **The effect of dispositional resilience on the relationship between professional quality of life and psychological distress factors of healthcare workers**

Martina Morando & Silvia Platania | University of Catania, Italy; Anna Paolillo & Vittorio Edoardo Scuderi | Kingston University, London; Stefania Gruttadauria, University of Catania, Italy

#### Research goals

The situation related to the COVID-19 pandemic forced healthcare workers to operate under emergency conditions to ensure treatment and safety measures for people who had contracted the virus and to limit the spread of infection. Since the beginning of the pandemic in Italy, medical staff had to cope with long, exhausting and stressful shifts and heavy workloads. In the first weeks of the pandemic, they also needed clear intervention protocols, adequate tools and the necessary personal protective equipment (PPE). As shown by other research since 2020, Italy has been and continues to be one of the most afflicted nations in terms of overload of hospital patients and difficulties in managing shifts due to staff shortages. This has resulted in high psychological stress, high health risks for healthcare workers and a generally reduced professional quality of life. Against this background, the aim of the present research is to examine the trend of stress, anxiety, depression and resilience levels and the effects on professional quality of life in Italian healthcare workers who worked on the front line during the first, second and third waves of the pandemic.

#### Theoretical background

In the current healthcare environment, job stress indicators is an important public health problem. Work-related and personal aspects could have an impact on the quality of life of healthcare workers. The current epidemic of COVID-19 stresses health care workers (HCWs) around the world and has impacted on the nature of their work and the quality of their personal and professional lives. Therefore, it is necessary to pay attention to and examine their professional quality of life. For this purpose, most studies (including our study) employ the Professional Quality of Life scale, which is used as a screening tool for the positive and negative aspects of working in the helping professions. This instrument allows us at the same time to analyse compassion satisfaction and compassion fatigue. For Stamm (2010), compassion satisfaction is the job-related satisfaction from helping or caring behaviour at work. While compassion satisfaction comes from positive interactions with patients, compassion fatigue comes from negative interactions, which result in the caregiver being worried about the trauma experienced by the patient and increase the emotional arousal or avoidance behaviour associated with the patient. In conceptualising ProQOL, Stamm (2010) embodies the previous behaviours and cognitions in the construct of secondary traumatic stress, suggesting that it reflects feelings of fear arising from the described sources. A secondary component of compassion fatigue according to Stamm's (2010) conceptualisation is burnout, as indicated by perceptions of exhaustion, hostility and depression. Several studies reported that frontline healthcare workers had higher secondary trauma scores than non-frontline healthcare workers (Kang et al., 2020; Lu et al., 2020). Resilience appears to play a mediating role in certain psychological dynamics variables (Wagnild & Young, 1993). Few research considered the relationship between resilience, Burnout and psychological distress as interacting variables.

#### Method

##### Participants and procedure

The research design of the study was established from the outset in three waves. In wave one, 478 people were recruited and they agreed to complete a survey on google platform. The same participants were then invited to a follow-up eight months later (wave two), where 92% of the original pool of participants agreed to participate (n = 440). Finally, during wave three, which also occurred eight months later wave two, the number of participants who responded to the survey dropped to 86% (n = 411; 52% men; Mage = 38; SDage = 8.1). The measures used were as follows: DASS-21 (Depression, anxiety and stress scale; Henry & Crawford, 2005); Professional Quality of Life Scale (ProQoL, for measuring compassion satisfaction, secondary traumatic stress, burnout) (Stamm, 2005); Dispositional Resilience Scale (Kobasa et al., 1982; it. Picardi et al., 2012).

## Results

Results indicated that in all three waves there is a significant increase in the effect of resilience on burnout: specifically, the effect of all three psychological distress decreases from the first to the third wave on Burnout. The effect of resilience on Burnout is significantly stronger in the third wave. In relation to secondary traumatic stress, progressively higher scores are found in the three waves, demonstrating a greater perception of workload and greater difficulty in managing the emotionality associated with the patient's perceived stress. This trend can also be seen in the resilience mediator effect, where despite the significant effect, an increase in stress and depression is found in the three waves. Finally, with regard to burnout, an increase can be observed in the comparison between the first and second wave, but a significant decrease during the third wave. Indeed, the effect of resilience on Burnout is significantly stronger in the third wave.

## Practical implications

Our findings are aligned to the existing literature on the fundamental role played by resilience and they underline the importance to invest on intervention strategies and programmes aimed at developing resilience in healthcare workers; however, it also underlines the importance to provide to prevention and assistance to health care workers with regards to job demands and unsustainable stressors. In terms of sustainable development goals, this work is part of good health and wellbeing.

## Relevant SDGs

In terms of sustainable development goals, this work is part of good health and wellbeing.

*Keywords: psychological distress; health care workers; resilience*

## Paper 2

### **The effect of Psychosocial safety climate on psychological distress of healthcare workers during the pandemic: a multilevel analysis**

Silvia Platania, University of Catania, Italy; Vittorio Edoardo Scuderi, Kingston University, London; Marcello Boccadamo & Martina Morando | University of Catania, Italy

#### Research goals

During the Covid-19 emergency, exceptional precautionary actions were taken with different effects on the population and workers involved. Work demands and workloads of healthcare workers have increased along with deteriorating physical and psychological well-being, and fear of being infected and passing the virus on to family and friends (Liu et al., 2020). These the critical conditions are increased by the obligation to wear personal protective equipment which, although essential, have caused and still cause inconvenience and some difficulties in breathing. Several studies have shown that a perceived lack of security leads to lower levels of personal well-being, less involvement, greater anxiety levels and an increased tendency to become a workaholic. The commitment has been defined as a positive motivational state that promotes a strong commitment of individual to work and, in turn, promotes positive outcomes for workers and businesses. In addition, there are discrepancies in perceptions of safety between nurses and doctors has been shown to affect different levels of psychosocial well-being during communication disease outbreaks. In response to this health crisis, the psychological assistance of health professionals they should be an essential part of the fight against the COVID-19 pandemic because of them vulnerability. The main objective of the study was to investigate the perception of a psychosocial safety climate and the effect on engagement and psychological stress in a sample of healthcare workers. Furthermore, we wanted to investigate the mediating effect of workaholism at both individual and group level.

#### Theoretical background

Several studies have shown that infectious diseases caused long-term and persistent psychopathological consequences in health workers (Tam et al., 2003; Lee et al., 2007). For example, previous evidence of the 2002--2004 severe acute respiratory syndrome (SARS) epidemic and the 2015 Middle East respiratory syndrome (MERS) epidemic showed that frontline health workers reported a lack of support. workplace and higher levels of psychological distress, anxiety, depression, and increased risk of developing long-term Post Traumatic Stress Disorder (PTSD).

Frontline health workers have found an unexpected increase in workload in a context of uncertainty, helplessness, alienation and isolation, making them more vulnerable to infection than other health workers or other categories of workers, they tend to report a higher prevalence of adverse psychological outcomes such as psychological distress. In addition, an excessive workload can intensify the work rate and pressure to meet all the job demands of health care workers, which, in turn, would increase the tendency to overwork and compulsively.

Several protective factors can help healthcare professionals cope emergency, during outbreaks or in other critical situations. The purpose of these protective factors was to provide essential resources, promote a climate of psychosocial security (PSC), and mitigate the negative effects of work (Yulita, Idris & Dollard, 2020). PSC is defined as shared employee perceptions of “ policies, practices and procedures for the protection of health and psychological safety of workers ” ( Dollard & Bakker, 2010, p. 580). Among these protective factors are the practice of physical exercise, clarity in

communication, the availability of personnel protective equipment, the need for adequate rest and practical and psychological support.

## Method

### Participants and procedure

The study involved 945 healthcare workers (physicians 42.3%, nurses 39.2%, healthcare assistants 18.5%) at the forefront of the battle against COVID-19 during the pandemic (males were 41.5% of the total sample), belonging to 9 organisations and organised into 21 working groups. Each group consisted of members from a distinct division of the organisation who were assigned to the same head of department. Participants were recruited through convenience sampling, and companies were contacted via written correspondence; once the approval from the HR department was given, a link to the survey was published in the companies' social media groups (i.e., LinkedIn, Twitter) and they were also approached in workgroups via written correspondence (e.g., email or invitation by letter to participate). The measures used were as follows: Psychosocial Safety Climate (PSC-12) (Hall, Dollard & Coward, 2010); Utrecht Work Engagement Scale (UWES-9) (Schaufeli and Bakker, 2003); Dutch Work Addiction Scale (DUWAS) (Balducci et al., 2019); Kessler 10 Psychological Distress Scale (K10) (Kessler et al., 2010).

## Results

The results indicate that a climate of psychosocial safety in health workers leads to a decrease in engagement through the mediation of compulsive work. This probably happens because inadequate work resources could lead to counterproductive and negative behaviors and reactions. One of the main connotations that characterized the COVID-19 pandemic concerns the great pressure of health institutions on workers, the requests for work have increased and the number of available resources has decreased. The mediating effect of compulsive work in the relationship between psychosocial safety and involvement could be due to a climate that does not guarantee or preserve the psychological health and safety of health workers. Compulsive work due to the state of emergency can cause tension, anger and irritation, leading to a reduction in all positive engagement-related behaviors such as happiness and enthusiasm.

### Practical implications

The results show the importance of the role that working compulsively plays as a mediator, as it can undermine the psychosocial safety climate causing workers to become detached from their work. In these frenetic times of insufficient readiness for a global pandemic, we need to understand whether healthcare organisations are prepared to support workers in their time of need, or whether all the burden is placed solely on these workers. Our research unlocks the possibility of investigating the negative effects of a poor psychosocial safety climate and compulsive work on effective employee engagement in various work environments, not only in the healthcare sector.

### Relevant SDGs

In terms of sustainable development goals, this work is part of good health and wellbeing.

*Keywords: Psychosocial safety climate; pandemic; multilevel analysis*

### Paper 3

#### **The effect of psychological stressors on Job Satisfaction of Healthcare Workers during COVID-19: the mediation role of psychological capital**

Pasquale Caponnetto, Giuseppe Santisi & Claudio Maggio | University of Catania, Italy

##### Research goals

The covid 19 pandemic has had a major impact on the lives, working and otherwise, of frontline health workers. New challenges have affected their lifestyles, increasing their levels of anxiety, irritability, and loneliness. Evidence shows that psychological capital (PsyCap) was a strong protective factor against these stressors. The purpose of this study was to analyze the job satisfaction of health care workers and the protective role of PsyCap. Therefore, we set out to investigate the negative correlation between anxiety, stress vulnerability, loneliness, and irritability with job satisfaction; furthermore, it is consequential, considering the literature, the negative correlation between PsyCap and these 4 stressors, and the protective role and positive correlation between PsyCap and job satisfaction.

##### Theoretical background

Frontline health workers have had to cope with an emergency condition that has led them to have new rhythms, new protocols, awareness of exposing themselves and their loved ones to a higher risk of infection, in addition to the fatigue resulting from the workload.

Under conditions such as fatigue, increased workload and high psychological stress, the perception of the quality of their work life deteriorated. Since the beginning of the pandemic, numerous publications and authors have reported that anxiety, depression, and stress are prevalent among frontline health workers. However, a very limited number of studies examine the extent and ways in which the job satisfaction construct has been affected. Among the published research, however, the findings are very clear: health care workers worldwide are largely dissatisfied with their work situation in the context of the COVID-19 pandemic (Zhang et al.). In addition, several studies reveal that the physical and psychological symptoms of anxiety and depression lead to poor work performance and significantly increase the risk of accidents (Da Silva, Dale). The impact of anxiety on job performance is significant and affects work at both the individual and organizational levels. At the individual employee level, it leads to impaired job performance, accidents, and sick leave. At the organizational level, there are impacts on productivity, staff morale, accidents, absenteeism, and staff turnover (Haslam). Job satisfaction, defined by Mousazadeh as an employee's accomplishment resulting from his or her work, producing a positive emotional response that is achieved as a result of self-assessment of one's experience at work, is known to have a positive effect on levels of self-esteem and self-efficacy and, consequently, on work behaviors. The analysis of job satisfaction of health care workers is a crucial factor for both health care workers and health care management. In conducting our study, we found that there was limited literature on the topic of health worker satisfaction during the emergency phase in Italy (Ramaci et al.). Therefore, the purpose of our study was to assess levels of job satisfaction among healthcare workers, investigating both specific antecedent factors (more traditional and more situation-specific) and the impact that psychological capital plays in preserving and promoting higher levels of job satisfaction. The present study will then be used to implement targeted health promotion interventions among health care workers.

##### Method

## Participants and procedure

The convenience sampling technique was used in this study, which is a method where the selection of participants is based on their ready availability, and we enrolled participants from the health workers population. Five-hundreds and twenty-seven health care workers on the front line of the battle against COVID-19 during the pandemic were enrolled in this study (physicians 35.2%, nurses 48.1%, health care assistants 16.7%; females were 71.7% of the total sample). Participants were from different areas in Italy (North, 36%; Central, 23%; South, 41%). The measures used were as follows: SVS (Stress Vulnerability Scale; Miller and Smith, 1985); GAD-7 (General Anxiety Disorder; Spitzer, 2006) scale in both the English and French versions; UCLA Loneliness Scale (de Grace, 1993); Brief Irritability Test scale (Holtzman, 2015); CPC-12 (Compound PsyCap Scale; Lorenz, 2016); JSS (job satisfaction scale; Platania, 2022).

## Results

Results indicated that psychological stress-related factors had a considerable impact on job satisfaction. All four of the predictors (Stress Vulnerability, Anxiety Symptoms, Loneliness and Irritability) examined were found to particularly decrease job satisfaction. Amongst other things, it is interesting to note the more pronounced result of Loneliness, whose impact on job satisfaction was significantly greater than the other factors analyzed.

The aspect of Loneliness in health professionals was also investigated in other studies and seems to be a particularly important finding for studies concerned with professionals who work in the environment of a health crisis.

Another objective of our study was to test the indirect effect of psychological capital, as a personal resource to be drawn on in response to the psychological stress arising from the situation. Our study shows how Psychological Capital could diminish the effects of psychological stressors on job satisfaction. Our results are consistent with previous studies that demonstrated that Psychological Capital could alleviate the role in work-related circumstances.

## Practical implications

The results suggest how, in a pandemic situation, involving frontline health workers, the effect of psychological capital could reduce the psychological stress arising from the work situation experienced and this implies that job satisfaction is not diminished. It is therefore necessary to develop psychological interventions that assist healthcare personnel in acquiring important resources such as resilience, optimism, self-efficacy, etc., that are useful for facing moments of crisis such as the COVID-19 pandemic. In conclusion, we believe that our research contributed to recent efforts to uncover the mediating role of psychological capital in the relationship between psychological stress and job satisfaction among frontline health professionals since the outbreak of the global COVID-19 epidemic.

In addition, these findings encourage the development of human resource management practices such as programs that aim to increase the performance and health of the psychological capital of frontline health workers.

## Relevant SDGs

In terms of sustainable development goals, this work is part of good health and wellbeing.

*Keywords: Psychological capital; stressors; Job satisfaction*

## Paper 4

### **Safety Climate and Service Access during COVID-19: a preliminary study in healthcare sector**

Vittorio Edoardo Scuderi, Kingston University, London; Ally Memon, Northumbria University, Newcastle; Anna Paolillo, Kingston University, London

**Background :** It has been apparent during the COVID-19 pandemic that there has been a hesitancy amongst the public (users) in accessing healthcare provision, typically in secondary and acute healthcare establishments, such as pharmacies and emergency care services. At the same time and especially at the peak of the pandemic, healthcare professionals across the world had to either refrain from physical working in hospital and community care environments or to deal with entirely new ways of working in novel risk averse environments, where safety is of paramount concern. For both employees and users, perceptions of safety climate and risk have radically altered during pandemic, as shown from the existing research in the last two years, and it appears to continue to do so in the post-COVID era, where the disease is far from disappearing yet. Despite the last 40 years of research on safety at work has often focused on safety climate as an antecedent of safety performance, this relationship has been scarcely investigated in the healthcare sector. More specifically, existing research in healthcare organisations has primarily focused on safety-related injuries, demonstrating what has already found in other settings, that better safety cultures and climates lead to less patients' injuries (defined as those injuries attributable to healthcare systems and professionals' mistakes, such as infections and medication errors). This research represents an innovative attempt to spotlight the users/patients' perspective; similar to the impact of safety climate on healthcare employees, users also perceive the atmosphere in which an organisation supports its employees to serve patients. Hence, the aim of this study is to examine possible spill over effects from the organisation and employees' safety climate to the users' safety perception of the same organisation/service provider, which could ultimately impact the delivery and usability of healthcare services. Investigating safety climate perceptions from the perspectives of both employees and users provides richness to this enquiry since both those stakeholders are key change agents in determining performance and creating value in public service organisations.

**Method:** This study applied a qualitative research design by interviewing two samples of 17 healthcare professionals and 23 healthcare users in the following departments: mental health and social care, cardiology, maternity, and critical care, respectively. Both samples were interviewed using semi-structured interviewing technique to gather primary data about their perceptions of their organisation (for employees) / last service accessed (for users) with regards to priority given to safety, together with employees/users' individual motivation to perform safely and their actual behaviours in terms of measures personally taken to reduce the risk of accidents and incidents when at work / accessing the service. Then, the interviews were transcribed and analysed using thematic analysis to identify possible recurring themes and patterns and enable one to gain insight and understanding of the phenomena in question. Data were analysed using AntConc qualitative data analysis software.

**Findings :** Findings have shown that professionals and users' perception of safety in the healthcare sector has increasingly become a priority after the spread of the SARS-CoV-2. Regarding healthcare professionals, safety procedures, protocols and practices have increased along with training sessions aimed at reducing the risks of infection faced by both professionals and users. At the same time, healthcare users perceived good levels of safety when they had to use private or public healthcare services such as NHS or general practitioners. This was due to both displayed instructions and verbal

guidance provided by healthcare institutions and professionals to reduce the risk of infection; at the same time, users underlined their own motivation to follow those guidelines and to correctly use the measures (i.e., masks, hand sanitisers and social distancing) to safeguard their health and prevent the risks of transmission. Despite the above, some additional themes have emerged; specifically, some users reported that, during the peaks and between waves of the pandemic, the delay in planning interventions for severe or mild conditions posed a risk to their safety. Specifically, the main words used were “unsafe/risk”, “short-staffed”, and “appointments after months”, hence the main perceived concern was related to “treat people in time”. Therefore, the rigour applied by healthcare professionals in implementing safety policies and practices and the importance given to such procedures (e.g., “... it was pretty much really safe, and just because of how they conduct...they still stick with those restrictions...even during the hospital visit, even if it was like high cases of Covid when I was attending the hospital back then, but still they really monitored my conditions...I was happy, honestly, with everything”) appear to promote users' compliance with safety procedures and their perception of being safe when accessing the service, although it did seem to pose some concerns with regards to their long-term health conditions, but non COVID-related.

**Conclusions/Practical implications:** This study shows that if patients feel that their healthcare provider attempts to maintain excellent safety levels and provides employees with measures and systems for a safe service delivery, then patients will feel safe to access and use the service. This has important implications for the organisation as well, since it helps highlighting how promoting a safe environment for workers, (in this case in terms of giving priority to minimising the risk of contracting the COVID-19 disease at work), can have positive repercussions on the users' perceptions of safety when accessing the service. From a practitioner's perspective, through the development of a positive safety climate among employees, there appears to be the added benefit of the behaviours and interpretation of events that occur among users too. A positive safety culture may be therefore enforced not only by having the workforce as the main goal, but also considering the service users, with positive repercussions for the whole organisation.

**Relevant SDGs:** In terms of sustainable development goals, this work is part of good health and wellbeing.

*Keywords: Safety climate; Covid-19; health care workers*

## **Symposium S077**

### **Sustainable Careers in Times of Change**

Madeleine Haenggli, University Carlos III de Madrid / University of Bern; Jos Akkermans, Vrije Universiteit Amsterdam

science

What will be covered and why

Research on sustainable careers has gained considerable momentum in recent years. Sustainable careers are characterized by happiness, health, and productivity indicators and focus on the interplay between person, context, and time requiring different research approaches to gain insights (De Vos et al., 2020; Van der Heijden et al., 2020). The contributions in this symposium use a variety of methodological and theoretical approaches to examine different aspects of sustainable career development in times of change.

The first contribution investigates international graduates' employability development during the school-to-work transition. The two-wave qualitative study applies a sustainable career perspective and emphasizes that the balance and alignment between three characteristics (happiness, satisfaction, productivity) is key to attaining a sustainable career. The second study presents a longitudinal quantitative intervention study targeting proactive motivation states as theoretical key predictors of career self-management behaviors. This study provides insights into how and by what means proactive career self-management behaviors can be systematically promoted to facilitate sustainable career development. The third contribution is a qualitative exploration of different processes that arise from the desire to realize an intra-organizational change. Taking a dynamic approach to understanding contemporary careers, the study provides insights into which pathways arise from this desire, whether people succeed in realizing the desired change, why people act (or fail to act) on this desire, and how this is influenced by their context. The final contribution presents a study on career self-management as a predictor of wellbeing trajectories during organizational restructuring. This longitudinal quantitative study provides insight into how these trajectories develop over time and differ between people and when during organizational change processes, career self-management is most critical for these trajectories.

The symposium will end with our discussant opening a discussion on sustainable careers integrating the four contributions. The discussant is an expert in the area of sustainable careers, as evidenced by being an author of numerous publications on sustainable careers' individual, job-related, and organizational determinants.

Relevance to the congress theme and SDGs

The papers in the proposed symposium explore topics and research methods that are directly relevant to the congress' theme. Nowadays, individuals experience various career changes throughout their working lives, starting in an early phase during the school-to-work transition and continuing through both voluntary and involuntary change. Effectively managing these changes can contribute to long-term career success and enable sustainable career development. In addition, the focus in the future of work is increasingly on the employees' responsibility to create their sustainable career development. The symposium connects with the UN SDGs focusing on decent work and wellbeing.

Research/practical implications

Using a variety of longitudinal methodological approaches (e.g., intervention, qualitative studies), this symposium offers theoretical and empirical advances in the sustainable career development framework for managing change in one's career. Furthermore, it provides valuable insights into research on sustainable careers by including different career development factors.

#### Overall conclusions

Our symposium explores sustainable careers throughout the lifespan using different methodological approaches and longitudinal research designs. Taking into consideration the dimensions of person, context, and time, the findings provide insight into how individuals achieve their career goals and maintain sustainable career development. Moreover, the symposium enriches the research on sustainable career development by highlighting different samples and perspectives. As such, the symposium provides insights into international students facing a double transition (educational and cultural). Furthermore, the symposium explores employees who need to proactively manage their careers to achieve career goals and adapt to changing organizational circumstances. Moreover, it deals with how these behaviors can be fostered and what this means for their well-being. Finally, different forms of stable careers, career inaction, and intra-organizational careers are included. Accordingly, our symposium offers new insights for a better understanding of the dynamic nature of the work world and should inspire future empirical research and theory.

discussant: Beatrice van der Heijden, Radboud University Nijmegen

*Keywords: Sustainable Careers, Career Development*

## Paper 1

### **Tackling Tricky Transitions: A Two-Wave Qualitative Study on International Graduates' Employability Development During the School-To-Work Transition**

Di Dong, Svetlana Khapova & Jos Akkermans | Vrije Universiteit Amsterdam

#### Research goals and why the work was worth doing

Our goal is to investigate international graduates' employability development during the school-to-work transition (STWT). We focused specifically on international students as they likely face unique enablers and obstacles during this critical transition. With this qualitative study, we aim to more fully comprehend the role that cultures play in STWT in both the home and the study countries. Furthermore, by viewing it through the lens of sustainable careers (De Vos et al., 2020), it helps us better understand how graduates' context, time, and agency interplay to shape their early-career happiness, wellbeing, and productivity, allowing them to develop and lay the groundwork for future career development.

#### Theoretical background

This research applies the sustainable career perspective as a theoretical framework (De Vos et al., 2020; Van der Heijden et al., 2020), it emphasizes that the balance and alignment between three characteristics (happiness, satisfaction, productivity) is key to attaining a sustainable career. Moreover, the trend of career development is a lifelong succession, STWT as a starting point is important for emerging adults (see, e.g., Akkermans et al., 2021), especially international mobile graduates as a stepping-stone to advance their career development. Thus, it provides a unique angle to better understand the perception of this group during STWT.

#### Design/methodology/approach/intervention

The study adopts a two-wave qualitative research approach to inductively gather insights into international, specifically Chinese graduates' perceptions of employability and early career development. To obtain a profound understanding and preserve consistency in the result, interviewees were interviewed twice: approximately 6 months before graduation (when studying abroad) and 6 months after (when working in Europe and China). In total, we conducted 50 semi-structured interviews (25 participants who completed two interviews).

#### Results obtained or expected

Preliminary findings point toward two groups of graduates' career paths, which align with their initial career expectations and vision prior to graduation. Specifically, the group that planned to work in China successfully found jobs there, whereas the other group ended up working in the Netherlands as expected. Hence, their primary career goals and destinations were relatively stable across a 1-year period. Second, we uncovered what we term a "double transition," referring to the STWT alongside a cultural transition. We found that the graduates who returned to China continued to retain the mentality they acculturated from western culture and perceived various aspects of a sustainable career. Finally, we preliminarily identified three patterns that reveal disparities in career-related orientations: proactive, indifferent, and passive orientations, which are influenced by international experiences and multicultural worldviews.

#### Limitations

First, we tracked Chinese graduates who received their degrees from Dutch universities one year later, therefore, did not investigate other European countries. It is necessary to research whether the perceptions and understandings will remain the same in other European countries. Second, the professional areas of the graduates were not specified. Because of the variations in organizations, positions, and personal objectives throughout the course of a career, it could be useful and adequate to investigate different industries in the future.

#### Research/practical implications

The study contributes to the STWT and sustainable career literature in two ways. First, we apply a career perspective to international mobile graduates and look beyond the educational or cultural transition. Specifically, we create a better understanding of how international mobility experience may be instrumental for the double transition, especially for their career establishment. Second, through a sustainable career lens, as contemporary careers are more unpredictable, our findings on international graduates provide insights into how individuals achieve their long-term career goals from a sustainable career perspective.

#### Relevance to the congress theme

This group of recent graduates acculturated with bicultural and multicultural backgrounds, equipped with new competencies and skills, could contribute to many professionals and promote more collaborations worldwide, thus in line with the congress theme, they also play an essential role in presenting and delivering the changes in the future, that is to say, our participants are the future of work.

#### Relevant UN SDGs

The research first replies to the UN SDGs: Achieving full and productive employability for young people and tied to international employment expansion and accelerating economic development globally. Second, our study group complements the strengthening of the international partnership for sustainable development by mobilizing, sharing, and exchanging their knowledge, expertise, and skills to support the accomplishment of individual sustainable development goals in the countries where they work.

*Keywords: International Mobility, School To Work Transition, Sustainable Career Development*

## Paper 2

### The Effect of Online Interventions Focusing on Different Aspects of Career Self-Management Motivation

Dawa Schläpfer, Francisco Wilhelm & Andreas Hirschi | University of Bern

#### Research goals and why the work was worth doing

The present study aims to provide new scientific knowledge on the promotability of Career self-management (CSM) behaviors through the systematic development and evaluation of career interventions. This study goes beyond previous studies by systematically manipulating proactive motivation states as theoretical key predictors of CSM behaviors. In this regard, three electronic proactive motivation interventions were developed.

#### Theoretical background

Consistent with Parker et al.'s (2010) model of proactive motivation, we propose that individual differences in the degree of engagement in proactive CSM behaviors arise through activating a person's career-related motivation and that proactive motivation acts as the primary proximal predictor of CSM behaviors. Following Pinder's (2008) definition of work-related motivation, we define CSM motivation as a set of energetic forces that originate from personal and contextual factors that drive the selection, intensity, and persistence of CSM behaviors. Thus, each intervention to promote one of three motivational states (i.e., can do, reason to, energized to) consist of personal and environmental factors.

#### Design/methodology/approach/intervention

To investigate whether the interventions can increase the three motivational states, a pilot study with a between-subjects design, consisting of three different intervention groups and an active control group, was conducted. Wang et al.'s (2022) indicate that at least two of the three motivational states should be activated to enhance engagement in proactive behaviors. Thus, for the main intervention study, using a repeated measures design, the newly recruited employees will complete several weekly assessments for three consecutive weeks. To deal with possible order effects of the interventions, we will use a complete counterbalancing design. We will conduct post-tests three weeks (Follow-up 1) and six weeks (Follow-up 2) after the final intervention week. This research design will allow us to (a) examine how the effects develop during the weekly intervention period and (b) to what extent the effects are sustainable over several weeks after the interventions.

#### Results obtained or expected

Preliminary findings of the pilot study show promising results for two of the three online interventions. Contrast analyses revealed that, while controlling for age, work experience, organizational tenure, and salary, the can do intervention significantly increased CSM self-efficacy  $t(502) = 0.414, p = .048$ , compared to all other conditions. The reason to intervention did significantly increase identified regulation  $t(502) = 0.863, p = .049$ , career goal clarity  $t(502) = 0.726, p = .016$ , and career goal commitment  $t(502) = 0.61, p = .040$  compared to all other conditions. However, the intervention did not significantly increase intrinsic motivation  $t(502) = 0.524, p = .244$ , and self-transcendent career meaningfulness  $t(502) = -0.305, p = .351$  compared to the other conditions. The energized to intervention showed no significant increase in high positive affect  $t(502) = -0.359, p = .295$ , and low positive affect  $t(502) = -0.451, p = .155$  compared to the other conditions. We expect

that the interventions focusing on motivational aspects of CSM may result in improved CSM behaviors, and more distal outcomes such as occupational wellbeing and career/job satisfaction.

#### Limitations

A common factor across all three interventions is that the method of expressive writing was used shorter than other studies used expressive writing (e.g., King, 2001; Lanaj et al., 2019), which might limit its effectiveness. Another limitation of the study was the use of a panel provider which might result in different participants, and thus results, compared to self-selected intervention samples.

#### Research/practical implications

First, although recent research has broadly acknowledged the importance of CSM, how and by what means proactive CSM behaviors can be systematically promoted remains an important open research question (Hall et al., 2018). The study provides a theory-based online intervention that provides an integrative understanding of the nature of CSM behaviors. Second, the interventions assist adults in lifelong CSM, and empower employees to master their career-related challenges autonomously, enabling them to access and effectively use the full range of resources within themselves and their environment. Lastly, the three electronic proactive motivation interventions provide a deeper insight into the effectiveness of online interventions and create a more accessible, cost- and time-effective alternative to traditional face-to-face interventions.

#### Relevance to the Congress Theme

This research contributes to the congress themes “training and development” and “wellbeing” by studying how people can get motivated for lifelong career self-management within a changing work environment.

#### Relevant UN SDGs

The research contributes to the UN Sustainable Development Goals ‘good health and wellbeing’ and ‘decent work and economic growth’ by providing more insight into the career self-management process which could help employees build sustainable careers.

*Keywords: Career Self-Management, Proactive Motivation, Sustainable Career Development*

### **Paper 3**

#### **Desiring a Career Change: What's Next?**

Roosmarij Clercx, University of Antwerp; Sofie Jacobs, Antwerp Management School; Ans de Vos, University of Antwerp / Antwerp Management School

#### Research goals and why the work was worth doing

Time and dynamics are core elements of careers (Akkermans et al., 2021; De Vos et al., 2021; Mayrhofer & Gunz, 2022). However, career transitions are mostly approached from a static perspective and therefore fail to capture how processes such as career decisions emerge and evolve over time (Fouad, 2021; George et al., 2022). Taking a dynamic perspective is important because it will enable us to understand why careers remain stable (Rodrigues & Guest, 2010) and why people fail to realize their desires (Verbruggen & De Vos, 2020). In addition, due to the focus on agency, the context in which careers develop is neglected (e.g. De Vos et al. 2021). The aim of this paper is to gain more insight in the different pathways that arise from the desire to realize an intra-organizational change, why people act (or fail to act) on this desire and how this is influenced by their context.

#### Theoretical background

The theory of career inaction explains the decision process of people that fail to act on their desire for a career change (Verbruggen & De Vos, 2020). The process consists of three phases (1) awareness (2) inaction and (3) recall phase. When people become aware of their desire for change, several inertia-enhancing mechanisms (i.e., short-term costs, fear, and high cognitive demands) make it more difficult to act on this desire. The mechanisms are more likely when the desire for change is vague, when it is perceived as a big step or when the timeframe to realize the change is long. In addition, experiencing high job embeddedness and norms of staying within the social context, also increases the inertia mechanisms.

In this research we focus on intra-organizational mobility. Due to the appearance of new types of careers (e.g., boundaryless and protean career Defillippi & Arthur, 1994; Hall, 2004) that emphasize individual agency, organizational careers have received less attention (Mayrhofer et al., 2020). However, organizations expect individuals to take more responsibility for their careers (De Vos & Cambré, 2017). It is interesting to study career inaction in this context as the responsibility to realize the desire for change is a key element of its definition (Verbruggen & De Vos, 2020). At the same time, there is critique on overemphasizing agency in careers (De Vos et al., 2021; Forrier et al., 2009). Therefore, we take both agency and structure into account by studying the decision-making process of individuals within their context.

#### Design/methodology/approach/intervention

We use a longitudinal qualitative research design in which we follow 30 employees who expressed a desire to make an intra-organizational change within two organizations that stimulate internal mobility but emphasize personal agency. During the timeframe of one year, we interview the employees three times, separated by six months. In the first interview, we first discuss the previous career and their desire for change in detail. The second interview looks back on their experiences in the past months and looks forward to the next months.

#### Results obtained or expected

At the moment, the second wave of interviews is being collected. The result of the ongoing analyses will be presented at the conference.

#### Limitations

The scope of the study is limited to 30 individuals within two organizations, which limits the generalizability of the study. Second, since the timeframe to realize the desire for change might vary (Verbruggen & De Vos, 2020), the timeframe of one year might be insufficient for some people to realize their desire.

#### Research/practical implications

We contribute to the literature in the following ways. First, we contribute by giving a prominent place to time in our study (Akkermans et al., 2021; De Vos et al., 2021; Fouad, 2021) and therefore contribute to theories that are inherently dynamic, such as the theory of career inaction (Verbruggen & De Vos, 2020). Second, we study poorly understood phenomena such as different forms of stable careers, career inaction (Verbruggen & De Vos, 2020) and intra-organizational careers (Baruch & Sullivan, 2022). Lastly, we contribute by considering both agency and structure in the career-decision making process (De Vos et al., 2021; Forrier et al., 2009).

#### Relevance to the congress theme

This research contributes to the congress theme by studying how people make career decisions and shape their career within a changing work environment.

#### Relevant UN SDG's

Lastly, the research contributes to the UN Sustainable Development Goal 'wellbeing' and 'decent work' by providing more insight in the career decision-making process which could help employees in pursuing their career desires and building sustainable careers and organizations in shaping their HR policies.

*Keywords: Intra-Organizational Mobility, Career Inaction, Career-Decision Making*

## Paper 4

### Facilitating Adaptation to Organizational Change Using Employees' Career Self-Management

Madeleine Haenggli, University Carlos III de Madrid / University of Bern; Sjur Uitdewilligen, Maastricht University; Ramón Rico, University Carlos III de Madrid

#### Research goals and why the work was worth doing

Organizational change research has mainly focused on the business and strategic aspects, neglecting employee-related factors and wellbeing outcomes (Trenerry et al., 2021). Particularly, there is a lack of knowledge about how employees' career self-management (CSM) behaviors can facilitate adaptation to organizational change and ensure sustainable career development and wellbeing. Furthermore, the literature lacks an understanding of the mechanisms driving these effects and potential boundary conditions. To redress these gaps, this study examines when and under which circumstances organizational change has positive versus negative effects on sustainable career development and employee wellbeing. Specifically, we investigate the role of employee CSM on employees' wellbeing, expecting positive relations between CSM and wellbeing outcomes over time.

#### Theoretical background

Work plays a vital role in employees' wellbeing. Nowadays, work not only provides sustenance and livelihood but serves as an essential source of meaning, personal fulfillment, enrichment, happiness, and satisfaction, which can be seen as principal elements of perceived wellbeing (Diener et al., 2018). However, recent changes in how we organize work profoundly affect employee wellbeing (Pereira & Romero, 2017), evoking fear of job loss and uncertainty about personal career development (Akkermans et al., 2021). Such significant events that occur in an individual's professional life can significantly impact their career paths (Hirschi, 2010), threatening sustainable career development (Akkermans et al., 2021) and, thus, wellbeing (Luhmann et al., 2012). Against this background, it is increasingly important to foster CSM as a vehicle to ensure wellbeing in our society (Hirschi et al., 2020). CSM is defined as "a process by which individuals develop, implement, and monitor career goals and strategies" (Greenhaus et al., 2010, p. 12) and is thus a powerful contributor to employees' wellbeing, serving both their own goals and those of the broader society and economy (Lent, 2018).

#### Design/methodology/approach/intervention

Data was collected during organizational restructuring at a large company in Switzerland at four measurement time points with time lags of 8 weeks between each survey. The final sample consists of 308 employees. Specifically, we investigate how trajectories of wellbeing outcomes develop from the beginning of the organizational change over time, how individual differences influence these trajectories in prevention and promotion focus, and when during organizational change CSM may be more beneficial for these trajectories.

#### Results obtained or expected

The idea is that CSM buffers organizational change, as employees conduct CSM behaviors to better deal with changes, leading to more sustainable career development and, thus, increased wellbeing. Also, the frequency of CSM behaviors depends on employees' career focus (prevention vs. promotion focus). Employees with a promotion focus show more career-related activities, whereas those with a prevention focus maintain the same level over time.

## Limitations

We exclusively relied on self-reports and cannot claim causality based on our time-lagged data.

## Research/practical implications

This study is an important step forward, exploring employee CSM behaviors, sustainable career development, and wellbeing during organizational change and over time. This study identifies employee populations that are particularly vulnerable when faced with change and provides insights into factors that help employees adjust to organizational changes. Furthermore, we integrate critical theories and insights from (sustainable) career literature to provide the most inclusive model of factors that help individuals during a potentially disruptive period in their lives.

## Relevance to the Congress Theme

As voluntary and involuntary changes in current work settings occur more frequently, our study contributes to the congress theme in several ways. First, the study provides important insights into how people cope with unexpected work events and what helps them to adapt successfully to maintain sustainable career development and wellbeing. Second, the study investigates the active role of employees in supporting a successful adaptation to organizational changes. Third, insights may become groundbreaking for organizations, policymakers, and career counselors to help individuals to pursue sustainable and healthy careers. Moreover, the study contributes to a better understanding of the impact of organizational change on employees' wellbeing, advancing a crucial research area.

## Relevant UN SDGs

The study is in line with the following UN SDGs: Investigating what fosters individuals in dealing successfully with contemporary career dynamics and increasing their wellbeing levels as a result. Furthermore, our study provides insights into embracing the active role of employees in times of uncertainty, contributing to working conditions improvement.

*Keywords: Career Self-Management, Organizational Change, Sustainable Career Development*

## Symposium S078

### **Harnessing the “Power of Us”: The Importance of Social Identity in Pandemic, Emergency and Disaster Responders**

Stefan Schilling, University of Oxford

science\_practice

Pandemic, Disaster, and Emergency workers (e.g., firefighters, police officers, paramedics, healthcare workers, and disaster relief personnel) perform in a unique organizational context. For most, responding to extreme events is not their primary role and many have received only limited training for such eventualities (even dedicated disaster relief agencies such as the German Technische Hilfswerk (THW) or the Israeli Homefront command consist predominantly of volunteers or reservists with different day jobs). Yet, when they are called upon to respond, such personnel are routinely expected to operate in highly chaotic, unexpected, urgent, and dangerous situations, with their work having a wide-reaching impact on people’s survival and livelihood, and the reduction of damage to local infrastructure. Given the high-risk environment and their unique responsibilities, such personnel often share a strong identification with their immediate team, and performance requires strict adherence to corresponding professional values, norms, and standard operating procedures of their organization. While identification between the organization and the team provides valuable resources for dealing with adverse experiences and can mitigate against negative mental health outcomes, strong identification with the team and differentiation from outgroups can have detrimental effects on collaboration across professional boundaries and can hinder effective disaster and emergency response. The inherent multi-sectorial complexity of most disasters, which requires effective interoperability, operational communication, and coordination across multi-disciplinary and multi-agency networks often highlight the limits of teams and organizations with strong group membership.

This symposium highlights the importance of the group and associated social identity processes for understanding the functioning of emergency services and the implications of the work on their employees. The present work provides both empirical evidence and practically innovative approaches to how social identity can be harnessed to improve mental health, interprofessional teamwork, and rescue operations. First, Neela Mühlemann will set the scene of the symposium by exploring the importance of firefighters’ occupational identity for their well-being during active duty and after retiring from the fire service. Stefan Schilling will then present qualitative and quantitative evidence from the NHS COVID Teams study showing how social identification with their immediate team impacted healthcare workers working on COVID wards. The presentation will show that social identification with other ward members, social support as well as proximity with co-workers help to prevent ill-mental health above and beyond the preventative effect of training and preparation measures. Louise Davidson will move into the operational space, addressing how blue light personnel’s occupational identities can create conflict and reduce joint teamwork. Simultaneously, harnessing and embracing a common superordinate identity as Pandemic Multi-Agency Response Teams (PMARTs) can be used to enhance multi-agency working. Finally, Tal Levy Diamenshtien will showcase – using her own experience in search & rescue operations – a practical innovation developed by the Israeli Disaster Response Unit, which utilizes a shared social bond between first responders and affected population to aid in the search and rescue effort and support the subsequent recovery and bereavement process. Finally, Prof. Alex Haslam, will pull the affective and functional threads together by discussing the impact of the presented empirical and practical contributions for future research.

By discussing how social identity processes within and between emergency services impact individual health, operational performance and multi-agency teamwork, the symposium is addressing several of the EAWOP 2023 themes, e.g.,

- how social identification can contribute to improved mental health and well-being by mediating stressors

- how social group membership can be utilized to increase collaborative working in an inter-professional environment

- showcase innovative practices to integrate affected populations in the S&R efforts and aid in their grieving process.

We conclude that the social identity approach is an appropriate theoretical lens to investigate the work in disaster and emergency services. Due to the nature of their work, social identities are central to the sense of self of personnel in these organizations and are an important source of social support, a sense of belonging, and guidance in facing adversity at work. The present work highlights the importance of identification processes across multiple emergency service organizations (e.g., police, fire, rescue service, etc.) and contributes to our understanding of the impact of intra- and intergroup dynamics in the contexts of emergency and disaster response.

discussant: Alex Haslam, University of Queensland

*Keywords: Emergency Organisations, Inter-professional, Social Identity*

## **Paper 1**

### **Firefighters' occupational identity: A cure and curse for their health and well-being**

Neela Mühlemann, University of Greenwich

**Research goals and why the work was worth doing:** The work of first responders to emergencies (e.g., firefighters, police officers and other member of the emergency services) is threatening, dangerous, and demanding. Work in these high-risk occupations are considered to be stressful and linked to a range of adverse psychological outcomes, for example depression and anxiety. The purpose of the present research was to provide insights into the role of firefighters' occupational identities in preventing or promoting ill-mental health.

**Theoretical background :** Because firefighting is an occupation that can be characterized by teamwork, camaraderie, and strong identification, there is likely a shift from the personal towards the social (group) level of identity. Thus, the social identity approach is appropriate in an analysis of firefighters' health. This theoretical approach makes the fundamental point that social group membership (e.g., being part of a work or occupational unit or team) can provide valuable resources to cope with adversity. At the same time, if an important identity is lost, it can have detrimental effects on individuals' health. The core research question that the study aims to address is: How can variables of social connectedness be managed to foster individual resilience of firefighters to deal with adverse experiences at work and in retirement and how group-based resources can prevent them from ill-mental health.

**Design/Methodology/Approach/Intervention :** Qualitative data from 20 in-depth, semi-structured interviews were conducted with retired firefighters. Participants reflected on their work as firefighters and discussed the importance of their occupational identity for their life in retirement.

**Results:** Thematic analysis indicate that firefighter identity very central to firefighters' sense of who they are and provides valuable resources for coping with adverse experiences at work. However, retirement is experienced as identity loss associated with missing a sense of meaning in life among retired firefighters and left them socially isolated in retirement.

**Limitations :** The number of participants was rather small, and findings of the qualitative study based on only twenty interviews.

**Conclusions – research and or practical implications :** Thus, we conclude that the occupational identity plays an important role for firefighters during their work life and beyond in retirement. The centrality of their strong sense of belonging to the occupation and the fire service has important implications for their mental health and well-being. By managing this important occupational identity and the associated group dynamics, fire services and their leaders can help their employees to sustain good health despite the adversities they experience in their work and the aftermath.

**Relevance to the Congress Theme :** The change from working to retired life can be considered as a major challenge. What the future hold for firefighters after leaving the Fire Service depends on their ability to manage the identity transition. The research demonstrates that identity management is key for a bright future and good health in retirement.

**Relevant UN SDGs :** The research contributes to our understanding and the promotion of good health and wellbeing.

**Keywords:** *Firefighters, Social Identity, Well-Being*

## Paper 2

### **“Built out of the horror of what we were seeing” – Teamwork, Social Identity and Social Support as predictors of mental health outcomes in interprofessions**

Stefan Schilling, University of Oxford; Nik Steffens, University of Queensland; Neela Mühlemann, University of Greenwich

**Research Goals and why the work was worth doing:** We aim to examine how non-technical factors for healthcare delivery (e.g., teamwork, preparedness, communication, shared mental models), social identification and social support by family and colleagues’ impact on the mental health of interprofessional healthcare staff working on COVID-19 wards. Given the increase of deployed personnel during COVID, and the fact that individual augmentees in other occupational contexts repeatedly report higher rates of negative mental health outcomes (Cucciare, Mengeling, Han, Torner, & Sadler, 2020; Ursano et al., 2017), it is important to assess the enduring effects on staff members least prepared for – or experienced in – emergency and critical care environments.

**Theoretical Background:** The multi-symptom pathology of SARS COV-2 required the quick integration of personnel from different disciplines, with varying degrees of intensive or acute care experience and little or no preparation or training, into COVID-19 wards. While recent studies highlight negative mental health outcomes in Health Care workers during the COVID-19 pandemic – with one recent UK study reporting that 39.5% of ICU personnel exhibited signs of probable PTSD and up to 80% struggled with stress, anxiety and exhaustion (Greenberg et al., 2020; Neil Greenberg, 2020) – little is known about the impact of different levels of occupational experience, preparedness, and training on such mental health outcomes. Furthermore, despite pre-pandemic evidence of the beneficial impact of social factors (e.g., social support, social identification with the team, and teamwork) on mental health of healthcare personnel, little research has focused on such factors during COVID work. Considering these difficulties, this ESRC funded and NIHR adopted research aims to understand the impact of preparedness, training, teamwork, social identity, and social support during long-term high stress work on frontline personnel from different care pathways and professions.

**Design/ Methodology:** The study will present some qualitative interview data from Phase 1 and quantitative data from Phase 2 of the NHS COVID TEAMS Study, which surveyed 458 permanent and deployed NHS Healthcare personnel from 18 NHS trusts working in wards treating Covid patients (e.g., ITU, respiratory HDU, COVID rehab unit). The survey contained standardised measures (GHQ-12 (Goldberg & Hillier, 1979), PCL-C 6 (Lang & Stein, 2005) to test prevalence of PTSD, NHS Burnout Scale, DRR1-2 Social Support Scale (Affairs et al., 2016; Vogt et al., 2013) and the 4 item Social-Identification Scale (Doosje et al., 1995; Drury et al., 2015; Veelen et al., 2015). Additionally, the survey tested for teamwork, preparedness and COVID work stressors and experiences.

**Results obtained or expected:** Results from linear regression analysis show that deployment had no significant effect on mental health outcomes, whereas social identification with other ward members, social support (from both family and colleagues) as well as proximity with co-workers helped to prevent negative mental health outcomes in IP personnel above and beyond technical trainings and preparation measures. The findings indicate that technical trainings preparing personnel on Covid-wards could prevent ill-mental health (PTSD, Burnout) to some extent, but group dynamics within the teams played a crucial role in helping them to deal with adversity at work.

Limitations: The data was limited to cross-sectional data of UK personnel deployed during COVID and as such may not be generalizable to other healthcare systems.

Conclusion: The results show that beyond training personnel for technical and non-technical skills factors social identification with the team, proximity to co-workers and social support significantly reduce negative mental health outcomes. This suggests that healthcare services need to invest more into developing identification with the work-team, provide for more opportunities for social exchange and enhance social support. The research project has relevance for the nation-wide response to future pandemics as well as to localised emergency and disaster relief efforts requiring ad-hoc fluid teamwork.

Relevance to Congress theme: This research expands upon preliminary work conducted on individual health outcomes during the initial stages of the COVID-19 pandemic, by systematically analysing the enduring impact of teamwork, social identification, and social support upon psychological outcomes of medical staff at the front line of the COVID response. By addressing the impact of social identification in healthcare personnel the study is highly relevant to practitioners by emphasising not only the need for training and preparedness of healthcare staff, but also highlight the importance of team integration to increase interprofessional collaboration and teamwork.

Relevant UN SDGs: This research contributes to UN SDGs 3 and 11. By providing recommendations for the training and professional development of healthcare staff, and the organisational structure within hospitals, we hope to support the development of resilient and effective hospitals and healthcare providers. By supporting the health and well-being of healthcare staff, this research is not only relevant to ensure healthy lives by providing effective patient care, but it also informs how to structure, lead, and manage rapidly amalgamated healthcare staff in future disaster, pandemic, and emergency situations.

*Keywords: Healthcare Workers, Covid-19, Social Identity*

### Paper 3

#### **A social identity perspective on interoperability in the emergency services in the UK: Understanding how police officers, firefighters, and paramedics**

Louise Davidson, University of Sussex and the UK Health Security Agency

Research goals: Incident inquiries and reports highlight the need for better understanding of multi-agency emergency response, specifically the social interactions that take place in the process of dealing with major incidents. With this in mind, we sought to understand, from a psychological point of view, how multi-agency response teams operate and the possible role of shared identity in facilitating effective multi-agency working. More specifically, the aims of this study were to identify:

Was there any evidence of a shared identity between responders?

What factors facilitated or challenged effective multi-agency working?

If there was a sense of shared identity, was this linked to any of the factors that facilitated or challenged effective multi-agency working?

Theoretical background: Previous research shows there are persistent challenges with multi-agency response centring on problems of communication and coordination. To better understand this challenge, the Social Identity Approach provides an important psychological framework for analysing relations within and between groups which can be used to understand why challenges in multi-agency response occur, and what can be done to prevent them re-occurring in the future. According to this approach, as well as defining themselves, and behaving in terms of their personal identity as individuals, people can, and often do, define themselves and behave in terms of their social identity, as members of social groups. Subsequently, this sense of shared social identity can improve joint working.

Methods: Semi-structured interviews were conducted with 14 responders from the police, fire, and ambulance service in the UK who were involved in the Pandemic Multi-Agency Response Teams (PAMRT) during the initial months of the COVID-19 pandemic. These teams responded to suspected COVID-19 deaths in the community. Interviews were transcribed and analysed using thematic analysis.

Results: Results show that responders appeared to share the pre-existing superordinate identity of all being members of the blue-light service. This identity was made salient as a result of responders experiencing positive contact with each other. Responders also shared the situational superordinate identity of PMART which was both created and made salient through positive contact with each other, as well as responders sharing difficult experiences. Results show that these factors that are linked to responders' social identity, also worked to facilitate multi-agency working. At the same time though, structural factors, such as inequalities in building access and different shift patterns increased the salience of sub-group identities in ways that created conflict between these identities, as well as operational challenges for joint working.

Conclusions: There was evidence of a sense of shared social identity between responders in the multi-agency teams and this sense of shared identity was linked to factors that facilitated joint working. Yet, factors that appeared to create challenges for joint working were present when salient or sub-group norms were salient or conflicting with each other. These findings point to the relevance

of the Social Identity Approach to the analysis of multi-agency working during emergency response, and to ways in which insights from this approach can inform efforts to improve this in the future.

Relevance to congress theme: This research contributes to the development of new competencies when it comes to multi-agency emergency response. Applying social identity processes to multi-agency response provides both researchers and practitioners a greater understanding into why challenges in joint working persist. This research not only gives us an insight into this, but it also provides specific practitioner recommendations to make this work accessible to the emergency services and to facilitate changes in collaboration between the services to happen. Through this research, we aim to open emergency responders' eyes and minds to a different way of thinking about collaboration in the hope that change will happen, joint working will be improved, and ultimately lives will be saved.

Relevant UN SDGs: This research contributes to UN SDGs 3 and 16. By providing recommendations for improved joint working in the emergency services, we hope to help build effective and accountable emergency services who serve the public. If we can improve the way that responders are able to work together and prevent the persistent challenges reoccurring then this can help save lives as well as helping minimise the extent of harm faced by individuals who are casualties in major incidents. Whilst conducted in the UK, we believe this research has transferrable lessons which can be utilised by responders across the world.

*Keywords: Emergency Responders, Covid-19, Social Identity*

## **Symposium S080**

### **The implications of incivility on employee well-being, personal life, and work outcomes**

Paolo Yaranon, University of Limerick

science

What will be covered and why : In today's competitive world, the growing interdependency of jobs and people has made organisations rely on positive exchanges between employees to foster effectiveness and productivity. Indeed, work is a social endeavour. However, a greater part of work stressors is socially related (Sonnentag & Frese, 2013). Mild and ambiguous deviant behaviours, such as incivility, are prevalent in the workplace (e.g., Sliter et al., 2013). Although there is compelling evidence to suggest that uncivil behaviours can have adverse effects on employee well-being and that incivility can originate from individuals across all levels in the workplace, our understanding of the differential impact of experiencing incivility from colleagues and people external to the organisation (e.g., customers) is lacking. Furthermore, the increase in the use of digital technology for communication, such as e-mails, has increased the ambiguity of interpersonal interactions. Uncivil exchanges can also happen online, but the impact on well-being and how it can spill outside work is yet to be investigated. In this symposium, we present four studies related to these gaps in the literature. The first paper (Argote & González-Morales) is a bibliometric review which provides a summary of empirical research to date on workplace incivility. The second paper (Yaranon et al.) investigates the differential impact of insider versus outsider sources of incivility on employee well-being and how individual differences in personal resources can potentially mitigate its adverse effects. The third and fourth papers look at incivility exhibited online via e-mails. In a two-sample study, Bernuzzi et al. explore whether uncivil e-mails from colleagues directly and indirectly (through techno-distress invasion) relate to work-to-private life conflict and emotional exhaustion. Finally, Sommovigo et al. experimentally examine the mediating mechanisms and the boundary conditions associated with how and when a single episode of e-mail incivility may trigger the intention from the recipient to reciprocate with an uncivil e-mail.

Relevance to the Congress Theme : Workplace incivility is a social stressor. The studies indicate that this deviant behaviour can happen in person or via online communication. Therefore, this symposium relates to the conference theme as it focuses on issues related to the changing nature of work, communications, and interpersonal relationships at work.

Research/Practical Implications : Combined, the four studies in this symposium provide evidence that incivility is a significant issue in the workplace and has implications for scholars and practitioners. First, it provides a picture of the current landscape of incivility literature, which should guide scholars in future investigations. Second, it offers novel evidence by adopting a comprehensive approach that considers different sources of incivility and their differential impact. Third, it provides new insights into an emerging topic, cyber incivility. Thus, it helps us understand the mechanisms by which incivility can penetrate personal life and shows interactional injustice as a key process that explains why and how incivility can proliferate at work. Based on the issues emerging from this symposium, organisations and practitioners must develop the necessary steps and interventions that aim to curtail the propagation of incivility in the workplace.

Overall Conclusions : The research in this symposium indicates that, although characteristically mild, these deviant behaviours can have negative implications on employee well-being, personal life, and work outcomes. Therefore, organisations should not underestimate the impact incivility can do and emphasise the significance of respect and professionalism at work.

Intended Audience : Academic, Practitioners

*Keywords: incivility sources, e-mail incivility, well-being*

## Paper 1

### Workplace Incivility: A Bibliometric Review

Nohelia Argote & M. Gloria González-Morales | Claremont Graduate University

**Research Goals and Why the Work was Worth Doing :** Workplace incivility is defined as a low-intensity deviant workplace behaviour with ambiguous intent to harm (Andersson & Pearson, 1999). Using a bibliometric review approach, the primary contribution of this study is providing scholars with a better understanding of workplace incivility research and directions for the field to move forward our understanding of this important phenomenon.

**Theoretical Background :** This paper analyses more than 20 years of scientific research on workplace incivility using a bibliometric approach to create an overview of the field, determine relationships among different concepts, identify primary authors, and explore the intellectual structure of the field. Both reviews and meta-analyses are great tools to summarize previous research (e.g., Cortina et al., 2017; Chris et al., 2022), but bibliometric reviews provide an additional holistic picture of the field without having to focus solely on specific studies that demonstrate exact relationships between constructs (Raghuram et al., 2010). Bibliometric analysis is a widely accepted and rigorous method for analyzing extensive amounts of scientific studies (Donthu et al., 2021) that we use to answer the following research questions: (1) What is the current structure of the workplace incivility field? (2) What are the theoretically and practically relevant future directions for research in the workplace incivility field? (3) Who are the key contributors to the workplace incivility field?

**Methodology :** We used VOSviewer, a free software, to construct and visualize bibliometric networks (Van Eck & Waltman, 2010). Study 1 involves a bibliographic coupling analysis, study 2 is a co-word analysis, and study 3 is a co-author analysis. Bibliometrics methods are quantitative in nature, and they allow researchers to provide descriptions and evaluations of scientific fields; they allow transparency and structure not afforded by other traditional types of reviews (Zupic & Čater, 2015) and when collecting primary documents for reviews bibliometric methods aid in avoiding subjective bias (Anand et al., 2020).

**Results :** The bibliometric coupling analysis allowed us to determine the structure of the current workplace incivility field. We determined that the field primarily focuses on the antecedents and outcomes of experienced incivility. We can also see other kinds of incivility explored (e.g., witnessed and enacted incivility). The coupling analysis also shows that first respondents and service workers are a primary area of interest. Regarding this area, one of the main focus areas is customer incivility and how it affects employees. We also identified an emergent area of study: cyber-incivility, defined as incivility through electronic forms of communication such as e-mail.

The co-word analysis results aligned with the major themes found in the coupling analysis: keywords were related to contributing factors and outcomes of workplace incivility and cyber-incivility as an emergent area study.

Lastly, co-authorship analysis identified the major contributor in the field, Lilia Cortina, conducting the first quantitative empirical studies on workplace incivility and introducing the selective incivility theory. Other primary contributors to the field, are women academics, such as Dana Kabat-Farr, and Vicki J. Magley, among others.

Limitations : A bibliometric analysis uses the number of citations that two publications have in common as a semantic measure between them. A limitation of this analysis is that it is impossible to determine why a publication is cited multiple times based exclusively on this procedure.

Conclusions : This study provides new insights into research trends. The three opportunities for future research are (1) exploring enacted incivility and victimization mechanisms further, (2) exploring workplace incivility at the team and organizational level, and (3) further exploring interventions that counteract incivility.

Relevance to the Congress Theme : This study contributes to the congress topic “The Future is Now: the changing world of work” as it provides new directions in the field of workplace incivility related to the changing nature of work towards remote and hybrid modes, in which cyber-incivility may occur and needs to be studied in terms of virtual challenges and opportunities.

Relevant UN SDGs : Workplace incivility is a prevalent problem in organizations and institutions that affects the health and well-being of workers around the world, especially those with unprivileged identities (i.e., selective incivility theory), contributing to inequality and lack of decent work. The study of workplace incivility is related to the following UN SDGs: Good health and well-being; Decent work and economic growth; Gender equality; Reduced inequalities. Overall, the study aligns with the Peace, justice, and strong institutions goal.

Audience : Scholars

*Keywords: Bibliometric Analysis, Incivility, Bibliometric Coupling*

## Paper 2

### **The Effects of Insider and Outsider Sources of Incivility on Teachers' Well-being. Can Personal Resources Mitigate the Impact?**

Paolo Yaranon, University of Limerick; Janine Bosak, Dublin City University; Deirdre O'Shea, University of Limerick

**Research Goals :** Workplace incivility refers to mild and discourteous behaviour, to which the clarity of its intention to harm another person can be vague (Andersson & Pearson, 1999). However, due to the instigator's low intensity and unclear intent, the harmful effects of workplace incivility are often overlooked compared to other forms of workplace mistreatment. Therefore, the goals of the present study are two-fold. First, it aims to examine how incivility experienced from colleagues (i.e., insider incivility) versus people outside of the organisation (i.e., outsider incivility) differentially relates to burnout. Doing so represents a significant step forward within the incivility literature as it will provide a deeper understanding of the distinct impact of these sources. Furthermore, investigating each source alone cannot address the many nuances of how incivility can impact employee well-being. Second, it also aims to advance our understanding of how individual differences in personal resources can influence the effects of incivility on employee well-being. Specifically, we investigate how personal resources (i.e., resilience and self-efficacy) can potentially minimise the positive relationship between experienced incivility from organisational insiders versus outsiders on burnout.

**Theoretical Background :** Drawing on the Job-Demands Resources Model (JD-R; Demerouti et al ., 2001) and Conservation of Resources Theory (Hobfoll, 1989), we propose that employees appraise these uncivil exchanges as job demands and stressors to their well-being. As such, episodes of uncivil interactions are stressful events which can harm well-being and lead to burnout symptoms such as feeling emotionally overwhelmed, detachment from others at work, or reduced personal accomplishment (i.e., health impairment process). Moreover, we also propose that self-efficacy and resilience can potentially alleviate the effects of experienced incivility from insider and outsider sources on well-being.

**Design :** Using a lagged design, we distributed and collected surveys online separated by two weeks from 205 primary, secondary, and special education teachers in Ireland. We measured insider incivility (i.e., perceived incivility from colleagues), outsider incivility (i.e., perceived incivility from students' parents), trait self-efficacy, and trait resilience at time 1. In addition, we assessed burnout at time 2.

**Results :** Path analyses indicated that both insider and outsider sources of incivility predicted burnout. However, both self-efficacy and resilience were not effective buffers. Although we found a significant interaction between insider incivility and resilience in predicting burnout, findings showed that the positive relationship between insider incivility and burnout was stronger at high levels of resilience. At the same time, it was weaker for low levels of resilience. These findings were contrary to our predictions and previous investigations.

**Limitations :** The study utilised self-report measures that retrospectively asked participants about areas such as experienced incivility from their colleagues, the parents of their students and their well-being during the past working week.

**Conclusion :** In the context of the present study, it showed that experiencing incivility, regardless of the source, was positively related to burnout. Although incivility from students' parents (i.e., outsider

sources) impacts well-being, teachers may be accustomed to these uncivil behaviours and consider such interactions part of their job. Additionally, parents do not influence the day-to-day work of teachers, unlike their colleagues. Considering that teachers work closely with their fellow teachers (i.e., insider sources), it makes sense that incivility from them impacts their well-being and disrupts the workplace norms of respect and professionalism. As for the potential moderating roles of personal resources, neither self-efficacy nor resilience were effective buffers on the relationship between experienced incivility and burnout. This further suggests that personal resources alone are not enough to tackle the adverse effects of incivility on well-being.

Relevance to the Congress Theme : The present study adds to the topic of communication and relationships by identifying the distinct effects of experienced incivility from colleagues and people outside the organisation on employee well-being. Hence, it should assist practitioners in changing the work landscape by finding effective ways to minimise workplace incivility and improve interpersonal relations among workers.

Relevant UN SDGs : Good health and well-being

Audience : Both scholars and practitioners

*Keywords: Incivility Sources, Personal Resources, Burnout*

### Paper 3

#### **Exploring the costs of co-workers email incivility on employees' wellbeing and personal life: A two-sample study**

Chiara Bernuzzi, University of Pavia; Deirdre O'Shea, University of Limerick; Ilaria Setti, University of Pavia; Valentina Sommovigo, Sapienza, University of Rome

**Research goals :** This research aimed to explore whether co-worker email incivility would be directly and indirectly (via techno-distress invasion) related to work-to-private life conflict and emotional exhaustion among affected employees. By pursuing this objective, this research contributes to the existing literature on cyber-incivility and technostress.

**Theoretical background :** Email represents a crucial and ubiquitous form of communication in the workplace (McCarthy et al., 2019). Evidence showed that employees spent up to 28% of their working week addressing e-mail-related issues and 6.3 hours per day communicating via email (Aljawarneh et al., 2020). This is expected to increase due to the ever-increasing adoption of remote working arrangements following the COVID-19 pandemic. While the use of email represents a faster and more effective way to communicate in the workplace, it can be a “double-edged sword” as it may pave the way to email incivility (i.e., behaviours that violate workplace norms of mutual respect exhibited in email-mediated interactions; Lim & Teo, 2009). Although the literature on this topic is still in its infancy, there is evidence that email incivility can trigger negative emotions (Zhou et al., 2022) and sleep problems (Yuan et al., 2020). Email incivility can also be associated with negative job-related outcomes, such as greater employees' distress at work and at home (Park et al., 2018), and work withdrawal (Park & Haun, 2018). Given the increased use of email for job-related communications and the costs associated with email incivility, further scientific knowledge on this topic is essential to effectively counteract its potentially harmful effects.

**Design :** Two studies were conducted with 199 Italian (Study 1) and 330 English (Study 2) workers. Research participants completed online questionnaires that measured prior experiences of email incivility from co-workers, techno-distress invasion, work-to-private life conflict, emotional exhaustion, average weekly working hours, and socio-demographic variables.

**Results :** In both studies, employees who reported co-worker email incivility were more likely to experience work-to-private life conflict and emotional exhaustion. These relationships were partially mediated by techno-distress invasion so that employees who experienced co-worker email incivility were likely to perceive that their personal life was invaded by technologies and then develop higher levels of work-to-private life conflict and emotional exhaustion.

**Limitations :** This cross-sectional study used self-report measures only. Data to compare e-mail incivility with in-person incivility were not collected.

**Conclusions :** Unlike most previous studies that focused on email incivility from supervisors, this study adds to the literature on incivility by concentrating on co-worker email incivility and showing its detrimental effects not only on employees' well-being but also on their personal life. Moreover, even if the previous literature confirms the crossover effect of cyber-incivility on spouses' work withdrawal (Park & Haun, 2018), this research helps understand through which mechanisms receiving an uncivil email from a co-worker may spill over to the personal life domain. This suggests that organizations should provide their employees with training about time and email management as well as adopting family-friendly practices by recognizing the “right to disconnect” Organizations

should also set “netiquette” codes to provide their employees with rules about writing emails in a civil tone, facilitating positive interpersonal online-based interactions. Organizations should consider inform their managers about the costs associated with email incivility so that they can act as role models for civil email communications at work. Additionally, training programs that increase employees’ awareness of the tendency to misinterpret online-based communications and knowledge of the harmful effects of incivility may also represent helpful interventions to mitigate incivility in the workplace.

Relevance to the Congress Theme : Interpersonal interactions via email are becoming increasingly common to the extent that the rising number of emails sent and received per day is forecast to grow to over 376 billion by the year-end 2025 (The Radicati Group, 2021). This may represent a fertile ground for the rise of email incivility episodes at work. Therefore, by demonstrating for the first time that co-worker email incivility is related to techno-distress invasion and then to work-to-private life conflict and emotional exhaustion among affected employees, this study enriches the scientific literature on the topic and encourages practitioners to adopt work-related intervention aimed to reduce the incidence of this kind of rudeness.

Relevant UN SDGs : Good health and wellbeing.

*Keywords: email incivility, emotional exhaustion, techno-invasion*

## Paper 4

### **Explaining target-specific reactions to email incivility from colleagues: An experimental examination of mediating and moderating factors**

Valentina Sommovigo, Sapienza, University of Rome; Deirdre O'Shea, University of Limerick; Francesco Montani, University of Bologna-Rimini; Ilaria Setti, University of Pavia; Monica Magrone, University of Bologna-Rimini; Chiara Bernuzzi, University of Pavia

**Research goals :** In recent years, email incivility (i.e., uncivil behaviours exhibited in email-mediated interactions) has become an ever-increasing concern in the workplace as most employees refer to experiencing rude email communications at work. However, despite the progress achieved in this research field, research has disregarded whether, how, and when a single episode of email incivility may trigger the intentions of an email recipient to reciprocate with uncivil online communications. Shedding light into how and when employees negatively react to email incivility is nonetheless crucial to formulate preventive measures that help companies reduce the likelihood of downward spirals of interpersonal behaviours. This study aims to experimentally examine the mediating processes – i.e., justice perceptions – and moderating conditions – i.e., individual values and goals – associated with the influence of the incidence of email incivility from a colleague on target-specific email uncivil reactions.

**Theoretical background :** Based on social exchange theory, we theorize a two-stage moderated mediation model in which interpersonal justice mediates, and individual uncertainty avoidance values and compassionate goals buffer, a negative indirect relationship between the incidence of email incivility from a colleague on target-specific email uncivil reactions. Precisely, we argue that respondents to uncivil email would cognitively interpret the email-mediated interaction as interpersonally unjust and, thereby, would be motivated to reciprocate by engaging in email incivility toward the sender of the rude email. However, holding high uncertainty avoidance values would help people reappraise the meaning of email incivility, preventing the emergence of negative justice perceptions. Moreover, holding compassionate goals would enable “victims” of email incivility to maintain a sense of interpersonal safeness and connection that prevents the likelihood of reciprocated uncivil reactions to interpersonal injustice.

**Design :** A total of 199 Italian (Study 1) and 330 English (Study 2) research participants completed questionnaires that included an experimental task manipulating email incivility levels through imaginative emails to create three conditions (civil, neutral, uncivil email). In both studies, interpersonal justice perceptions, uncertainty avoidance cultural values, and sender-directed email incivility intentions were analysed. In Study 2, we also collected data on employees' compassionate goals.

**Results :** In both studies, the manipulation check confirmed the effectiveness of our experimental manipulation. Respondents in the uncivil (versus civil) email condition were likely to reported higher engagement in email incivility toward the sender of the rude email through the mediating role of interpersonal justice perceptions. However, this relationship was stronger for employees who had high scores on the individual-level cultural dimension of uncertainty avoidance (Studies 1 and 2). Moreover, even a single episode of email incivility motivated uncivil reactions toward the colleague-sender of the rude email (Study 2), especially when the employee-recipient of the email had high uncertainty avoidance levels and, simultaneously, low compassionate goals (Study 2).

Limitations : This cross-sectional study relied only on self-report measures.

Conclusions : The present findings contribute to extend prior research on email incivility, which had primarily focused on the direct impact of supervisor uncivil emails on subordinates' reactions. Our findings highlight co-worker email incivility as a specific form of uncivil behaviour leading to reciprocated email-mediated incivility intentions and discloses interactional injustice as a key process explaining why and how such a downward spiral of negative interpersonal behaviours arises. Moreover, our results shed new light on the boundary conditions associated with these negative effects by showing that the ambiguous intent of email incivility may be differently interpreted based on individual-level cultural values, and that compassionate employees are less likely to reciprocate email incivility. From a practical standpoint, organizations should set clear norms concerning acceptable and unacceptable emails. The topics of email incivility should be incorporated into formal training programs to make employees aware of potential misperceptions/biases in online communication. Online etiquette training may be useful to educate workers about the proper ways to interact through ICTs, while compassion meditation could have the potential to reduce employees' uncivil reactions.

Relevance to the Congress Theme : This study extends the topic of communication and relationships by disclosing how and when a specific incidence of email incivility from a colleague would lead to more target-specific uncivil reactions to colleagues as entities.

Relevant UN SDGs : Good health and wellbeing.

Audience : Both practitioners and academics

*Keywords: email incivility, uncertainty avoidance, compassionate goals*

## **Symposium S082**

### **The State of Work and Organizational Psychology: Critical Investigations of our Scientific Field and Practice: PART I**

Matthijs Bal, University of Lincoln

science

What will be covered and why (including the contribution of any discussant)

THIS IS PART 1 OF A DUAL-SYMPOSIUM CONSISTING OF 2 PARTS, IN TOTAL 7 PRESENTATIONS AND A DISCUSSANT.

Is Work and Organizational Psychology in crisis? Previously, scholars have drawn the attention to the important issues that we face as a scientific discipline, such as the relevance of our work (Bal et al., 2019; Highhouse et al., 2020). There are multiple indicators that we desperately need to pay attention to the research we conduct in our field (e.g., Bal & Dóci, 2018), but also to the way we organize as academic field and as universities more broadly (Bal et al., 2019). As academics, we are often struggling to maintain ourselves and our positions in academia, facing the burnout crisis and the rapid rise of precarious employment in academia. This 2-part symposium brings these important topics together, and presents a wide range of new perspectives on our field, including an assessment of the responsibilities we have as academics to build a sustainable system, the need to decolonize our curriculum in order to make WOP truly global, a discussion of the role of social class in our profession as work psychologists, the need to organize our conferences differently, a study of the publication patterns and authorship inequality in WOP over the last 60 years, and finally, an empirical study on the state of WOP in Italy. The symposium contributions answer questions about how we can enact upon our responsibilities as academics, how we can be more responsible educators, how we can be more critical of our own positions in our field, and how we can better organize conferences in our field.

Jointly, these presentations offer a wide perspective on the state of our field, elucidating the nature of our field as problematic such that there are a variety of aspects to our work which need to be improved substantially. This includes the way we organize our publication system, our professional values, and the ways we organize our institutions such that not only high-quality research and teaching can be conducted, but also such that our well-being as academics is protected.

The presentations all give insights into the problems faced by our WOP system, and all offer ways out of the current situation. Thereby, the 2-part symposium not only offers insights into the problems we face as a field, but also showcase the future of our field, and the ways we can collectively improve our field, and make it more sustainable for our colleagues and students.

Finally, the discussant Yvonne van Rossenberg (Radboud University Nijmegen, the Netherlands), has the experience to put the presentations into perspective, and will provide specific reflections upon the policy implications of the set of presentations in the dual-symposium. Van Rossenberg has a wide interest in the state of WOP research, and has ample experience in researching the state of the field, and evaluating hegemonic practices in the field.

Relevance to the Congress Theme

The symposium has great relevance for the theme of the conference. While sessions and presentations at the EAWOP conference often focus on the content of our work, we tend to forget about the structures and institutions that we have developed to make our research and teaching

possible. The current symposium is crucial as it draws the attention to the system we are in, and thus how we can change our own institutions for a more sustainable future. Moreover, if we are able to change our own institutions, we can also show the ways through which the world of work can be changed, and how organizations may engage in change processes for a more sustainable future.

#### Research/Practical Implications

The symposium will have important implications for both research and practice. First, the contributions show how we can study our own field, why it is important, and why self-reflection and reflexivity is crucial in maintaining (the relevance of) our field. Moreover, the various presentations show the ways future research in WOP and about WOP can be conducted. Finally, the session has important practical implications, in the ways through we can maintain our system and how we can organize the WOP field, and organize sessions at conferences. We will discuss policy implications in particular, and with special focus on the

#### Overall conclusions

This symposium aims to highlight the various problems that we face as a scientific discipline in both the ways we conduct our research and maintain our publication system, but also how we uphold our professional values and teach our students. Overall, the symposium offers anyone in the field an engaging session in which we debate the state of our field and how we can make our field more sustainable for the future.

*Keywords: State of WOP, Critical Reflections*

## Paper 1

### **The recommendations for sustainable future of Work and Organizational Psychology are worth it: initial evidence for the of FoWOP measurement in academ**

Amalia Perez-Nebra, University of Zaragoza; Solange Alfinito, University of Brasilia; Edgar Reyes Júnior (in Memoriam), University of Brasilia

Research goals and why the work was worth doing : Although the recommendations for sustainable future of Work and Organizational Psychology (FoWOP) (Bal et al., 2019) had a great impact, there was no measurement of how much those practices are worth. This work aims to propose and show evidence of the validity of a scale to measure post-graduate students' perceptions of their supervisors' FoWOP practices.

Theoretical background: Post-graduate students could be considered as entry careers into academia. Students' perception of their supervisors' academic practices influences their behaviour in many ways: as models to follow, the learning process and achievement, and to support /disapprove them/us. The perception of employee RHM Practices field showed similar results and has categorized three main conceptualizations to employee perceptions of RH practices (Van Beurden et al., 2021): exchange, communication, and occupational health. The former category provides a framework for understanding the quality of exchange. The second describes how the practices can contribute to achieving performance. The last category of theoretical perspective focuses on explaining employee wellbeing. The integrated perspective to explore the practices improves the operationalization of students' perception of FoWOP practices and was used.

Methodology: We conducted a systematic, multi-study scale development. Using the Manifesto 10 recommendations for a sustainable future for the field of Work and Organizational Psychology, we generated items and conducted an expert panel (N=5) and one survey (N = 70; 25 tutors).

Results obtained or expected: Face and content validity were examined through a jury of experts who evaluated clarity and appropriateness of each item. To verify the internal validity a preliminary exploratory factor analysis was conducted and showed 3 emerging factors: Exchange (e.g., he/she gives me regular feedback on the work I did and shows me how I should do things), Communication (e.g., he/she is accessible - the communication is easy) and Health (e.g., engages in open dialogue with me to find sustainable ways of learning, wellbeing, health, and development). The average were quite high. The validity of construct and criterion were examined through correlation analysis with the relative growth of the supervisor citation (i.e., the percentage of growth/decrease between 2021 and 2020 using the Scholar Google metric). The Health dimension is the most positive related to citation growth.

Limitations: A cross-sectional study design, one post-graduation program in Brazil and sample size are the main limitations of the study.

Conclusions – research and or practical implications: The present study proposes an instrument to measure the degree of FoWOP practices within the academic context and also the relationship with external validity (citation growth index) suggesting that FoWOP practices facilitate a win-win HRM perspective.

Relevance to the Congress Theme: FoWOP practices represent the first instrument that measures FoWOP recommendations, and it may contribute to a positive and sustainable necessary change in academic work.

Relevant UN SDGs: Good health and wellbeing; decent work and economic growth; Quality education

*Keywords: Manifesto, FoWOP*

## Paper 2

### Reengineering HE Education through Decolonization: A Postcolonial perspective

John Mendy, University of Lincoln

#### Research background

In 'The future of work' Gratton (2011) examined 5 economic, technological, demographic, individualistic, energy and societal forces that will reshape the future world of work. Eleven years on, her predicted changes on individuals' adaptability skills, networking capability and the prioritization of life have been overtaken by greater consumerism and the decolonization debates in HE. Likewise, the extent to which her recommendations for organizations' leaders to be transparent and authentic, to develop partnerships, to network, to be socially interconnected and to enhance flexible working, teams have still not highlighted why the anticipated high-performance capability of institutions such as Universities has still not been fully achieved through reengineering initiatives (e.g. decolonization). This study focuses on the urgency to address such a gap by examining and problematizing not only UK-wide but also global HE institutions' sudden push to decolonize their curricula by modifying the contents, methodologies and personnel required to deliver quality education for the workplace of the future.

#### Research goals and why the work was worth doing

Who defines and what framework(s) do we use in charting the quality education for the future.

What type(s) of education is/are required in workplaces of the future.

Whom and what purpose does the decolonization agenda serve.

#### Theoretical anchor

The theoretical anchor for this presentation is postcolonial theory partly because I seek to problematize and situate its variety of narratives to understand issues of inequality within the decolonization of higher education worldwide. Postcolonial theory arose as a chronological sequence from colonization but, more fundamentally, it captures the significant resistance impact of the experiences of millions of people across the Americas, Africa and Asia and over a 400-year time span. It forms part of an increasing body of critical debates and analytical frames that seek to capture the differences, nuances and reverberations of colonial trajectories in various countries, continents and societal spheres. This set of theoretical engagements highlight the criticality with which academics, researchers and practitioners in the Social Sciences surface the socio-cultural, the economic and political legacy of colonialism and conquest and the impact of human and territorial subjugation, exploitation and control. From here postcolonial theoretical analysis and discourse was created to help study the deep underlying power relations of people interactions, cultures, histories and organizational and national dynamics.

Although the theory accommodates different approaches, from the anthropological that highlights understanding and knowledge of the colonial colonizer-colonized interactions to the narrative that highlights the experiences and stories of those who were colonized to a deeper appraisal of the socio-economic, political and cultural structural interactions that have maintained and nurtured the colonial and even neo-colonial discourses and narratives over the centuries. It is the latter approach that resonates with the interdisciplinarity of the theoretical selection and its justification given its

ability to describing and appraising incidents/cases of an historic, anthropological, scientific, political, geographic, philosophical, sociological and philosophy nature. By extension, other scholars have used the theory and its inherent approach to investigate and understand complex issues around ideology, gender and sexuality issues and religion.

#### Design/Methodology/Approach

The study's methodological design is based on an initial examination of a cross section of what Universities in the UK have been doing to decolonize their teaching, learning, research contents. The aim is to develop an epistemology on the future of higher education to ascertain its capacity to provide a toolkit that meets the challenges related to Gratton's and FoWOP's future of work agenda. To do so, the narratives of participants will be used for verifiability, for discussing ethical, philosophical and morality issues that may have constrained what participants perceive as good quality and liberalising forms of education in a post-colonial world of work and education. Additionally, the narrative accounts are used to understand and develop knowledge on what really captures the individual, collective, national and international identities of educators, researchers, policy makers and beneficiaries of the decolonization of education. This is taken from the following:

- a) The processes via which implementers of a decolonized educational programme acquire socio-economic, cultural and political knowledge of those onto whom the decolonization programme is being implemented for.
- b) How changes to the education programme are being conducted as part of a reengineering discourse and their impacts on implementers and recipients.

This design was chosen because it provides intellectually safe spaces for people, who would otherwise not have the opportunity, to converse openly and freely on matters of significant future impact. By so doing, they project their voices, perspectives and opinions, thereby articulating/producing their own socio-economic, political, philosophical and cultural discourses. This produces a more balanced, yet nuanced presentation that highlights the varieties of structural, processual and human power dynamics that would have been negated in the traditional bi-polar, binary implementer (in a position of powerful 'colonizer') and recipient (in a position of non-powerful 'colonized') relation (see Said's (1978) discourse analysis in his seminal work 'Orientalism' and Bhabha's (2012) cultural hybridity and its potency for socio-political change).

#### Preliminary Results

The initial results highlight the following categories:

Universities that show commitment to decolonizing their curriculum by mentioning it in their strategy or curriculum.

Universities that decolonize their curriculum by making amendments to various modules' reading lists without amending their contemporary or future pedagogic contents.

Universities whose imperial and colonial infrastructures in terms of institutional and knowledge development processes remain intact.

Universities that conduct training and development for students, academic and administration staff

Universities that choose not to do anything in relation to decolonizing their infrastructures or contents

Universities that consult minoritized and marginalized communities that may have been adversely impacted by curricula that were received from colonial past.

#### Relevance to Congress

This study on decolonization within the HE context is significantly relevant research and fits the theme of the congress.

#### Relevance to UN SDGs

This study is relevant to tackling issues of lack of inclusion, poor attainments and poor achievements that may have been the outcomes of a non-decolonized teaching, learning, research infrastructure of HE institutions. Future work will entail an expansion of the study to other HE institutions within and beyond Europe and to develop a toolkit for actualizing a greater democratization of HEI spaces, contents, methodologies and infrastructures.

*Keywords: Higher Education, Decolonizing, Curriculum*

### Paper 3

#### Observations on (un-)conferencing: How science fails to communicate knowledge

Johanna Degen, University of Flensburg; Franziska Koessler, Humboldt-Universität zu Berlin;  
Francesco Tomassi, University of Verona

The aim of this study is to a) understand the effectiveness of scientific communication at conferences, b) map and evaluate conference organizers' measures for innovation and successful communication of research, and c) analyze the scholarly reactions to such measures and their effectiveness.

In the globally growing neoliberal ideology, sciences too underlay quantitative aims, measuring researchers against numbers: the worth equals many papers placed well and the number of talks given. Such quantitative measures and newer scientific traditions of publishing limit the communication of research and knowledge to specific forms, monotone in style and confined in scope. This leads to growing scientific fatigue – talks and papers seem redundant and the communication of knowledge is impended.

Contemporary attempts of conference organizers at breaking such logics aim for post-qualitative ways of research, including new ways of communication. Besides remaining in the margins and located largely in neighbouring fields, such attempts include labelling events as “unconferences”, including buzzwords such as “un-keynote” and presentations called “a virtual salon”. Observing such conferences we can learn, besides single and pleasurable exceptions, one awaits the new, artistic or innovative in vain. Covered behind fancy wording the repetitive style is sometimes even accelerated, with prolonged pre-recorded monologues, not seldom enough followed by the audience asking: Can you summarize in short, what you try to say?

The data collection was conducted by three researchers as ethnographic participatory observation studies and interviews during seven conferences during the years 2021 and 2022. We collected both the organizer's theorization and visions, logged presentations following a standardized protocol, and conducted problem-centered interviews. Moreover, we logged planned interventions, such as a “bell of boredom” and kept protocol of effects on group dynamics and styles of presentation. The data is analysed using discourse analysis.

the preliminary results demonstrate that organizers emphasize strongly new orders of communicating scientific knowledge and research, urging for creativity and innovation. Such attempts are built up in the calls for contribution, the offered formats of presentation, wording, and the digital architecture of conference websites, e.g. by building online surroundings for data sharing and games. The researcher's realization instead holds largely on to traditional presentation styles, overwriting new formats against the formal guidelines and visions. At the same time, growing fatigue from attending such contributions is expressed by the audience, verbally in the interviews, and visible by body-language, e.g. groaning or writing emails, making explicit that communication at the conferences is failing. Such situations are reportedly demotivating for both attendances and contributors.

This study is limited due to the case study design, stretching between the field of work- and organizational and social psychology.

While un-conferencing is much needed, the implementation still lags behind. Tradition is holding a grasp around science, and more seems needed than a changed label. What does it take to break tradition and year-long conditioning? In this presentation, we will give examples of successful un-conferencing and post-qualitative ways of communicating knowledge, followed by a discussion, on how we envision communication in the future to avoid scientific fatigue.

Study and results are directly related to the EAWOP congress theme and questions on how to communicate eminent new knowledge and how to constitute contemporary work- and organizational sciences in a changing world and future, including effective knowledge transfer. It moreover shares positive blueprints of successful knowledge transfer and communication of significant scientific work and results, securing knowledge flow for the future, alongside concrete examples.

Successful communication of scientific work and knowledge is applicable to most of the UN SDGs, as it regards WOPs scientific communication in general.

*Keywords: Conferences, un-conferencing, scientific communication*

## Symposium S083

### **The State of Work and Organizational Psychology: Critical Investigations of our Scientific Field and Practice: PART II**

Matthijs Bal, University of Lincoln

Science

THIS IS PART II OF A DUAL-SYMPOSIUM CONSISTING OF 2 PARTS, IN TOTAL 7 PRESENTATIONS AND A DISCUSSANT.

What will be covered and why (including the contribution of any discussant)

Is Work and Organizational Psychology in crisis? Previously, scholars have drawn the attention to the important issues that we face as a scientific discipline, such as the relevance of our work (Bal et al., 2019; Highhouse et al., 2020). There are multiple indicators that we desperately need to pay attention to the research we conduct in our field (e.g., Bal & Dóci, 2018), but also to the way we organize as academic field and as universities more broadly (Bal et al., 2019). As academics, we are often struggling to maintain ourselves and our positions in academia, facing the burnout crisis and the rapid rise of precarious employment in academia. This 2-part symposium brings these important topics together, and presents a wide range of new perspectives on our field, including an assessment of the responsibilities we have as academics to build a sustainable system, the need to decolonize our curriculum in order to make WOP truly global, a discussion of the role of social class in our profession as work psychologists, the need to organize our conferences differently, a study of the publication patterns and authorship inequality in WOP over the last 60 years, and finally, an empirical study on the state of WOP in Italy. The symposium contributions answer questions about how we can enact upon our responsibilities as academics, how we can be more responsible educators, how we can be more critical of our own positions in our field, and how we can better organize conferences in our field.

Jointly, these presentations offer a wide perspective on the state of our field, elucidating the nature of our field as problematic such that there are a variety of aspects to our work which need to be improved substantially. This includes the way we organize our publication system, our professional values, and the ways we organize our institutions such that not only high-quality research and teaching can be conducted, but also such that our well-being as academics is protected.

The presentations all give insights into the problems faced by our WOP system, and all offer ways out of the current situation. Thereby, the 2-part symposium not only offers insights into the problems we face as a field, but also showcase the future of our field, and the ways we can collectively improve our field, and make it more sustainable for our colleagues and students.

Finally, the discussant Yvonne van Rossenberg (Radboud University Nijmegen, the Netherlands), has the experience to put the presentations into perspective, and will provide specific reflections upon the policy implications of the set of presentations in the dual-symposium. Van Rossenberg has a wide interest in the state of WOP research, and has ample experience in researching the state of the field, and evaluating hegemonic practices in the field.

Relevance to the Congress Theme

The symposium has great relevance for the theme of the conference. While sessions and presentations at the EAWOP conference often focus on the content of our work, we tend to forget about the structures and institutions that we have developed to make our research and teaching

possible. The current symposium is crucial as it draws the attention to the system we are in, and thus how we can change our own institutions for a more sustainable future. Moreover, if we are able to change our own institutions, we can also show the ways through which the world of work can be changed, and how organizations may engage in change processes for a more sustainable future.

#### Research/Practical Implications

The symposium will have important implications for both research and practice. First, the contributions show how we can study our own field, why it is important, and why self-reflection and reflexivity is crucial in maintaining (the relevance of) our field. Moreover, the various presentations show the ways future research in WOP and about WOP can be conducted. Finally, the session has important practical implications, in the ways through we can maintain our system and how we can organize the WOP field, and organize sessions at conferences. We will discuss policy implications in particular, and with special focus on the

#### Overall conclusions

This symposium aims to highlight the various problems that we face as a scientific discipline in both the ways we conduct our research and maintain our publication system, but also how we uphold our professional values and teach our students. Overall, the symposium offers anyone in the field an engaging session in which we debate the state of our field and how we can make our field more sustainable for the future.

discussant: Yvonne Van Rossenberg, Radboud University Nijmegen

*Keywords: State of WOP, Critical Reflections*

## **Paper 1**

### **Six decades of organizational research: Authorship inequality, elite dominance, and the inevitable rise of eminent scholars**

Mehmet Orhan, EM Normandie Business School; Yvonne van Rosenberg, Radboud University Nijmegen

Research goals and why the work was worth doing: Ideally, the academic publication process should be meritocratic and, at the same time, fair and accessible to diverse groups of scholars. Yet, many scholarly disciplines are far from this ideal state, as many voices are believed to be underrepresented. To explore the extent and nature of authorship inequality in organizational research, we examined 60 years of publication trends in Industrial-Organizational Psychology (IOP), Management (MNGT), and Human Resource Management (HRM).

Theoretical background: Drawing on the economic theory of income inequality and Mertonian scientific norms, the impact of authorship inequality on scientific progress is discussed.

Design/Methodology/Approach/Intervention: Analyzing over 55,000 publications in 42 top journals of these fields, we reviewed authorship inequalities in the last six decades.

Results obtained: Based on the publication records of more than 3,000 of the most prolific researchers, we identify a stronger dominance of a small cluster of researchers in IOP compared to MNGT and HRM. Analysis shows the most prolific IOP researchers publish a significantly larger number of articles than those in other fields. Besides this excessive number of publications, the super-elite of IOP are found to be dominating more journals, as we observe a higher frequency of the same authors appearing on the top-10 most productive list in IOP than in the other two fields.

Limitations: Our analyses were based on top-tier journal publications. Considering the wide range of scientific communication options, authorship inequality might be overstated in top journals.

Conclusions – research and or practical implications: We conclude by discussing the impact of inequality and dominance of a scholarly elite and provide recommendations for future practice and policy.

Relevance to the Congress Theme : 4 – Diversity and inclusion – Equal opportunities

Relevant UN SDGs: Reduced inequalities. Reducing inequalities in societies is one of the primary goals of UN.

*Keywords: underrepresentation, hyperproduction, scientific elites*

## Paper 2

### On Reproduction of Form in WOP Research

Matthijs Bal, University of Lincoln

#### Theoretical Background

Why do we as academics collectively (and individually) produce so many papers? Why are so many papers published in our field and top journals so boring to read? In this paper, we set out to analyze academic research practices in WOP research drawing on the construct of Reproduction of Form. Reproduction of form is the reproduction of the authoritative ideological discourse, while the meaning attached to individual terms grows ambiguous (hypernormalization), is paradoxical and, eventually, devoid of meaning. Based on work of the Russian-born anthropologist Yurchak (2005), reproduction of form was the mechanism used by the Soviet Union after the death of Stalin to control public discourse in society. All communication by the Soviet government (newspaper, cultural symbols, propaganda) perfectly reproduced discourse from the Stalin era, in order to maintain stability and ideological rule over society. However, over time, this discourse became increasingly meaningless. Drawing upon Yurchak's work, we identify reproduction of form in contemporary academic research, whereby we observe how papers and academic research are reproductive in their form, and what ideological meanings this has, and what paradoxes emerge out of this hyper-reproduction of academic research.

We identify three dimensions of reproduction of form, at the level of form, content, and ideology. We proceed by analyzing the authoritative discourse underpinning these elements, their constative dimension. In so doing, we describe the performative and constative dimensions of these paradoxes, and connect the ideological and the practical level of reproduction of form.

#### New Perspectives/Contributions

Our use of Reproduction of Form to understand the contemporary WOP publication system is entirely new. While reproduction of form is often prescribed by journals and editors themselves (e.g., through the requirement to shape submissions to a journal in a particular style), this is associated with an increasing uniformity in how journal papers look like and what they describe. One primary consequence is the lack of pluralism in WOP, which is accentuated through the continuous stylistic reproduction within academic papers. The content-dimension takes this reproduction of form one step further, by analyzing the 'theoretical contribution' that is proclaimed as the primary requirement to get published in WOP. However, analyzing what is expected reveals that contributions should be incremental enough to fit with the journal, and are implicitly expected to reproduce the more hidden, and ideological assumptions under research. Thereby, hegemonic theorizing within journals dictates authors to comply with the ideological underpinnings of journals and the work published in journals, ultimately stifling scientific progress.

Finally, the systemic dimensions underpinning reproduction of form further support ideological status-quo. While authoritative discourse in academia proclaims that publishing is a fair competition and that academia is a collective and collaborative space, in reality, academia and the publishing process is dominated by a small group of elite scholars who take up an unfair amount of space in journals. Consequently, this exacerbates the status-quo as elite scholars, who have priority access to journals, tend to defend the ideological status-quo and disincentive critique on hegemonic practice within WOP. This leaves the young and early career scholar in a position of dependence on the elite,

as the early career scholar has fewer chances to publish original work (deviating from the prescribed norms) in journals, and thus to develop an academic career. Increasingly, the road for early career scholars is to comply with the system, collaborate with elite scholars, thereby being allowed access to the system.

#### Conclusions

We conclude the paper with identifying different ways of dealing with the reproduction of form. We advocate for pluralism, elite scholars to publish less, renewal of the publication system, and open review processes, whereby publishing becomes less dependent upon the approval of the elite into the restricted space of top-tier journals. We identify problematization, resistance, imagination and transformation as four subsequent steps that may help academics to escape the current system, and to contribute to a healthier and more sustainable publication system.

#### Relevance to Conference theme

The conference theme relates to the future of our field, and the future is bleak. This paper shows how our field has stifled scientific progress. Therefore, it is of great importance to understand how Reproduction of Form unfolds in WOP, such that we can actually create a more sustainable field of WOP that has real meaning.

#### UN SDGs

This paper is about equality in society, and the chances for academia and scientific research to contribute to this.

*Keywords: Reproduction of Form, Academia, Research*

### Paper 3

#### **Investigating the Italian academic movement toward future directions of Work and Organizational Psychology**

Mara Gorli, Marta Piria, Sara Petrilli, Silvia Gilardi, Laura Galuppo & Chiara Corvino | Università Cattolica di Milano; Daniela Converso, Università di Torino; Andreina Bruno, Università di Genova; Angelo Benozzo, Università della Valle d'Aosta; Luca Vecchio, Università Bicocca di Milano; Silvio Ripamonti; Francesco Tommasi, Università di Verona

#### Introduction and conceptual background

As scholars of work and organizational psychology, we are all aware that contemporary workplaces and organizations are radically changing, bringing about new challenges for people and their relationship with work. Our discipline responds to such challenges by taking different positions concerning organizational research and interventions. Various approaches are supported by different and separate theoretical positions which affect the way of conducting research. This echoes in the organization and evaluation of the academic system. Mutually, academics and the academic system itself perpetuate the same ideological tenets.

This work aims to explore the way the Italian academic community of Work and Organizational Psychology (WOP) is adapting to new emerging contents and research objects, and to the contemporary conditions for conducting research and education in the university system.

#### Theoretical background

According to Bal and Doci (2018), the influence of neoliberalism is being felt not only in the workplace but also in how we do research and produce knowledge in our discipline. Current trends in how the academic activity is evaluated, in how research gets financed, and in how academic career tracks are constructed, have also transformed the nature of work and organizational psychologists operating in universities.

The risk is to acritically assume two out of the three tenets of neoliberalism: individualism and instrumentality (Harvey, 2005).

Perhaps as a reaction, some movements and some published Manifesto-works are appearing both in the psychologists' communities and within the organization scholars' groups, calling for a (more) sustainable future for the discipline and the communities (Bal et al., 2019; Korica 2022; Benozzo et al 2021; Kudina et al 2022).

#### Research goals and why the work was worth doing

Based on this reading of the context, the study we present aims to explore the research choices and practices adopted by scholars in the WOP sector in Italy, and their expectations and ways of envisaging the future. This study aims to contribute to the debate about the prevalent issues being investigated in WOP; the theoretical frameworks used to interpret the relationship between individuals and organizations; the space dedicated to macro-level societal issues such as inclusion and social inequalities.

#### Methodology

The work is based on two phases and different methodologies. In a first phase, we examined the scientific production of WOP scholars in the last ten years (2011- 2021), considering 1.941 “research products” (papers, book chapters etc) appearing within the Scopus database. The analysis digs into the kind and dimension of publication growth, the numerosity of co-authors and the typologies of journals chosen. Through the T-LAB software, we have analyzed and mapped the topics, interests, methodologies and contexts of the WOP community.

A second phase, a qualitative inquiry through explorative interviews, has been conducted into the community of researchers and professors in the Italian WOP sector for understanding approaches and evolutions of research objects, investments and publication choices during the academic career.

Thirty in-depth interviews were performed and then examined using thematic analysis.

Results obtained or expected

The research illustrates the results, which reveal the contradictions and divergences regarding assumptions, critical views, and objects of investigation within WOP.

The results help understand the scientific development of the discipline in Italy in relation to the more actual economic, social and political challenges, and the way they are tackled.

Furthermore, the analysis outlines some aspects of how neoliberalism is shaping the Italian WOP community members' work and offers interesting critical thoughts for debating and reflecting on the future of WOP.

Limitations

The study is directed to different geographical positioning of WOP scholars. For the scope and dimension of this study, we could not investigate the single contextual specificities of territories and institutional local investments, which are surely interesting to analyze for future works.

Conclusions – research and or practical implications:

The present study proposes a picture of an evolving field that deserves wide consideration for two reasons: it affects both the applied contribution of psychologists in helping organizations and workers cope with the current trends; and it sheds light on the state of the internal academic field as one broad organization whose workers (the scholars) themselves deserve care and critical attention for more sustainable working conditions.

Relevance to the Congress Theme

The future of WOP must be interrogated by taking into consideration both local perspectives, and more macro scenarios. The Italian context offers an interesting analysis of how specific, situated and contextual considerations may impact the evolution of the WOP discipline. At a macro scenario, the broad WOP community may benefit by considering multiple perspectives through which to understand and look at the future of the sector.

Relevant UN SDGs:

Good health and wellbeing; decent work and economic growth; Quality education

*Keywords: Academic system, Italy, Critical Investigation*

## Symposium S084

### **What happens at work, stays at work...? How and when work experiences spill over into recovery time**

Rosine Rutten & Ute Hülshager | Maastricht University

science

In this symposium, we present five empirical papers that look into the relationship between experiences at work and experiences after work. As work is becoming more complex and the boundaries between work and life increasingly blur, it is important to understand the specific challenges of the modern work-life interface. Therefore, all five contributions focus on when and how employee recovery is affected by work factors, and together build on a shared understanding of how the impact of work on employee well-being can be successfully managed. The presented work hereby contributes to research on recovery, by 1) identifying work-related antecedents of recovery and well-being, 2) examining cognitive mechanisms through which work affects employees during their free time, and 3) providing insights that guide practical interventions aimed at improving work-life balance and recovery.

Julia Iser and her colleagues will present their work on supportive supervisor behaviors that could benefit employees' daily recovery from work. They conducted a daily diary study with a subordinate sample over the course of two workweeks (N = 171) that examined daily fluctuations in workload and supervisor work- and non-work support as predictors of vitality and recovery experiences. With this contribution, they add to the recovery literature by identifying daily work-related antecedents to recovery experiences during free time. Practically, they show how supervisors can positively influence their employees' recovery.

Rosine Rutten and colleagues posit that it is important to not only take past workday demands into account when examining recovery processes, but also consider upcoming work demands. In a typical workweek, workdays follow each other closely, with recovery from past demands and anticipation of future demands likely overlapping and accumulating. In a daily diary study (N = 166), they therefore examined the conjoint influence of past and future challenge and hindrance demands on evening fatigue, and the role of work prospecting (i.e., future-oriented work-related thinking) in this relationship. They contribute to the recovery literature by drawing attention to the temporal context in which the stressor-strain reaction occurs.

Johannes Wendsche and his team take stock of and extend evidence on the link between unfinished work tasks and three types of work-related thoughts (detachment, negative rumination, and problem-solving pondering) during internal and external recovery periods. They will present four studies, including a meta-analysis, two cross-sectional studies, and a longitudinal study, which all focused on the extent to which unfinished tasks sparked work-related thoughts during free time and how this affected recovery. Furthermore, they investigated whether personal and organizational resources buffer any detrimental effects. Their work adds to the recovery literature by shedding light on the consequences of unfinished tasks for after work cognitive activity.

Anja Morstatt and colleagues investigate day-specific crafting patterns across life domains (i.e., work and private life), and more specifically, whether and how anticipating both high work and life demands, as well as crafting opportunities, may impact crafting efforts and subsequent recovery experiences. The study they will present employed an ecological momentary assessment methodology, with participants (N = 415) reporting on their experiences six times a day on six

working days across two weeks (10922 observations in total). They hereby provide new insights on how people navigate individual life challenges on a daily basis, both at work and at home.

Dana Unger and her colleagues propose that strict boundaries between work and private life helps employees detach from their work during their free time. In an experimental field study (N = 237), they investigated whether actively creating boundaries would positively affect recovery and work performance through increased detachment. Not only does this study advance the literature on boundary management by shedding light on the processes taking place during the transition from the work domain to the home domain, it also offers practitioners evidence-based information on the effectiveness of a low-cost intervention aimed at improving both recovery and work performance.

Together, these contributions demonstrate that research on recovery is far from parched and that various streams of research are motivated to support a harmonious and healthy work-life interface. The studies employ various research methods (i.e., experience sampling, experimental, meta-analytic, cross-sectional, and longitudinal designs) and integrate different theoretical perspectives. Together, they have the potential to further exploration and integration of recovery research and provide insights for evidence-based management practices for organizations and practitioners.

Intended audience: Academics and Practitioners.

*Keywords: recovery, work-related thinking, boundary crafting*

## Paper 1

### **A work-home resources perspective on recovery experiences: The role of supervisor work and non-work support, workload, and subordinates' vitality**

Julia Iser, Sabine Sonnentag, Hadar Neshor Shoshan | University of Mannheim

**Research goals:** The goal of our study is to identify supportive supervisor behaviors that could benefit employees' daily recovery from work. For that purpose, we examine supervisor nonwork support (i.e., supportive behaviors that help subordinates manage work and nonwork roles) and supervisor work support (i.e., support aimed at the work domain such as helping with work tasks) as predictors of recovery. Former research has mostly focused on identifying negative antecedents of recovery, such as work stressors. Our aim is to simultaneously look at resources (i.e., supervisor support) and demands (i.e., workload) as predictors of recovery experiences.

**Theoretical background and hypothesis:** Drawing on the work-home resources (W-HR) model (ten Brummelhuis & Bakker, 2012), we propose that work resources (i.e., supervisor nonwork support and supervisor work support) positively predict recovery experiences at home, while work demands (i.e., workload) negatively predict recovery. The W-HR model suggests that the associations between resources and demands with home outcomes are mediated by personal resources. Therefore, we examine employees' vitality (i.e., their energetic state) after work as underlying mechanism. In addition, we propose that the association of supervisor nonwork support, supervisor work support, and workload with recovery experiences is stronger on days when people work from home. Because people work in the home domain and lack segmentation between work and home, work demands and resources should have stronger effects on home outcomes (i.e., recovery experiences).

**Design:** We conducted a daily diary study with a subordinate sample over the course of two work weeks (171 employees, 871 days). After filling in an entry survey, participants completed daily surveys after work and before going to bed. We only included days in our analysis when employees had (virtual or face-to-face) contact with their supervisor.

**Results:** Multilevel path models revealed that supervisor work support was positively related and workload was negatively related to subordinates' vitality after work, vitality positively predicted recovery experiences, and the indirect effects of supervisor work support and workload on recovery experiences via vitality were significant. Working from home did not moderate the associations of supervisor work support and workload with recovery experiences. We found no support for the indirect effect of supervisor nonwork support on recovery experiences via vitality. However, supervisor nonwork support was positively related to subordinates' detachment, relaxation, and control on working-from-home days but there were no significant relationships on working-at-the-office days.

**Limitations:** Our study is not without limitations. First, we measured supervisor support from the subordinates' point of view and did not include supervisors as respondents in our sample. However, as the subjective perception of support should be especially relevant to influence employees' psychological experiences, we decided to focus on subordinates. Second, we measured both the predictors and vitality in the end-of-work survey. Nevertheless, because the predictors retrospectively assess factors at work, whereas vitality indicates how employees felt while filling in the survey, predictors and mediators are conceptually separated in time.

Implications: In conclusion, our study contributes to the recovery literature by identifying supervisor supportive behaviors as daily antecedents of employees' recovery experiences. Supervisor support can positively influence recovery from work either directly (on working-from-home days) or by fostering personal resources. We show that both supporting employees' with their work tasks and helping them manage their nonwork roles is associated with successful recovery from work. This knowledge can also be useful in practice: Supervisors can help their subordinates to recover from work by showing work and nonwork supportive behaviors.

Relevance to the congress theme: The congress theme "The future is now: the changing world of work" is reflected in our study because we are examining the moderating effect of daily working from home. The pandemic has greatly changed employees' daily work situations with more people than ever regularly working from home. Social interactions with supervisors during work time are therefore qualitatively different from pre-pandemic times. We capture the changing world of work by taking new perspectives on work and home into account.

Relevant UN SDGs: Our study contributes to the UN Sustainable Development Goal of health and well-being. By examining predictors of recovery from work, we seek to identify factors that can promote employees' well-being on a day-to-day basis.

*Keywords: supervisor support, recovery experiences, working from home*

## Paper 2

### **I saw, I foresaw, and... I felt drained? How past and future work demands conjointly influence evening fatigue via work prospection**

Rosine Rutten, Ute Hülshager & Fred Zijlstra | Maastricht University

**Research goals:** While past empirical work stress research has mostly focused on the effects of past work stressors on employee well-being and recovery (e.g., Guthier et al., 2020), stress researchers in both work and non-work domains agree that stressors can affect employee well-being before, during, and after they are imposed (Verkuil et al., 2009; Casper & Sonnentag, 2019; Hülshager et al., 2022). However, this has thus far been solely examined in a piecemeal fashion, with studies focusing on either past stressors or the anticipation of future stressors. More realistically, stressor-strain reactions occur in a temporal context (Rosen et al., 2020). In a typical workweek, workdays follow each other closely, with recovery from past demands and anticipation of future demands likely overlapping and accumulating. In the current study, we therefore consider both past and future work demands simultaneously. This enables us to partition variance in employee well-being stemming from either past or future work demands, and test whether mental representations of demands (i.e., work prospection) act as the mechanism through which work demands can affect well-being during free time.

**Theoretical background:** Drawing on cognitive activation theory of stress (CATS; Ursin & Eriksen, 2004; Meurs & Perrewé, 2011), we propose that both past day and next day work demands can drain employees' evening energetic resources (i.e., fatigue). CATS argues that it is not the stimulus itself that elicits the stress response, but an individual's appraisal that is based on both past experiences and future expectations that translates a stimulus into a stressful experience. We directly test this proposition by suggesting that work prospection – future-oriented thinking about work (Rutten et al., 2022) – acts as the appraisal process. More specifically, while past workday demands can directly affect evening fatigue due to depletion following effort expenditure (Meijman & Mulder, 1996), future work demands can only indirectly affect fatigue. We argue that both certain (e.g., planned meetings) and uncertain (i.e., unexpected interruptions, others' actions) elements of future work demands feed into the mental representations people have or actively construct about them. Furthermore, we expect that the effects of challenge demands will be more pronounced. Challenge demands are inherently more strongly linked to goals, and past findings showed that it is more difficult to detach from challenge demands than from hindrance demands (Bennett et al., 2018).

**Design:** We conducted a 14-day diary study on a working population (N = 166). Participants completed an intake survey, followed by daily after work and before bedtime surveys (2443 observations). We measured challenge and hindrance demands in the after work survey, and work prospection and fatigue in the evening survey.

**Results:** Multilevel analyses showed that both past day and next day challenge demands were positively related to work prospection in the evening, while we did not find these effects for hindrance stressors. In turn, work prospection was positively related to fatigue in the evening. Past work day challenge stressors were also directly and positively related to fatigue in the evening, in line with our expectations. These results are preliminary, but thus far partly confirm our hypotheses and show that especially challenge demands – both past and future – may spark work-related thoughts during free time, which in turn drains further energy.

Limitations: First, we assumed certain work demands as being challenging or hindering, but did not assess whether participants appraised them as such. Second, we measured work prospection and fatigue in the same survey. However, we ask for momentary fatigue and work prospection during the past evening, conceptually separating the measurements. Moreover, participants may have refrained from responding when demands that day were particularly high, which may have deflated our results.

Conclusions/implications: Our study shows that it is important to take into account both past and future work demands when considering the work demand – stress relationship. While employees are already tired after their workday, next day demands can cause them to think about work and instigate the stress response, drawing on their energy levels even further. Moreover, while challenge demands are typically seen as the more favorable type of work demand, our findings show that they can have detrimental effects on well-being.

Relevance to Congress Theme: Work is becoming more complex and employees are faced with high demands that require them to be proactive. Our study shows that employees do in fact think about their upcoming workday during their free time, which affects their fatigue levels. This can eventually impact workers' health.

Relevant UN SDGs: Our work contributes to the UN Sustainable Development Goal of health and well-being.

*Keywords: work prospection, work demands, employee well-being*

### Paper 3

#### **Unfinished tasks and work-related thoughts during recovery periods: The role of recovery resources**

Johannes Wendsche, Federal Institute for Occupational Safety and Health, Department of Work and Health, Dresden, Germany; Annika Schulz, Ina Schöllgen & Andrea Lohmann-Haislah | Federal Institute for Occupational Safety and Health, Department of Work and Health, Berlin, Germany; Susanne Liebermann, FH Westküste University of Applied Sciences; Hiltraut Paridon, SRH Gera University of Applied Sciences; Oliver Weigelt, University of Leipzig

**Research goals and why the work was worth doing :** Research on how unfinished tasks as a work-related stressor may impair recovery has gained traction in recent years. Drawing on this line of research we set out to take stock of and extend evidence on links between unfinished tasks and three conceptualizations of work-related thoughts (WRT; low psychological detachment, affective rumination/negative work-reflection, and problem-solving pondering) during internal and external recovery periods. Furthermore, we consider leverage points for intervention and explore how personal (i.e. recovery competence) and organizational (i.e. organizational recovery climate) recovery resources shape these relationships.

**Theoretical background :** Recovery theories suggest that work stressors negatively affect cognitive recovery from work. This research has drawn on different conceptualizations of work-related rumination (i.e., different measures of WRT) – making integration across studies challenging. Many studies have focused on external recovery periods such as evenings or weekends. Based on more specific propositions from cognitive and motivational psychology, we study how unfinished work tasks relate to different aspects of WRT during internal (i.e., work breaks) and external (i.e., evenings) recovery periods. In addition, we extend these theoretical approaches and hypothesize that personal and organizational recovery resources, such as high recovery competence and a strong organizational recovery climate, are not only associated with lower WRT but also mitigate the detrimental effects of unfinished tasks.

**Methods :** In Study 1, we meta-analyzed relationships between unfinished tasks and WRT ( $k = 10$ ,  $N$  between = 1208;  $N$  within = 8833). We collected further cross-sectional data in Study 2 and 3 ( $N$ s = 154/164) on relationships between unfinished tasks, organizational recovery climate, recovery competence, and detachment in the evening and during work breaks (only Study 3). In Study 4 ( $N = 309$ ), we collected longitudinal data over three waves (each 6 months apart) and considered, in addition to the variables in Study 3, negative work reflection and problem-solving pondering during work breaks and evenings as WRT outcomes. We analyzed data from Study 2-4 with structural equation modeling including latent interactions. In Study 4, we used latent difference score modeling to examine lagged between-person relationships and within-person change effects between unfinished tasks and WRT measures in combination.

**Results :** In Study 1, we found positive relationships ( $\rho$ s) between unfinished tasks and WRT (detachment, affective rumination, problem-solving pondering) both at the between-person (-.39, .45, .33) and the within-person-level (-.22, .43, .32). After including our data from Study 2-4, between-person-relationships emerged as independent from WRT conceptualization (-.35, .35, .36). In Study 2, we found a negative relationship between unfinished tasks and evening detachment that was no longer significant when adjusting for the positive relationship between recovery competence and detachment. In Study 3, we found a similar pattern for detachment during breaks but unfinished

tasks were not significantly related to evening detachment. Organizational recovery climate had neither direct nor moderating effects in Study 2 nor 3, and recovery competence did not moderate relationships between unfinished tasks and detachment. In Study 4, our results revealed positive person-level relationships between unfinished tasks and all WRT aspects six months later. Change-to-change relationships were widely not significant. However, a six-month change in unfinished tasks related positively to problem-solving pondering during breaks and evenings after that time. In line with results from Study 2 and 3, higher recovery competence related to less WRT six months later, independent from WRT conceptualization and recovery period, but interactions with unfinished tasks did not emerge. Moreover, we found some partial support for the protective role of a high organizational recovery climate when considering the relationships between changes in unfinished tasks and detachment and problem-solving pondering during breaks.

Limitations : Due to the limited sample, moderator testing had to be dropped in Study 1. Study 2 and 3 are cross-sectional and hence mute on causality. In Study 4, the long intervals between assessments might have affected our results.

Conclusions : Our study results show that unfinished tasks are positively and recovery competence is negatively related to different aspects of WRT measures during work breaks and evenings, especially when considering their more chronic and stable emergence. Perceived organizational recovery climate is largely not predictive of WRT and does not account for reactivity to unfinished work tasks in this regard.

Relevance to congress theme : About 30% of all European workers state that they have at least sometimes not enough time to get their job done. Thus, unfinished tasks at work are highly prevalent. Since a meta-analysis revealed that WRT relate to lower health and wellbeing, reducing unfinished tasks and increasing employees' recovery competence are relevant from a practical perspective.

*Keywords: unfinished tasks, detachment, rumination*

## Paper 4

### **Anticipatory processes as predictors for day-specific crafting patterns across life domains and its consequence for the recovery process**

Anja Morstatt, University of Zürich; Jessica de Bloom, University of Groningen; Georg Bauer & Philipp Kerksieck | University of Zürich

Research goals, why the work was worth doing and theoretical background : Crafting is considered a proactive strategy that enables employees to address their individual life challenges (de Bloom et al., 2020). In our study, we will address cognitive processes to explain why employees engage in crafting and how they reflect about their work and private life afterwards depending on the crafting effort taken. Specifically, we would like to transfer the idea of an anticipatory phase from coping research (Folkman & Lazarus, 1985; Lazarus & Folkman, 1984) to the crafting concept. In the context of stress and traditional coping research, anticipation has been discussed and investigated as an activating mechanism (Brosschot et al., 2005; Casper et al., 2017; Monat et al., 1972), but little is known about anticipatory processes when focusing on proactive crafting behaviors. We will consider anticipation in two ways: First, in a positive light, we will address whether employees anticipate daily crafting opportunities (e.g., timewise) and how this relates to their crafting efforts towards needs satisfaction (e.g., the need for mastery). Second, we will also address whether employees anticipate stressful life characteristics (e.g., high workload, high demands outside of work), which might lead employees to craft for needs satisfaction as a compensation. Further, we assess how these are then related to relevant health and performance indicators, e.g., job performance, or recovery, both in terms of recovery experiences and reflective processes at the end of the day. This is important because a more positive reflection of the work-domain is beneficial for the recovery processes of employees (Bono et al., 2013; Casper et al., 2018; Meier et al., 2016). Lastly, we will also investigate whether specific person characteristics, e.g., in general thinking more positive about stress and its outcomes (Stress Mindset; Crum et al., 2013) could explain differences in the intensity in which employees engage in daily crafting depending on their anticipation.

Design/Methodology/Approach/Intervention : We have collected intensive longitudinal data via an ecological momentary assessment study from May to July 2022. German-speaking employees from Germany, Austria, and Switzerland were surveyed six times per day on six measurement days (Mondays, Wednesdays, Fridays; schedule adapted to part-time workers) across two work weeks. We received survey responses from N = 415 participants (total of 10922 measurement). On average, participants filled out 26 of the 36 possible measurements (SD = 8.622). The final N will depend on further data cleaning. The data will be analyzed using multilevel structural equation modeling to account for the nested structure of such data (Schwartz & Stone, 1998).

Results obtained or expected: Results are currently unavailable and will be presented at the conference.

Limitations: Our study focused specifically on crafting behaviors across days and repeatedly asked participants to rate their extent of crafting multiple times per day. The measurement by itself might have led to self-reflective processes and measurement reactivity, altering the natural behavior of participants over the course of the study participation (French & Sutton, 2010). Additionally, this study will also focus on demand anticipation. Study participation was voluntary, which is why participants might have decided to not respond to survey invitations on working days with high demands, leading to a selective sample. Both limitations will be examined during data analysis.

Conclusions – research and practical implications: We add knowledge to the processes that possibly trigger crafting efforts and shed light on the general frequency and intensity of crafting efforts during the course of a workday. Further, we relate day specific crafting patterns across life domains with recovery from work, bridging the two research fields. This knowledge could direct future research to investigate suitable interventions e.g., incorporating anticipation exercises to motivate crafting behaviors.

Relevance to the Congress Theme: In a rapidly changing world, employees are faced more than ever with complex life challenges. Crafting is a suitable strategy to address such challenges and offers employees opportunities to act where top-down work design strategies might not be sufficient. In our study, we further bridge the field to recovery from work, which also becomes more important when life including work becomes more complex and demanding. Therefore, we conclude that to investigate the future of work, crafting and recovery should be focus topics.

Relevant UN SDGs: The study would be highly relevant for the UN SDG: “Good Health and Well-being”.

*Keywords: recovery, work-life balance, job crafting*

## Paper 5

### **Creating Boundaries for the Better: An Intervention to Study how Boundary Creation Behaviors Relate to Well-Being and Work Performance**

Dana Unger, UiT The Arctic University of Norway; Wladislaw Rivkin, Trinity College Dublin; Laura Venz, Leuphana University Lüneburg; Fabiola Gerpott, WHU Otto Beisheim School of Management

**Research goals and why the work was worth doing:** During the COVID-19 pandemic, many media outlets were happy to advise their audience to create boundaries between work and home. Drawing on boundary theory (Ashforth et al., 2000) and recovery research (Sonnentag & Fritz, 2015), we have indeed good reasons to assume that boundary creation behaviors might be beneficial for recovery and work performance. However, much-needed empirical evidence for this assumption is lacking. We contribute this evidence by shifting the research attention from how employees manage their boundaries while being in one domain to examining the actual transition between domains (see Cobb et al., 2022). In a field intervention study, we investigate whether boundary creation behaviors have a beneficial impact on recovery (i.e., detachment and energy states) and work performance.

**Theoretical background:** We define boundary creation behaviors as the enactment of strategies to actively draw a line between the end of one's working day and the beginning of one's free time. We integrate boundary theory with the stressor-detachment model to develop a conceptual framework that links boundary creation behaviors at the end of work with employees' recovery at home, same- and next-day energy states, and next-day work performance. Ashforth and colleagues' boundary theory (2000) postulates that individuals create boundaries between various spheres such as work and home. We argue that on days on which employees actively engage in boundary creation behaviors, they can draw firm lines between work and private life increasing the likelihood of detachment (i.e., being mentally away from work; Sonnentag & Fritz, 2015). Detachment should, in turn, improve employees' energy states on the same day (i.e., evening) and the next morning, which should have a positive effect on next-day work performance.

**Design/Methodology/Approach/Intervention:** We ran an intervention study across two subsequent workdays with 237 full-time workers in the United Kingdom who were recruited by Prolific Academic. We randomly assigned these participants to one of three conditions: Seventy-three people were in the boundary creation condition in which we asked them to deliberately create a boundary between work and free time (e.g., turn off all work-related equipment, clean their workspace, engage in a relaxing activity), 78 people were in the active control group in which we asked them to write down three good things that happened at work that day, and 86 people were in the passive control group (i.e., no intervention). The outcomes evening detachment, evening and next-morning energy states, and next-day work performance were measured on the same evening and the next day respectively.

**Results obtained:** Participants in the intervention group who actively engaged in boundary creation behaviors subsequently reported higher detachment in comparison to the active and passive control groups. Furthermore, we found indirect effects of active boundary creation behaviors on same- and next-day energy states as well as higher next-day work performance via detachment.

**Limitations:** First, we did not analyze whether some boundary creation behaviors are more beneficial than others. Second, we did not consider participants' personal preference for segmented (vs. integrated) work-to-home boundaries which might buffer the effect of the boundary creation intervention on detachment with its downstream consequences for energy states and work

performance. Finally, our research design does not allow us to study the role of time in the context of boundary creation behaviors. For instance, the effectiveness of these behaviors might rise with increasing levels of routinization.

Conclusions – research and or practical implications: We advance the literature on boundary management by shedding light on the processes taking place during the transition from the work domain to the home domain. Our field study informs evidence-based management decisions about the effectiveness of a low-cost intervention that has the potential to improve recovery and work performance to achieve organizational sustainability.

Relevance to the Congress Theme: With technological advancements and the emergence of hybrid work practices for larger parts of the working population, the work and leisure domains are becoming ever more blended. With physical boundaries ceasing to exist for telecommuters, employees must draw work-home boundaries themselves. We contribute to shaping the future of work by outlining how to facilitate this process.

Relevant UN SDGs: Our research advances the pursuit of Sustainable Development Goal “Good health and wellbeing”.

*Keywords: boundary management, well-being, intervention*

## Symposium S085

### **Bionics and Robotics at Work: Consequences for Workers' Social Perception and Work Experience**

Bertolt Meyer, TU Chemnitz

science

Labour within the contemporary world of work, still described with terms like Industry 4.0, Automation 4.0, or Work 4.0, is characterized by constantly advancing digitization and automation processes. Along with these processes, the use of (social) robotics and embodied digital technologies (EDTs) for restoring or extending the capabilities of their users is increasingly shifting into focus. These changes require investigating the consequences of the shift towards hybrid societies characterized by increasing human-machine interaction. How are working and living environments changing through the use of such technologies? What opportunities and risks are associated with these developments for the working individual and the workforce as a whole? How must bionic instruments, technical assistance systems, and robotics be designed to offer the utmost acceptance while simultaneously providing the best performance and mitigating unwanted side effects?

The symposium, which originates from the Collaborative Research Center 1410 "Hybrid Societies" at TU Chemnitz, reflects those questions mirroring the conference's central theme and will address three significant developments regarding future work settings. The presented research approaches these questions from different angles and reports the first results of various studies focussing on the usage of bionic devices, human-robot interaction, and the specific use of social robotics in working environments. Further research questions will also be discussed and embedded in the context of current developments. Overall, the symposium comes with a two-fold thematic focus.

The first part of the symposium presents research regarding the use of bionic devices and their effects on social perception and feelings toward the users of such technologies. The initial presentation will focus on how the usage of bionic devices will influence social perception and behavior toward their users. The presented study addresses the user experience and the broader perspective of users of bionic devices for the first time, while also pointing out current difficulties when studying the phenomena due to the small number of eligible participants. The second contribution addresses this problem by presenting an augmented reality environment capable of simulating the use of bionic devices and thus enables experimental research regarding the effects of bionic devices on the self-and other perception. The presented system allows users to control a simulated EDT device, which makes experiments on perception more accessible and allows to study users with no prior experiences regarding EDTs. To widen the scope of the symposium from restorative bionic devices to augmenting ones, the third speaker will present specific aspects on the comprehensive user experience of occupational exoskeletons from a design practice and research perspective. The presentation will highlight the meaning of "close-to-body" interaction for the users and the relation between the exoskeleton's characteristics and users' self-perception, and provide implications for design approaches of those devices..

The second part of the symposium will address topics apart from merging humans with technology and will focus on human-robot interaction against the background of the emerging use of robotics in various settings. With a focus on feelings and possible fears induced by robot coworkers, the fourth contributor will investigate how sociodigital self-comparisons with a robot influence the perception of threat and job insecurity. The final presentation will continue the outlook on human-robot interaction. It will widen the perspective while focusing on a specific but increasingly important aspect, the effects of social robots' perceived gender. The presented research will shed light on how

gender attributions may influence ascriptions, feelings, and behavior, such as the willingness to cooperate, towards social robots.

A concluding discussion opens the space for comments, identifies future research topics, and finally wraps up and reflects on the contributions to emphasize the relevance of well-designed EDTs for inclusive working environments, good working conditions, and thus for employees well-being.

*Keywords: Robotics, Bionics*

## Paper 1

### The Impact of Bionic Prostheses on Social-Perception from the Users' Perspective

Maximilian Bretschneider, Bertolt Meyer & Frank Asbrock | TU Chemnitz

**Goals:** Bionics can have a profound effect on the social perception of their users such that they are perceived differently in terms of warmth, competence, and morality (Bretschneider et al., 2022; Mandl et al., 2022; Meyer & Asbrock, 2018). Therefore, using restorative bionics will likely affect attitudes and behaviors toward their users. However, the user perspective still needs to be studied. The present study aims to gain more profound insights into how restorative bionic devices influence users' self-perceptions. We aim to shed light on the influence of using such technologies on the user's self-perception, meta-perception, and everyday experiences in social interactions. To realize these insights, we conducted an exploratory qualitative study.

**Theoretical background:** Recent studies (Bretschneider et al., 2022; Mandl et al., 2022; Meyer & Asbrock, 2018) address how others perceive users of bionic prostheses. This research is primarily based on the Stereotype Content Model (SCM; Fiske et al., 2002). The SCM proposes two fundamental dimensions, Warmth and Competence, across which others perceive groups and individuals. Additionally, the perception of warmth and competence elicits specific emotional and behavioral reactions (Cuddy et al., 2008). People with physical disabilities are typically perceived as warm and incompetent evoking pity and active facilitation as emotional and behavioral correlates (Asbrock, 2010; Fiske et al., 2020; Meyer & Asbrock, 2018). Users of bionic prostheses reclaim perceived competence while still being perceived as warm as people with physical disabilities (Meyer & Asbrock, 2018). Nevertheless, nothing has been said about the users perspective so far.

**Method:** We conducted semi-structured interviews and used a guideline prepared in advance and included all relevant topics. All interviews were conducted online. Our sample consisted of ten individuals (M age = 45.6, SD = 17.5) who use a bionic arm prosthesis. The corresponding impairments are caused congenital (n= 7), traumatic (n= 2), and by amputations for medical reasons (n=2). The data analysis was carried out employing thematic analysis (Braun & Clarke, 2006) using MAXDQA (version: 20.0.0) based on the anonymized transcripts.

**Results:** When using no prostheses or low-tech ones, participants described evoking patronizing, sometimes encroaching behavior that is often seen as an implicit ascription of incompetence. This tendency changes when using a more sophisticated prosthesis so that users describe that they are seen more positively by others when using a bionic prosthesis. Overall, users feel more competent and experience higher levels of self-efficacy due to regained capabilities when using a bionic prosthesis.

**Limitations:** Our study comes with certain limitations. Specifically, our sample consisted only of German-speaking individuals and was gathered by convenience sampling at the first stages and combined with a snowball technique later on. Therefore the results are neither representative nor generalizable and are not simply transferable to different cultural contexts. Also, the results, despite utmost methodological cautiousness and good interrater reliability ( $\kappa_n = .64$ ), may unintentionally be biased by the researchers during data collection or categorization.

**Conclusions:** Our findings indicate that using such devices affects how others perceive users and might induce specific behaviors toward them. For example, using bionic prostheses positively affects the acceptance of disabled people at work conveyed by the ascribed competence (Vornholt et al.,

2013), similar to able-bodied individuals. We expect that augmenting devices will also trigger these processes of social perception with positive and negative outcomes, as partially shown by Gilotta et al. (2019) and Siedl & Mara (2021). Consequently, in upcoming studies, we will address devices for augmenting user capabilities and focus on more work-related applications like exoskeletons.

Relevance: Bionic devices for reestablishing or augmenting users' capabilities (e.g., bionic prostheses or exoskeletons) are likely to proliferate in the near future. Our results indicate that using bionic prostheses influences the social perception of bionics users in multiple ways, such that users describe themselves as being seen as more competent by others. In spite of being exploratory, these findings indicate that the use of bionic technologies can affect users' self-perception, stereotypes, and interpersonal perceptions. Despite the shown inclusive potential of bionic technologies, introducing such technologies in future work contexts might have unintended social repercussions that need to be accounted for.

UN SDGs: Decent work and economic growth, reduced inequalities

Intended audience: Science & Practice

*Keywords: Bionics, self- and other-perception, stereotypes*

## Paper 2

### Effects of gender perception of humanoid robots on social perception

Bertolt Meyer, Anja Strobel & Sarah Mandl | TU Chemnitz

**Goals:** The research goal of the present study is to replicate prior findings on whether and if so, how, gender attributions are associated with social perception of humanoid robots. Gender as a social category plays a significant role in how humans interact with other beings (Eyszel & Kuchenbrandt, 2012). The two traditional dimensions of social perception, that is, warmth and competence generate distinct emotions (Cuddy et al., 2008) and are linked to gender stereotypes: women are perceived as less competent and warmer than men (Fiske et al., 1999). Against the background of hybrid societies, where robots are increasingly put into social roles, gender attributions are increasingly shifted into focus of researchers. However, findings on the topic of gendered robots are still inconclusive (Neuteboom & De Graaf, 2021; Seaborn & Frank, 2022).

**Theoretical Background:** People assign human traits to computers (Nass et al., 1994) and attribute social dimensions, i.e., warmth, competence, sociability, and morality to robots (Bretschneider et al., 2022; Jung et al., 2022; Mandl et al., 2022). Robots are subject to gender stereotyping through morphological features (Eyszel & Hegel, 2012, but see Banks & Koban, 2022). Recently, a literature review showed that a robots' gender does not affect constructs such as likeability or acceptance of a robot (Perugia & Lisy, 2022). On the contrary, gendered robots can evoke emotional reactions (Seo, 2022) and are subject to gender stereotypes (You & Hung, 2021). Humanoid robots can be designed to resemble male or female human beings, that is, the two traditional (binary) gender expressions. This could be problematic two-fold: for one, gender should not be seen as a binary construct, but rather as a continuum. Secondly, gendered robots, especially if they are constructed as traditional male or female, could reinforce gender stereotypes. Therefore, robots which do not fall into these two categories but are gender neutral or ambiguous (Seaborn & Pennefather, 2022; Suzuki & Nomura, 2022), or even non-humanoid (Jung et al., 2022), might be more suitable for deployment in various social areas. However, with the findings to date pointing into various directions, to dismiss the significance of the topic would be premature. With our study, we provide complementary insights to add to the body of research.

**Method:** We are currently in the process of collecting data of  $n = 299$  participants. Participants are presented four different images of robots which are rated with regard to (1) the perceived gender on a continuum (anchored at 1 – male and 7 – female) and (2) attributions of social dimensions (competence and anthropomorphism, sociability/morality, activity/cooperation; Mandl et al., 2022). Additionally, we investigate whether personality variables, i.e., Need for Cognition (Bless et al., 1994), Affinity for Technology Interaction (Franke et al., 2019), Attitudes Towards Robots (Nomura et al., 2008; Bartneck, 2019), and Tendency to Anthropomorphize (Waytz et al., 2010) are associated with gender attributions and/or social perception. We employ mixed models with random intercepts to account for nested data, since each participant rates each picture.

**Results:** We are currently in the process of collecting data of  $n = 299$  participants. We expect results to be complete by 12/2022.

**Limitations:** Participants are presented unmoving pictures, no real interaction between robots and participants is included. We chose four pictures of humanoid robots, whether our findings are applicable to other robots, e.g., zoomorphic, will be focus of upcoming studies. The pictures were

chosen to be neutral in robotic facial expression, color, and background, but it is not ruled out that the stimuli were not perceived as neutral by participants. Furthermore, we collected data from a mainly high educated, German-speaking sample, so possible cultural and educational differences need to be investigated more thoroughly.

Conclusions: With the present study, we are aiming at replicating prior findings on associations between gender attributions and social perception. We point out that, even if gendered robots are subject to controversies, their research is of great importance for hybrid societies of the future.

Relevance to Congress Theme: Apart from more obvious themes of HRI, gender perception and gender stereotyping is a rather overlooked, but all the more important topic: by adopting gendered robots in stereotypically male or female areas, the reinforcement of gender stereotypes is problematic and should not be pushed. With our research, we provide a status quo of gender perception of robots as a starting point for further discussion.

Relevant UN SDGs: Gender equality, decent work and economic growth, reduced inequalities

*Keywords: gender stereotypes, human robot interaction, social perception*

### Paper 3

#### **Merging Bodies with Technology in Augmented Reality for Empirical Studies on Hybrid Societies**

Carsten Rudolph, Bertolt Meyer & Maximilian Bretschneider | TU Chemnitz

**Goals:** An increasing number of humans are already merging their bodies with digital technologies. The reasons for this are diverse, however we can expect that with ever evolving forms of embodied digital technologies (EDTs), the number of persons with body-worn technology will increase in the future. As of today, it is challenging to perform studies on such technologies, due to low accessibility and a limited number of participants. We present a novel way of performing behavioral studies regarding EDTs. We developed an Augmented Reality experience where participants control a bionic prosthesis that is rendered into their natural field of view. This not only allows us to not only overcome the need for physical traditionally resources required to perform such studies, but also to expose participants with non-existing, innovative designs.

**Theoretical Background:** Merging humans with technology will affect the psychological processes underlying social human interaction, e.g. with respect to social perception and stereotyping. Studying such effects is important not only from a psychological, but also from a technological point of view as the findings of these investigations will help to develop technologies that adapt better to the expectations and needs of humans. Recent advancements in the area of bionics have already resulted in new high-tech bionic limbs that change how people with disabilities who wear such bionic prostheses are perceived and stereotyped (Meyer & Asbrock, 2018).

**Method:** In order to test the acceptance of our system we conducted a non-randomized quasi-experimental study (n = 27) where all participants were assigned to the same condition, performed the same task within the AR environment, and filled in the provided questionnaire afterwards. We designed an explorative scenario in three stages. In the questionnaire we measured for five variables: Sense of Body Ownership (Romano et al., 2021), Self Presence and Immersion (Makransky et al., 2017), User Experience (Norman, 2018) and Affinity for Technology (Franke et al, 2019).

**Results:** In support of our hypothesis, users experienced a sense of body ownership. Also, a feeling of self-presence is induced during the task, and participants rated the overall experience as positive. Ownership, self-presence, immersion and user experience were all unrelated to age, gender, and technology affinity. Participants experienced a significant sense of body ownership with regard to the virtual prosthesis, albeit a small one. Regarding the experience of self-presence, the results exhibit the same pattern: participant's average response was above the scale centerpoint and the difference between the scale centerpoint was highly significant and associated with a large effect.

**Conclusion:** We developed an Augmented Reality system that can replace the user's hand with a prosthetic hand in real-time. We investigated users' perceptions of ownership, self-presence, immersion, and user experience and correlated them with users' affinity for technology. Perceptions of ownership, self-presence, immersion, and user experience were unrelated to users' age, gender, and technological affinity. Furthermore, perceptions of ownership, self-presence, immersion, and user experience were all favorably, in the sense that users' average perceptions were significantly above the scale mean and all of these differences were associated with large effect sizes. Accordingly, the results support the hypothesis and show that the system works as intended. Our system allows to run empirical studies on perception and behavior with a significantly lower the technological barriers.

Relevance: Embodied digital technologies, especially body-enhancing technologies have the potential to strongly influence many aspects of human labor. However, the acceptance of such technologies is currently underrepresented in social sciences. This is mostly caused by the weak accessibility of such technologies. Systems like ours have the potential to run studies with much lower requirements.

UN SDGs: Reduced inequalities, Good health and wellbeing.

*Keywords: Stereotyping, Augmented Reality, Social Perception*

## Paper 4

### Self-comparisons in human and human-robot teams: Effects on threat experience and job insecurity

Nathalie Schauffel, Thomas Ellwart & Carmen-Helen Weber | Trier University

**Goals:** The research goal is to investigate what psychological effects sociodigital self-comparisons (SDSC) with a robot coworker can have on the perception of threat and job insecurity compared to traditional social comparisons with other human coworkers. With the introduction of robots in various work fields, aside from humans also robots become objects of comparison at work (Schauffel et al., 2022). Robots are expected to be superior at various tasks in the coming decades (Grace, 2018), and research demonstrates that robots can induce threat perceptions (Yogeeswaran et al. 2016) and fears of job replacement (Granulo et al., 2019). In an EU-project context of ship inspection, it became visible that SDSC exist. However, also in all human settings, individuals can be replaced by more qualified and competent humans. Thus, it is relevant to investigate if social comparisons and SDSC have similar consequences on threat and job insecurity, or if robot coworkers trigger different fears.

**Theoretical background:** Individuals have a fundamental drive to compare themselves with others in social settings (Festinger, 1954). Research shows that social comparison processes evoke complex functional and dysfunctional consequences in work teams (Margolis & Dust, 2016). Research on SDSC is scarce (Granulo et al., 2019; Schauffel et al., 2022; Spatola & Normand, 2021) but points to relations between SDSC and job-related fears. Also, first evidence indicates differences in job-related fears depending on the object of comparison (i.e., human vs. robot, Granulo et al., 2019).

**Method :** 303 individuals (75.2% female, M age =23.3, SD age = 6.13) participated in the study. Participants were confronted with four scenarios in which they were told to put themselves in the role of a ship inspector performing better/worse than a human/robot colleague (i.e., project context). Thus, we manipulated (within-person) the direction of comparison (upward vs. downward) and object of comparison (human vs. robot). After each scenario, participants provided self-reports of perceived threats (five items based on Yogeeswaran et al. 2016, e.g., “The increased use of robots in our everyday life is causing job losses for humans.”,  $\alpha \geq .77$ ) and job insecurity (four items based on De Witte, 2000, e.g., “Chances are, I will soon lose my job.”,  $\alpha \geq .85$ ). We conducted a two-factor analysis of variance (ANOVA) with repeated measure using IBM SPSS 26.

**Results:** Upward comparisons led to greater threat experience and job insecurity than downward comparisons. Self-comparison with a robot (i.e., SDSC) led to greater job insecurity than that with a human colleague, but not to greater threat experience. The threat experience was greater for the upward comparison than for the downward comparison, whereby this was particularly pronounced for the comparison with the robot (i.e., SDSC), compared to the self-comparison with a human colleague.

**Limitations:** Main limitations refer to the applied approach and the sample. First, the approach considers a fictional scenario. No real interaction between humans or humans and robots was included, restricting the external validity and generalizability of the results. Nevertheless, the applied vignette approach represents an economical way to investigate a new, partly exploratory, research field within a realistic application context of human-robot interaction in ship inspection. Second, the sample had limited experiences with robots and the scenario context of ship inspection which could

have made it difficult to put themselves in the scenarios. However, the vast majority of the participants indicated that they could easily put themselves in the scenarios.

Conclusions: Contrasting the consequences of the comparison process in human-human and human-robot interaction, this study extends limited research on social comparison in traditional work teams (Margolis & Dust, 2016) while also providing knowledge for the relatively new field of human-robot teaming (O’Neill et al., 2020; You & Robert, 2017). Especially human-robot interaction in which humans perceive themselves as outperformed by a robot coworker might have negative consequences for individuals' psychological well-being and results in job-related fears (e.g., job insecurity). Given the fundamental human drive to compare themselves (Festinger, 1954), the present results offer practical implications for the design and implementation of robots at work (e.g., cooperative vs. competitive, emphasize human uniqueness) and directions for future research (e.g., perception of fairness).

Relevance to Congress Theme: Human-robot teaming is changing the world of work. Thereby, robots at work are a double-edged sword, incorporating positive but also potential negative consequences. The study's focus on self-comparisons in human-robot teams introduces a to-date underinvestigated perspective on human-robot teaming, rooted in a well-established theory on social comparisons (Festinger, 1954).

Relevant UN SDGs: Decent work and economic growth

*Keywords: Human-robot interaction; social comparison; job insecurity*

## Paper 5

### Specific Dimensions of the User Experience of Occupational Exoskeletons

Emese Papp, Jens Krzywinski & Christian Wölfel | TU Dresden

Theoretical background: Exoskeleton technology is relatively new and its use in companies is still limited. Therefore, it is understandable that research and development projects have focused mainly on technical implementation so far, and existing research on the user's perspective in this field is still in its infancy (Elprama et al., 2022). A few existing frameworks (Moyon et al., 2019; Fox et al., 2019, Elprama et al., 2022) provide rich insights about influencing components of acceptance and point out the importance of different aspects for the development (e.g., wearing comfort, task-fit) and implementation (e.g., familiarization time, organizational aspects). However, research on occupational exoskeleton has considered the user's emotional experience only marginally and addressed physical aspects mainly through ergonomics (Papp et al., 2021).

New Perspectives/Contributions: This contribution will emphasize the relevance of the user experience (Thüring & Mahlke, 2007; Ludden & Van Rompay, 2015) with a particular focus on its corporeal dimension and the role the exoskeleton's design plays in the social and self-perception of the user.

We can observe an intimate, physical alliance of the exoskeleton and the human body (Jochum et al., 2018), with a specific interaction level of union (Papp et al., 2020) or fluid human-machine cooperation (Butnaru, 2021) that affects not only the work tasks but also the user's body and the user itself. To capture the complex and highly subjective human-exoskeleton experience (Papp et al., 2020; Torricelli et al., 2020; Butnaru, 2021), our analysis will follow the product experience framework of Ludden and Van Rompay (2015) that conceptualizes human-product interaction at three different levels: sensorial-visceral; functional-behavioral; and symbolic-reflective.

We will highlight exoskeletons' potential to change the wearer's appearance (sensorial level) and influence a person's self-image and social perception (symbolic level). Many studies noted that workers' acceptance was severely affected by workplace bullying or the fear of it (Feldmann et al., 2020; Gilotta et al., 2019; Moyon et al., 2019; Papp et al., 2020). This shows that wearing an exoskeleton could be understood as a sign of weakness (Baltrusch et al., 2021; Feldmann et al., 2020; Elprama et al., 2020; Papp et al., 2020). Since the properties of an exoskeleton might directly influence the user's self-image and how users are perceived by others (Papp et al., 2020), visual aesthetics will play a crucial role in avoiding possible stigmatization (Baltrusch et al., 2021; Papp et al., 2020).

Another critical insight is that exoskeletons can direct the user's attention to its bodily capabilities on a functional and symbolic level. Wearing a support system can be a form of users' confrontation with the possibility of future health problems (Papp et al., 2020). However, it can also help users understanding their bodies and bodily functions in a new way. In this sense, exoskeletons become a means to body awareness: self-awareness (Sonneveld & Schifferstein, 2008) or kinesthetic awareness (Jochum et al., 2018).

Conclusions – research and or practical implications: This working paper, as a complement to existing frameworks, focuses on the user's subjective idiocratic exoskeleton experience instead of capturing the wide variety of influencing factors of acceptance. It attempts to illustrate how the different levels of experience entangle themselves around the user's corporeality, extending from

visual and bodily impressions to self-perception. The identified experience dimensions and the intertwining of those still have to be validated and completed in further qualitative field research. Based on empirical validation, they could significantly contribute to a more exhaustive picture of the experience and acceptance of exoskeletons in the occupational context and help developers to find the right design approaches to create positive experiences with those devices.

Relevance to the Congress Theme: Through physical relief, exoskeletons could reduce work-related health hazards, times of absence, and accidents. Thus, the use of exoskeletons contributes to decent working conditions and the individual well-being of many employees working under physically demanding conditions. For widespread adoption of occupational exoskeletons, it is essential to understand the underlying mechanism, which shapes a positive user experience and actual use. Based on the established frameworks of user experience and the theory of embodied cognition, this contribution focuses on a previously poorly understood human-exoskeleton experience with its close-to-body character.

Relevant UN SDGs: Decent work and economic growth, Industry, Innovation and Infrastructure,  
Good health and well-being

*Keywords: Exoskeletons, Occupational Health, User Experience*

## Symposium S087

### Critical Work and Organizational Psychology

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science\_practice

The symposium aims to discuss key perspectives about the meaning and approaches to work. This ponders on the importance of questioning the status quo to generating critical approaches to WOP whose foundation is to view work realities as dynamic in time and space. This affords a voice to scholars and practitioners to define future work orientations in a more humane and social form, thus transcending the technical praxis we are accustomed to. This critical WOP symposium is, thus, about reflection deeply rooted assumptions about work, some of which may no longer be relevant, therefore are obsolete, and some that require dramatic rethinking. Critical WOP puts the individual at work in a social context which can enrich not only performance for individuals and organizations, but can refocus human societies (Gerard, 2016). Through the combined efforts of academics and practitioners, that we can see the true value of scholarship and praxis working in synchrony to transform work and the world in which we live (Teo, 2015).

It is in this spirit that that the topics submitted to this CWOP symposium are set. They have significant linkages which reinforce the critical theory-praxis integration that WOP seeks. For example, in her submission, Mara discusses platforms for doctors (doctors visiting patients online). This is set in the neoliberalist perspectives which raise significant questions about the degree to which doctors put their lives at risk to power a poorly funded public healthcare system. The work of doctors becoming more isolating due to a reduction in their institutional and organizational involvement, for then gaining more freedom and economic advance in meeting patients online. These approaches raise the critical question of doctors' mental health but problematizes healthcare privatization which only profits investors.

Christian and colleagues' submission clearly complements this by examining the high commitment model in human resource management (HRM), which despite being acclaimed as a high-performance model can exhibit significant disadvantages which have been widely acknowledged. The authors contend that some studies raise concerns that performance improvements come at the expense of workers' health. This is because highly involved individuals may overexert themselves in pursuit of their work tasks and exhibit a pattern of self-regulated work intensification with detrimental effects on occupational health.

An initiative such the platform, Premilla argues in their communication for this symposium, has emerged as a response to some of the criticisms about the timid actions to face and revisit the nature of workplace relations and practices. Many have acclaimed the potential of the platform to engage employees and create more democratically organized businesses that provide workers with new ways of connecting, cooperating and realizing meaning, but the effectiveness of this is still wide open for debate. Premilla and co-author ponder on the accuracy of these claims by examining workers' conditions in the Indian context by reviewing a large body of theoretical and empirical works.

Degen's submission is not only correlated to the previous ones but provides tentative answers to the problematics posed, especially in Premilla's paper. Degen examines issues of exploitation and fantasies about work in information technology workers. Incidentally, these workers are experts in the use of technologies and online platforms. The verdict is clear from the data obtained. Degen concludes that there is a realization of an initial model focused on the vulnerability-exploitation of IT workers, broadly defined as the condition under which IT workers accept to be exploited.

Vulnerability-exploitation stands at the nexus of fantasies and actual working conditions. Although the vulnerability-exploitation condition creates the space for individualization of work, this buffer levels of exploitation perpetuating logics of postcapitalist working conditions.

Dieu's submission attempts to conceptualise 'systemic racism' in the light of structuration theory to aid its use in policy frameworks and academia. He examines the concept in the light of recent intense debates about the notion of systemic racism. This period has seen a significant surge in racial tensions, particularly as affecting minority ethnic groups. Though some in the political and media sector acknowledge that there may be some organised discrimination against minorities, others in the same circles have persistently refuted the existence of systemic racism. This abstract casts a critical eye on the meaning of the concept and sheds light on what constitutes systemic racism and how it endangers opportunities and the psychological wellbeing of many in society.

These interesting discussions will allow a re-awakening of scholars and practitioners to the importance of consistent and systematic engaged scholarship that is attune with dynamism work, workplaces and research.

*Keywords: Approaches to work, Neoliberalist, Stress*

## Paper 1

### **Doctors in the age of platforms: the new social mechanism of experiencing health care through screens and online consultation**

Mara Gorli, Università Cattolica di Milano

#### Introduction and conceptual background

Even before the healthcare disruption caused by Covid-19, health systems were broadly struggling with well-known massive challenges rather familiar in many parts of the world. These include rising pressures for healthcare due to growing demands for the aging population, chronic diseases associated with more complex cases, lack of resources including the shortage of doctors and nurses, new technologies which often seem to increase cost pressures (Storey & Holti, 2020; Buchanan et al., 2013), and waves of institutional reforms impacting on processes and on how workplaces are perceived. In such a picture of complex and challenging conditions, Covid-19 has even further increased the strain on healthcare workers, causing increasing distress and discomfort (Heath et al 2020; Palmer et al 2022) and a reaction of progressive diminishing of the professional vocation and engagement in specific healthcare departments.

On the other side, digital platforms are branching out at many levels, and recent years have witnessed the increasing growth and expansion of medical platforms for online clinical consultation (Al-Mahdi et al 2015; Singh et al., 2021). This is a new frontier that opens unexpected opportunities for the healthcare system, as well as potential subtle risks.

The research investigates the 'silent quit' of doctors and a potential growing tendency to reduce their institutional and organizational involvement, for then gaining more freedom and economic advance in meeting patients online.

It is a very delicate topic that raises many considerations both political (the privatization of healthcare, the ownership of data, the individualization of professional contracts) and socio-organizational (how to create safe and better conditions to sustain workers in public services, thus guaranteeing a dedicated service of care).

#### Theoretical background

As work and organizational scholars, we are aware that contemporary workplaces and organizations are radically changing, bringing about new challenges for people and their relationships with work.

Healthcare personnel oversees complex, high-risk decisions, in contact with physical and emotional tensions, balancing scarcity of resources and high demand for fast, effective treatments. Healthcare workers are specifically involved in exceptionally high levels of dynamic, fast-paced situations often made heavier by phenomena like overcrowding, turnover, lack of resources, and exposure to physical and psychological demands (Schneider et al., 2019; Xu et al., 2020). It does not come as a surprise that levels of psychological issues such as burnout and difficulties in coping with uncertainty, and physical problems such as bad quality of sleep and musculoskeletal disorders are associated with professionals working in such field (Moukarzel et al., 2019).

Perhaps as a reaction, many doctors are now opting for different forms of patient care. The expansion of online platforms helps meet the demands of patients, whilst at the same time

guaranteeing an individual and 'autonomous contract' that doctors may define around their commitment.

Research goals and why the work was worth doing

Based on this scenario, the study aims to critically explore:

- i) How the usage of online platforms impacts the creation of new forms of healthcare practices and doctors' vocational values and identities
- ii) How the usage of online platforms affects the lived experience and the quality of care for the patients.

Methodology

The work is based on diverse data sources, collected within one online platform in Italy, through different methodologies:

Semi-structured interviews and focus groups reaching approximately 40 doctors; Semi-structured interviews with a sample of patients using the platform; Online questionnaire to doctors and patients;

The qualitative material collected is analysed through an inductive thematic analysis (Braun & Clarke, 2006; Vaismoradi et al., 2013), with the support of NVivo to create thematic areas and the conceptual map.

Results obtained or expected

The research illustrates the results, which reveal new emerging assumptions and positioning with respect to professional identity, sense of organizational belonging, care of the patient, and vocational values.

The analysis discusses potential risks and opportunities brought by the use of platforms for medical consultation.

Limitations

The study is directed to one platform in one sole country. Further studies could focus on comparisons among different platform systems and countries, to grasp cultural and institutional implications.

Conclusions – research and or practical implications / Relevance to the Congress Theme :

The present study proposes a picture of an evolving field that deserves wide consideration as platforms are nowadays shaping new relationships with work and with the concept of care (for the professional, for the patient), affecting experiences and identities. The research provides indications around the ethical and fruitful usage of online medical services that can inform organizational development, future work practices, and policy agendas.

Relevant UN SDGs:

Good health and wellbeing; decent work and economic growth

*Keywords: Neoliberalism, healthcare, professional identity*

## Paper 2

### PEAK PERFORMANCE—PARADOXICAL IMPACT: WHEN SUPPORTIVE HUMAN RESOURCE PRACTICES ARE TOO MUCH OF A GOOD THING

Christian Seubert, University of Innsbruck, Austria; Severin Hornung; Thomas Höge; Jürgen Glaser; Matthias Weigl

#### Research goals and why the work was worth doing

According to research on “high-performance work systems” (HPWS), integrated sets of complementary human resource (HR) management practices aim to cultivate specific job attitudes and behaviors that are considered beneficial for organizational performance. In particular, so-called “high-involvement” and “high-commitment” practices are postulated to be mutually beneficial for employers and employees. However, some studies raise concerns that performance improvements come at the expense of workers’ health. Highly involved individuals may overexert themselves in pursuit of their work tasks and exhibit a pattern of self-regulated work intensification with detrimental effects on occupational health. This study examines moderating and mediating roles of job involvement between perceived supportive HR practices and work ability to assess the validity of these concerns.

#### Theoretical background

The “HPWS” label has emerged as an overarching category for certain sets of complementary HR practices that aim to develop positive synergies for the workforce and work systems. HPWS comprise high-involvement practices that emphasize employee control and influence at work (such as participation in managerial decision-making), and high-commitment practices are focused on employee welfare (such as improved work design). While most research has focused on positive HR effects, a number of studies found negative side effects on worker well-being. Given these contradictory findings, critical analyses have suggested a paradoxical “dual” role of such HR practices in enhancing work motivation and peak performance, while at the same time provoking job stress and strain as “hidden costs”.

#### Design/Methodology/Approach/Intervention

The data stem from a large-scale commercial best employer survey study among German municipal employees (N=14,372). Two empirically distinct sets of HR practices (6 items each) were identified: participatory management style ( $\omega[6]=.90$ ) and decent working conditions ( $\omega[6]=.75$ ). Job involvement was measured with another empirically distinct set of 6 items ( $\omega[6]=.88$ ). Subjective work capacity was assessed with the work ability index (7 items,  $\omega[7]=.81$ ). Structural equation modeling was performed, controlling for gender, age, disability, organizational tenure, employment level, supervisor position, and occupational field. Latent interactions were tested using double-mean centering.

#### Results obtained or expected

Both participatory management style ( $\beta=.15$ ,  $p<.01$ ) and decent working conditions ( $4\beta=.49$ ,  $p<.01$ ) predicted higher levels of work ability. Job involvement acted as a partial mediator between HR practices and work ability ( $\beta=.19$ , 95%-BootCI [.17,.21],  $\beta=.20$ , 95%-BootCI [.18,.22]). Further, a buffering two-way interaction of participatory management style with job involvement ( $\beta=-.16$ ,

p<.01) as well as an attenuating three-way interaction of job involvement, participatory management style, and decent working conditions ( $\beta=-.35$ , p<.01) were found.

#### Limitations

The cross-sectional nature of the data does not allow to trace temporal trajectories or draw causal conclusions. Ad-hoc measures of perceived HR practices and job involvement were empirically established. Future research should employ longitudinal data and objective measures of HPWS.

#### Conclusions – research and or practical implications

The results suggest an ambiguous role of HPWS and provide evidence of reduced work capacity under conditions of high employee involvement linked to extensive organizational use of specific sets of HR practices. Stimulating peak performance by utilizing these HR practices may yield the paradoxical impact of self-endangering, over-engaged work intensification, resulting in diminished work ability. Sustainable application of such HR practices requires not merely promoting involvement and commitment in order to boost worker productivity, but to simultaneously monitor potentially harmful side effects as well as implementing customized health-promoting interventions to secure workers' long-term health and capability to perform.

#### Relevance to the Congress Theme

HR departments that constantly evolve and employ HPWS practices need to balance performance considerations with preconditions of long-term work ability. Work and organizational psychologists urgently need to advocate sustainable work practices that allow workers to thrive throughout their entire careers, rather than overexerting themselves in the short term.

#### Relevant UN SDGs

Good health and wellbeing, decent work and economic growth.

*Keywords: High-performance work system, high-commitment, HR practices*

### Paper 3

#### **PLATFORM PRECARIETY AND WORKER COMMODIFICATION-DECOMMODIFICATION, MEANING, EMPOWERMENT AND WELL-BEING**

Premilla D'Cruz, Indian Institute of Management Ahmedabad; Ernesto Noronha

##### Research rationale and goals:

The rise of the platform as an organizational model is recognized as one of the most important socioeconomic developments of our time, being considered to hold the potential for creating more democratically organized businesses that provide workers with new ways of connecting and cooperating and hence realizing meaning, empowerment and well-being. We sought to examine the veracity of these claims through the experiences of Indian platform workers and to make recommendations for policy and intervention.

##### Theoretical background:

We used the lens of economic precarity for our study, in keeping with platforms' 'independent contractor' description of workers. Precarious work refers to increasingly insecure employment and uncertainty, linked to the loss of social protections and social dialogue and rejection of standard employment relationships/SER. Precarization is a two-fold simultaneous 'normalization' process: erosion of SER and spread of non-standard forms of employment/NSFE, often portrayed as an alternative to unemployment. We sought to understand how precarity impinges on workers' experiences of meaning, empowerment and well-being at work.

##### Design/methodology:

We undertook a review of academic literature on the platform economy in India, covering crowdwork and on-demand work. To conduct the review, an unrestricted date search using several terms and variations, like gig economy India, platform economy India, Zomato India, Swiggy India, Ola India and Uber India, was conducted of the Web of Science, Scopus and Google Scholar databases. Only English-language, peer-reviewed academic output was considered.

##### Findings:

Our findings show that platform work, comprising crowdwork and on-demand work, in India is a mixed bag. Though Indian platform workers seem to benefit in terms freeing themselves from workplace hierarchies, escaping from micro-politics, bettering their incomes, accommodating complex personal schedules and avoiding difficult commutes, risks are transferred away from employers and towards workers, resulting in job insecurity, uncertainty, instability and vulnerability, underscoring precarity. Work is individually organized through interpersonal competition. Algorithms are used to maximize the companies' business interests and economically exploit workers. Platform workers are barred from basic protections like social security, minimum wage, working hours, gratuity, overtime pay and collective bargaining rights. The COVID-19 pandemic only intensified their precarity, highlighting both the platforms' and the state's absence of actual care and accountability for workers. Indeed, platforms intensify the worst features of global capitalism, increasing inequality and disenfranchisement through working conditions of wage theft, deregulation, increased intensification of work and unprecedented workplace surveillance. Even so, resistance through worker initiatives and advocacy groups as well as nascent but fragmented union action, indicative of agency, and emergent regulation and policy, indicative of state protection, provide some counter to

the precarity. Platform workers experience ambivalence, reporting the concomitant experience of both meaningfulness and uncertainty, empowerment and helplessness, and well-being and strain.

Limitations:

The study was based on secondary literature; yet, the findings resonate with international data on the experiences of platform workers and hence have global applicability.

Conclusions/contributions/implications:

Theoretically, we demonstrate platform workers' simultaneous commodification-decommodification dynamic, indicating attempts to seek empowerment in spite of disenfranchisement and reflecting implications for meanings of work and life. Platform workers have none of the labour or workplace rights of conventional employees or collectively agreed frameworks governing crowd employment. Bereft of long-standing protections, platform freelancers are forced to shoulder risk for infrastructure, skill development, personal injury and damage to tools and assets, financial malfeasance and harassment by customers, the costs of inadequate demand and loss of earnings resulting from deactivation based on customer/client feedback. Yet, heterogeneous experiences of the platform workforce indicate that they experience gains through flexibility and independent engagement, opportunities to earn and advance their careers, freelancer networks, attempts at collectivization and advocacy which yielded positive outcomes in terms of influencing regulation and policy. Our theoretical contribution suggests policy and intervention efforts towards augmenting decommodification, meaning, empowerment and well-being.

Relevance to the Congress theme:

The study, speaking to the latest interface between technology and work through platform work and portraying the inherent precarity of platform work, directly reflects the Congress theme in regard to the ongoing unfolding of the future and the changing nature of the world of work. Moreover, the study is relevant to the inequalities and critical streams of FOWOP due to its focus on precarity, disenfranchisement and empowerment.

Relevant UN SDGs:

No poverty, reduced inequalities, decent work and economic growth, good health and well-being, responsible workplaces endorsing justice

*Keywords: Commodification, Precarization, Well-Being*

## Paper 4

### **EXPLOITATION AND FANTASIES ABOUT WORK IN INFORMATION TECHNOLOGY WORKERS: A QUALITATIVE STUDY**

Johanna L. Degen, Europa-Universität Flensburg; Francesco Tommasi; Franziska Koessler

Research goals and why the work was worth doing: Studies in work and organizational psychology (WOP) rarely place an emphasis on exploitation and abuse of IT workers. Being at the core of technological developments, business-oriented and market-driven constructs represent the mainstream theme of investigations on IT workers. Conversely, from the memoir by Anne Weiner, recent social movements (e.g., Tech Workers Coalition) and European Commission claims, exploitation has been being dramatically present in implicit thinking in personal and professional ideologies. The study sought to improve our knowledge on exploitation and develop a comprehensive model based on the lived experience of information technology (IT) workers.

Theoretical background: Given goal of our study to build rather than test or elaborate theory, our methodological strategy followed a theoretical logic (Glaser and Strauss, 1967) with indications to the type of sample (i.e., IT workers) and interpretative lens (i.e., psychodynamic approach).

Design/Methodology/Approach/Intervention: The study draws on a qualitative approach based on semi-structured interviews of N = 20 IT workers. Using psychodynamic approach as a critical lens, the study on the lived experiences of vulnerability, abuse and actual exploitation of IT workers to interpret data collected.

that while studying nurses' wellbeing is worthwhile, this nonetheless risks neglecting intra-subjective and inter-subjective mechanisms (e.g., cognitive-affective, and meaning-making processes) leading to question the meaning of nurses' wellbeing.

Results obtained or expected (if not available, it must be made clear when they will be): Data analysis led to the realization of an initial model focused on the vulnerability-exploitation of IT workers, broadly defined as the condition under which IT workers accept to be exploited. Vulnerability-exploitation stands at the nexus of fantasies and actual working conditions. Although the vulnerability-exploitation condition creates the space for individualization of work, this buffer levels of exploitation perpetuating logics of postcapitalist working and organizational conditions.

Limitations: Our study is not pretentious in the sense of representability. The sample strategy recruitment was limited to the network of the authors, online forums and groups of IT workers. Moreover, participants volunteered to participate without any form of compensation. This may hinder their representative due to self-selection bias.

Conclusions – research and or practical implications/Originality/Value: The originality of the present study is threefold: a) theoretically, the originality stands in revisiting the meaning of exploitation beyond working and organizational conditions; b) methodologically, the study creates space for psychodynamic interpretative lens in WOP; c) socially, the study opens to novel approach to the work of IT by emphasising ethical and sustainable organization in the field of technology development.

Relevant UN SDGs: Decent work and economic growth; Reduced inequalities; Peace, justice, and strong institutions

*Keywords: Exploitation, Abuse, IT workers*

## Paper 5

### Framing systemic racism

Dieu Hack-Polay, University of Lincoln, UK

#### Introduction

This discussion paper examines the notion of systemic racism which has been prominent in recent years during two critical events: the 2020 US election that saw Donald Trump elected, and the covid-19 pandemic of 2020-2022. Both events brought back to the surface the claim that blacks and non-whites are discriminated against in various countries in most spheres of life. However, there have been narratives and counter-narratives about the existence of a phenomenon termed 'systemic racism'. This confusion derives from the fact that seldom academics and scholars have devoted sufficient attention to clarifying the contours of the term, leading to far-reaching interpretation and denials. This paper attempts to conceptualise the term in the light of structuration theory to aid its use in policy frameworks and in academia. In recent year key debates have emerge over the notion of systemic racism and its existence. These debates have intensified in this year during the covid-19 pandemic period. This period has seen a resurgence and significant surge in racial tensions, particularly as affecting minorities ethnic groups. Though some in the political and media sector acknowledge that there may be some organised discrimination against minorities, others in the same circles have persistently refuted the existence of systemic racism. In this article, I examine what might constitute systemic racism.

#### Examining the notion of 'systemic'

Let's first unpack the meaning of the term systemic (sometimes used interchangeably with the term systematic). The Oxford Dictionary defines the term systemic as a fact or phenomenon 'relating to a system, especially as opposed to a particular part'. Considering the phrase 'relating to a system', one can start to think about particular social systems (if we consider a given collectivity as a social system). The second part of the Oxford definition, 'as opposed to a particular part', also gives us some clues as to how systemic could be understood. This second part of the definition signifies that a systemic phenomenon or action runs through the structures of the collectivity with little exceptions. Sociologist Auguste Comte perceives system as an integrate whole which means that what happens in a part of the whole affects other parts of that whole. Comte argues that a critical condition to maintain the system in good order and for it to progress is for each element to cultivate more altruism which signifies working harmoniously with the other parts.

#### Case supporting systemic racism

Now returning to the notion of systemic racism, how does it meet the conditions of systemic proposed in the Oxford definition and in Comte's theorisation. Both in the USA and the UK as well as most countries struggling with racism, there is a sense that racism touches all spheres of society: employment, health care, policing, education and government and the justice system, etc. (Lewis, 2005). Let's consider some of these areas in more depth to elucidate the case.

In education and employment, for instance, there have been countless reports on how racial disadvantage is prevalent in British and American schools. In both countries, the underperformance of black and minorities is well documented. In the UK, the unemployment rate for these minorities has been consistently over twice of that of their majority counterparts for decades, currently

standing at 10% compared with just 4% for the white population (Hack-Polay , Ogbaru, Rahman & Mahmoud, 2021). This sustained minority disadvantage in education and employment has led Anthias and Yuval-Davis (1995) and MILES, (1974) to speak of migrants as being a reserve army of labour which is drawn upon only when there is a shortfall in the majority labour force. Hack-Polay (2019) has spoken of the Ghettoisation of minorities.

In policing and the justice system, it is well documented that black and minority people are twice more likely to be arrested (Lewis, 2005) and to receive long term sentences for petit crimes compared to their white counterparts in the UK and the USA (REF...). The disparities in the way in which the police deals with law and order in different communities has been prominently exemplified in recent years by the killing of Breonna Taylor and George Floyd, etc. in the USA ; the mishandling of the killing of black teenager Stephen Lawrence (UK), Native killing and dispossession. These high profile examples only represent the tip of the gigantic iceberg of black disadvantage in policing and the justice system. In an investigation of the Stephen Lawrence case in the UK, Sir McPherson found that the police force is 'institutionally' racist REF...). This institutionalism of racism has resonance in many other countries and social areas. The attempted insurrection of the Capitol Building in the USA on 6 th January 2021 and its light handling by the police and law enforcement forces has been highlighted as further evidence of the colour of policing and justice. The majority of the insurgents were white participants and only 50 arrests were made. This sharply contrasts with the mainly black protest again the killing of George Floyd and against police brutalities where several dozens were arrested, tear gas fired and the National Guards speedily deployed in great numbers.

The examples can form a long list. We cannot cover all areas of the social system but these examples show how the social system displays widespread and embedded disparities in opportunities for various racial groups (Kirton & Greene, 2015) in different countries. The evidence of widespread and embeddedness of racial disadvantage meets the first criteria in our established definition of 'systemic'.

#### Lasting rhetoric and Structuration Theory

A further significant point that supports the case for systemic racism is the temporal endurance in our societies. Despite formulated legal frameworks to protect different races, the social system as a whole has shown a significant inability to work effectively towards equality for all. In the UK, the Race Relations Act for formulated in 1956 but progress towards race equality has been slow. If almost a century since the legal framework came into effect, the debate about race equality is still raging, then there might significant flaws in the application of the legal framework or its enforcement. This points to a systemic aspect. In the US, since Black people earned the right to vote in the 1940s, there have been reports of tampering with their ability to exercise this critical right. For instance, recently, some polling stations have been closed without rationale in areas with Black majority, making it difficult for Blacks to vote (Levine, 2022). And suspicion of systemic discrimination is further reinforced when at the same time, there is a curb on postal voting which traditionally enabled Black voters whose work patterns did not allow them to present themselves physically at the polling stations to vote. The persistence of race inequalities could be understood through Giddens (1979) Structuration Theory.

#### Conclusion

In total, the statistical evidence available, the protracted period of disadvantage suffered by minorities and the inability of governments to vigorously enforce equal opportunity and diversity legislations, it is difficult to refute the suggestions about the existence of systemic racism. In this article we have substantiated two key parameters that make the claim about systemic or systematic

racism compelling: persistence and affecting all areas of the social system and the faintness or lack of political will to address the situation (this can be clearly mapped on Structuration theory). Western civilisation appears to have constructed a system that implicitly favours white supremacy (e.g. colonisation, neo-colonisation, cultural imperialism and oppression against its own ideology of freedom, democracy, equality and diversity).

UN SDG

Reduced inequalities, responsible workplaces endorsing justice

*Keywords: Disadvantage, racism, structuration theory*

## **Symposium S089**

### **Moving science on workplace bullying into the future (I)**

Jose M. Leon-Perez, Universidad de Sevilla; Philipp E. Sischka, University of Luxembourg

science

What will be covered and why

Workplace bullying (WB) refers to repeated and systematic negative acts towards one or more targets during a prolonged period of time (Einarsen et al., 2020). Although previous research has made significant contributions to better understanding why and how workplace bullying emerge at work (e.g., Salin & Hoel., 2020; Gupta et al., 2020), there are still some shortcomings in the field. From the theoretical and methodological side, the field needs both more longitudinal studies that allow us to know better the dynamics and patterns of workplace bullying, and multisource and multilevel designs that help to capture the group processes that interplay with organizational and personal factors in the bullying development. From the practical side, we lack information about the success of interventions to prevent and deal with workplace bullying at different levels of analysis.

In this symposium, we aim to overcome some of the above-mentioned limitations. Indeed, we have divided the symposium in two parts. The first part tries to shed some light on the bullying process and stages as well as on the role that different actors play (e.g., managers, bystanders). In the first contribution, Notelaers and colleagues explore the role of line managers (i.e., laissez-faire leadership) in how workplace bullying unfolds over time. In the second contribution, Sischka and colleagues address the interplay of workplace bullying exposure and perpetration from a person-centered approach (i.e., latent class modelling). In a similar vein, the third study conducted by Vranjes and colleagues investigate the longitudinal association between enactment of bullying and exposure to bullying. In the fourth contribution, Ng and Niven develop and validate a measure of workplace bullying bystander responses. Finally, Bastiaensen and colleagues explore bystanders' behaviors from a qualitative approach.

In the second part, we focus on a psychosocial risks approach to workplace bullying and the effectiveness of some interventions at different levels. In the first contribution, León-Pérez and colleagues confirmed cut-off scores of the Negative Acts Questionnaire in Spain and the relationship of risk categories with well-being indicators three months later. In the second contribution, Hamre and colleagues explore, in a multilevel design, the moderating role of job insecurity climate on the relationship between role stressors and workplace bullying. Then, in the third contribution, Balducci and colleagues conducted a diary study to explore the link between negative acts and post-traumatic stress disorder (PTSD) symptoms. In the fourth contribution, Rodríguez-Muñoz and colleagues present the results of an expressive-writing intervention at individual level aimed at minimizing negative consequences of being exposed to negative acts at work. Finally, Li and colleagues report a work-design intervention at the organizational level to prevent workplace bullying.

Relevance to the Congress Theme

The symposium aims to broaden our understanding of the bullying phenomenon in the context of an ever changing working world. Moreover, it discusses preventive measures and is therefore in line with the Sustainable Development Goals to foster good health and wellbeing and to create "decent work for all" (Fields, 2003).

Research/Practical Implications

The contribution of this symposium suggests that workplace bullying is a multicausal dynamic process that needs to be addressed by integrating the role of different agents and multiple levels of analysis. In addition, this symposium offers useful insights from longitudinal studies with different time lags between measures and provides findings from interventions that can help preventing and managing workplace bullying.

#### Overall conclusions

To move the science of workplace bullying into the future, it is of utmost importance to understand the bullying process and stages, which factors facilitate or inhibit the (de)escalation of this process and which interventions prove to be effective countermeasures.

*Keywords: workplace bullying, mobbing, work design*

## Paper 1

### Leadership in the process of workplace bullying: beware of the laissez-faire leader?

Guy Notelaers, University of Bergen; Sarah-Geneviève Trépanier, Université du Québec à Trois-Rivières; Jose M. Leon-Perez, Universidad de Sevilla; Philipp E Sischka, University of Luxembourg; Elfi Baillien, KU Leuven

#### Theoretical background and why the work was worth doing

Already in the early days of workplace bullying research, Leymann (1996) pointed to the devastating role of management in the workplace bullying process. This motivated scholars to investigate both active and passive destructive leadership as a risk factor. Whereas active destructive leadership may on a conceptual level be conceived as a form of bullying (i.e., downward bullying), passive destructive leadership – particularly laissez-faire leadership – fuels the development of bullying over time by not intervening and effectively managing what needs to be managed (Skogstad et al, 2007). So far, some studies scratched the surface of how laissez-faire leadership is associated with bullying: longitudinal research showed ambiguous results in terms of reporting forward as well as reversed and even reciprocal relations between both laissez-faire leadership and reports of bullying (Ågotnes et al., 2020, 2021).

However, this previous research entails some methodological limitations, which challenges the accuracy of their statistical conclusions as well as limits our current understanding of how laissez-faire leadership relates to workplace bullying over time. First, past research has focused on between-person processes rather than within-person processes, and therefore gives limited information on the role of laissez-faire leadership in how a bullying situation unfolds over time. Second, the analyses assume normally distributed measures, whereas the distributions are more likely to resemble a negative binomial distribution making classical linear modeling approaches less suitable. Third, as indicated by several more critical scholars (Hershcovis & Reich, 2013; Notelaers et al., 2018), past research treated ordinal data as continuous measures. Finally, it has predominantly regarded bullying as a continuous process, whereas both by definition as from empirical findings it is a heterogeneous process consisting of different stages (Einarsen et al., 2021; Notelaers & van der Heijden, 2020).

#### Research goals & Methodology

In reply to these limitations, the current study aims to test the acclaimed role of laissez-faire leadership in the process of bullying using a dual process latent class Markov model. This within-person perspective allows us to test the causal direction of the processes. When a normal or reversed model fits best, a 3-step latent state model can be used to estimate whether transitions (for instance, in the frequency of exposure to negative acts) are the results of changes in another process (for instance, laissez-faire leadership). In order to rigorously explore the longitudinal relationship between laissez-faire leadership and workplace bullying as well as cross-validate the findings, we will present the results from three different longitudinal data collections using various timeframes as well as measures of laissez-faire leadership: (1) a six-wave study (one-month interval between measures) from Luxembourg, (2) a two-wave panel study (four-month interval between measures) from Spain, and (3) a three-wave panel study (six-month interval between measures) from Belgium.

#### Expected results

While some of the data collections are currently in their final stage, preliminary results showed a reciprocal process between both workplace bullying and laissez-faire leadership. These bidirectional results indicate that both processes reinforce each other over time: employees that were targets or occasionally bullied, compared to employees who are not bullied, report over time more laissez-faire leadership and employees reporting earlier laissez-faire leadership, as compared employees reporting no laissez-faire leadership, are later more likely to be occasionally bullied or targets of bullying. During the conference, once all datasets are analyzed using a dual process latent class Markov model, a within-person perspective will be discussed.

#### Limitations

Although the present study extensively explores the longitudinal relationship between laissez-faire leadership and workplace bullying using three longitudinal datasets, the latter contain different occupational groups, different measures, and different time intervals, which can result in some heterogeneity across samples.

#### Conclusions

While the results and conclusions pertaining to all three samples will be discussed and compared during the oral presentation, the preliminary findings illustrate that the relation between laissez-faire leadership and workplace bullying is complex: while management not taking its responsibility can explain the development of bullying, the expectations of fair and just treatment of those exposed to negative acts at work— unfulfilled by their leader's inaction - may further fuel the process.

#### Relevance to the Congress Theme

Our findings will be discussed under the light of the UN Sustainable Development Goals (SDGs) as they may have relevant implications for ensuring decent work and promoting well-being at work.

#### Relevant UN SDGs

#8 Decent work and economic growth

#3 Good health and wellbeing

*Keywords: workplace bullying, laissez-faire leadership, latent class Markov model*

## Paper 2

### Patterns of workplace bullying involvement and its link to personality, power and social status

Phillip E. Sischka, Georges Steffgen, Matthea Wehage & Fabrice Klinger | University of Luxembourg;  
Guy Notelaers, University of Bergen

#### Research goals and why the work was worth doing

Just like many school aggression researchers (see the review of studies in Olivier et al., 2021), many scholars investigating workplace bullying assume the existence of types of involved employees. Commonly, scholars distinguish four types of employees: Uninvolved employees, victims, perpetrator, and provocative victims (also called 'bully-victims'; e.g., Zapf & Einarsen, 2020). So far, empirical evidence supporting such a typology is lacking so far. Studies on workplace bullying mostly focused solely on the victim perspective (Einarsen et al., 2020; see also the review of studies in Gupta et al., 2020) and only a handful of studies investigate the perpetrator perspective (see the enumerated studies in Nielsen & Einarsen, 2018). Only a few studies include both perspectives (e.g., Fernández-del-Río et al., 2021; Sischka et al., 2021). However, these studies applied a variable-centered approach and treated workplace bullying exposure and perpetration as separate variables. Thus, they leave us somewhat in the dark with respect to the existence of the aforementioned typology. The current study employs a person-centered approach (i.e., latent class modelling) to identify groups of employees that show different patterns of workplace bullying involvement. Moreover, the current study aims to identify predictors of group membership.

#### Theoretical background

We investigate the individual disposition hypothesis (Nielsen & Einarsen, 2018), assuming that individual characteristics such as personality traits may be related to being involved in bullying and could therefore be typifying features of workplace bullying groups. Moreover, according to some researchers in workplace bullying, individual characteristics such as certain personality traits (big five dimensions, trait aggression, dominance) are particularly appropriate to identify and distinguish workplace bullying subgroups (Matthiesen & Einarsen, 2007; see also Nielsen et al., 2017). On the other hand, power and social status represent enabling structures (Salin, 2003) of workplace bullying, and power imbalance is often seen as a defining feature of workplace bullying (Einarsen et al., 2020). Thus, we investigate whether different workplace bullying groups differ with regard to perceived power and social status.

#### Design/Methodology

To test our hypotheses, respondents were recruited via Amazon's Mechanical Turk (MTurk; Buhrmester et al., 2011; Crump et al., 2013) using CloudResearch (Litman & Robinson, 2020) to participate in an online survey. The final sample contained 1,492 respondents (53.8% females,  $n = 802$ ), with ages ranging from 19 to 77 ( $M = 40.2$ ,  $SD = 10.8$ ). Most respondents worked full time (91.2%,  $n = 1,360$ ). The survey contained the Short-Negative Acts Questionnaire (S-NAQ; Notelaers et al., 2019) that was applied from the victim as well as from the perpetrator perspective. Furthermore, we assessed the big five with the Mini-IPIP (Donnellan et al., 2006), trait aggression with the brief aggression questionnaire (Webster et al., 2014), and dominance with the domineering subscale of the Inventory of Interpersonal Problems (Soldz et al., 1995). Moreover, power and social status were assessed with a newly developed bipartite measure of social hierarchy (Yu et al., 2019).

## Results

A latent class modelling approach was employed. Statistical fit indices, substantive interpretability and utility, as well as classification diagnostics were jointly considered to determine the number of workplace bullying classes. Latent class structure analysis revealed that the classes were meaningfully linked with the big five dimensions, trait aggression, dominance, power and social status.

LimitationsThe cross-sectional and self-reported nature of the study. Conclusions – research and or practical implications

Scholars and policy makers need to be aware of different patterns of being involved in workplace bullying in order to create effective interventions. Personality factors as well as power and social status are important correlates of workplace bullying involvement.

Relevance to the Congress Theme

#15 Stress and dysfunction

Relevant UN SDGs

#8 Decent work and economic growth

#3 Good health and wellbeing

*Keywords: social status, latent class analysis, personality*

### Paper 3

#### **What goes around comes around: How perpetrators of workplace bullying become targets themselves.**

Ivana Vranjes, University of Tilburg; Elfi Baillien, KU Leuven; Hans De Witte, KU Leuven; Yannick Griep, Behavioural Science Institute Radboud University; Tinne Vander Elst, University of Tilburg

#### Research goals and why the work was worth doing

While authors univocally acknowledge the problematic nature of workplace bullying, most of what we currently know about workplace bullying stems from the targets' perspective. The few studies that did look at perpetrators found a significant association between being a perpetrator and a target of bullying (Baillien et al., 2011a; Balducci et al., 2012), and some scholars reasoned that perpetrators may over time become targets themselves (Brotheridge et al., 2012). However, this latter perspective seems at odds with the commonly accepted view on perpetrators of bullying as being more powerful than targets (Baillien et al., 2017), and with previous empirical evidence supporting this perspective (Glambek et al., 2016). This study aims to test this relationship and explain why and how perpetrators become targets themselves.

#### Theoretical background

In this study, we want to unravel the process in which perpetrators lose their more powerful position and ultimately become a target of bullying themselves. In doing so, we reason from the Conservation of Resources Theory ('COR'; Hobfoll, 1989) that perpetrators of bullying become targets through a loss of resources manifested in frictions with colleagues and a decrease in perceived control. In other words, the transition from a perpetrator to a target role is a gradual process that happens when the perpetrator loses his support from others, starts feeling powerless and consequently becomes vulnerable to interpersonal attacks.

#### Design/Methodology/Approach/Intervention

Our sample consists of a heterogeneous group of Belgian employees with a mean age of 38.2 years (SD = 10.41) and 50.2% male participants. We investigate our hypotheses in a longitudinal sequential mediated structural equation model over four time points, testing the mediating effect of interpersonal frictions and loss of control on the effect of enactment of bullying to exposure to bullying.

#### Results

Our results confirmed that employees who enacted bullying were more likely to become exposed to bullying 15 months later. This effect was not always confirmed with shorter time lags, suggesting longer timeframes for this process. We also found that experience of relationship may mediate this relationship, suggesting that perpetrator experience backlash following their engagement in bullying. However, we did not find support for our proposed mediating effect of perceived control loss. Our findings suggest that perpetrators of bullying may not be as untouchable as previously thought and invite further exploration into the processes that may account for this relationship.

#### Limitations

We experienced some drop-out of participants across the different measurement moments related to the bullying experience with bullied individuals being more likely to respond to the surveys. Next,

common method bias could be a concern as we used self-reported measurements. We tried to decrease the risk of common method bias by highlighting the voluntary character of the study and the anonymous treatment of the data, by using items from internationally validated scales, and by using a lagged design in which predictors and outcome variables were separated in time.

#### Research/Practical Implications

The implications of this study are threefold. First, our study is one of the few to focus on perpetrators of workplace bullying, shedding light on an under-represented perspective in bullying interactions. Second, while previous studies have shown an association between perpetrator and target roles in bullying, this study helps us to further unpack this dynamic by investigating the mechanisms that underlie the evolution from the perpetrator to the target role over time. It also highlights the timeframe within which the relationship between enactment and exposure may unfold. Finally, this paper also has practical implications, as it highlights risks associated with enactment of bullying behavior and the potential spiraling effect of this behavior. Insight in these dynamics of workplace bullying may help policy makers and practitioners to identify factors that may interrupt these dynamics, and thus provide a strong imperative for bullying prevention strategies.

#### Originality/Value

While previous studies have shed light on a variety of negative outcomes for the targets of this behavior, our understanding of perpetrator outcomes has remained limited. Such imbalanced view on bullying is problematic as it neglects a key player in workplace bullying involvement and provides us with merely a partial understanding of bullying behavior. In this study, we therefore aimed to investigate consequences of workplace bullying for perpetrators themselves.

#### Relevance to the Congress Theme

#15 Stress and dysfunction

Relevant UN SDGs

#8 Decent work and economic growth

#3 Good health and wellbeing

*Keywords: workplace bullying, perpetrators, victims*

## Paper 4

### Development and validation of a Bystander Typology Scale (BTS): An update

Kara Ng, University of Manchester; Karen Niven, University of Sheffield

#### Research goals and why the work was worth doing

Our research goals are to develop and validate a measure of workplace bullying bystander responses, known as the Bystander Typology Scale (BTS). Research has consistently shown that bullying is not just a problem between the perpetrator and target; rather, it is often a group-level issue and bullying instances are often observed by third-parties, known as bystanders. Although bystanders have traditionally been portrayed as mainly passive agents, recent work suggests that they can enact a variety of responses that can ameliorate or worsen the bullying. To date, there has been no validated scale to measure bystander behaviour in workplace bullying, which hinders researchers' ability to understand and examine what encourages different bystander responses and their effects.

#### Theoretical background

We draw on an established framework of workplace bullying bystanders, first proposed by Paull et al. (2012) and further developed by later scholars. This framework conceptualises bystander responses along two dimensions: Constructive to Destructive (the extent to which responses aim to improve or worsen bullying) and Active to Passive (the extent to which responses directly target the bullying situation). This creates four general bystander response types: Active constructive, active destructive, passive constructive, and passive destructive. We propose that these response types have different antecedents and outcomes, which we examine in testing our scale's nomological validity.

#### Design and methodology

We clarified our constructs by identifying potential attributes that represent our four bystander types through literature reviews. After developing preliminary definitions, we asked academic and practitioner subject matter experts to rate and comment on the definitions. Feedback was used to finalise our definitions and conceptualisations of the four bystander responses, and to create 36 initial items.

In Study 1, we ran an initial validation of the BTS by conducting an EFA ( $n = 360$ ) and CFA ( $n = 288$ ), which produced a final set of 22 items. We conducted multidimensional scaling to confirm that items produced four clusters that match our proposed taxonomy.

In Study 2, we examined the BTS's nomological validity using three samples to see how different predictors relate to the four responses. Study 2a ( $n = 242$ ) examined whether morally relevant individual traits (e.g., prosocial values, trait moral disengagement) predicted whether responses would be constructive or destructive. Study 2b ( $n = 445$ ) examined behavioural predictors of constructive and destructive responses, such as OCB and personal assertiveness. Study 2c ( $n = 488$ ) examined how facets of organisational culture, such as conflict for climate management and team psychological safety, predicted passive or active responses.

Study 3 (data to be collected by March 2023) aims to measure outcomes of the BTS by examining target well-being and attitudes in response to bystander behaviours.

## Results

The BTS's final 22 items showed good psychometric fit, internal reliability, and discriminant validity. Multidimensional scaling showed that items were grouped in four clear clusters. Study 2 confirmed that individual differences, behaviours, and aspects of organisational culture successfully predict different bystander response types. Study 3 results are forthcoming, but we predict that targets in groups with greater active constructive responses will have better outcomes than targets in groups with more destructive or passive bystanders.

## Limitations

The BTS has been tested on working adults but using Prolific sampling. Future research should seek to use the scale in a field study, where we would be able to examine how bystander responses are influenced by, and influence, team and organisational characteristics.

## Conclusions

This presentation aims to provide an update on our validating the BTS. We believe that the BTS will provide a standard framework to conceptualise the variety of workplace bullying responses, which will help unify future research and deepen our understanding of bullying as a social, group-level phenomenon. The BTS can also be used to measure the prevalence of different bystander responses in real organisations and can be used to evaluate bystander intervention training programmes.

## Relevance to the Congress Theme

There has been evermore importance placed on workplace well-being and the effects that workplace relationships can have on our well-being. Bystander research seeks to emphasise that workplace bullying is a group issue, in which others have the power to stop or improve the situation. We hope our scale, its framework, and our findings contribute to existing efforts to reduce workplace bullying and improve future workplace relationships.

## Relevant UN SDGs

#8 Decent work and economic growth

#3 Good health and wellbeing

*Keywords: workplace bullying, bystanders, scale validation*

## Paper 5

### **Mapping responses to interpersonal workplace mistreatment from the co-worker's perspective.**

Caroline V. M. Bastiaensen, Lieven Brebels & Elfi Baillien | KU-Leuven

#### Research goals and why the work was worth doing

Research on interpersonal workplace mistreatment (IWM) – of which workplace bullying is a well-known phenomenon – increasingly incorporates co-workers as a relevant actor in (de-)escalating the social process of IWM. Scholars have typically adopted a victim-centric perspective by looking at how co-workers affect the situation for the victim. Research on this topic has thus taken a normative stance, thereby increasing the challenge of detecting non-normative responses to IWM in the study context because of social desirability and humans' motivation to maintain a positive self-concept. Nonetheless, these reactions are observed in real-life settings. Indeed, several factors – such as perceived victim deservingness (Li et al., 2019), motivated ignorance (Wieland, 2016), and moral disengagement (Bandura, 1999; Ng et al., 2019) – can explain co-workers' non-normative responses. As such, this leaves a remarkable blind spot in our current knowledge as, up until now, we have been showing limited interest in the co-worker's perspective. Co-worker's responses are not stand-alone behaviours that affect only the victim. Rather, co-workers operate within the social context of their work environment and experience broader consequences of their behavioural reactions. We aim to expand our knowledge by addressing this gap and thus orienting this study towards a co-worker-centric perspective. More specifically, in a qualitative study, we will dive deeper into how co-workers perceive the situation and their own and other co-workers' responses to IWM. Through disentangling what happened in real-life incidents of mistreatment, we also aim to link the range of behavioral responses more clearly to the social context and the co-workers' stakes in the incidents. This study thus aims to expand the focus and thereby – besides often-studied victim-supportive behaviors – also shed light on non-normative responses.

#### Design and methodology

Semi-structured interviews will be conducted with employees recruited to talk about how they experience social relations at work. We will not recruit on “witnessing acts of IWM” to avoid guiding interviewees in a specific direction with the focus on an alleged victim and thereby triggering an evaluative or normative mindset. Particular attention during the study will thus be distinguishing observers from victims. Moreover, IWM is a sensitive topic which may provoke emotional responses that have to be coped with by the interviewer. The interviewees will be asked to describe their own behavioural responses, and the responses they observed among others involved within the organisation (employer, other co-workers, etc.). We aim to overcome social desirability bias by expressing that we are explicitly interested in their perceptions as a co-worker and not taking a victim-centred, evaluative, or normative approach. Sharing observed behaviour of other co-workers should make it less challenging to identify the full spectrum of co-worker behaviours, including those that lead to conflict escalation. Interviewees will also be asked to reflect upon the effects the listed behaviours had on themselves and their work environment. This will help us to illustrate when and why co-workers chose a specific behavioural response.

#### Expected results

The results of the study will be available at the conference. We expect to a) present an inventory of co-worker reactions from different perspectives, going beyond normative responses. To b) shed light

on which behaviours are most commonly mentioned when listing actions from a certain perspective, informing us about how employees reflect on their own behaviour and that of others. And to c) disentangle how the different behaviours relate to the experienced consequences of the behaviours. With this information, we expect to introduce a framework from an inquisitive perspective regarding these co-worker behaviours instead of an evaluative categorisation that is currently used in research.

#### Conclusions

The inventory can be used in further research regarding when and why co-workers show these reactions. This, in turn, will support the development and implementation of successful co-worker intervention programs. It is essential to know why co-workers, within their context, choose to enact behaviours that are not necessarily victim-supportive, to create programs in which they are stimulated to take up these types of roles.

#### Relevance to the Congress Theme & UN SDGs

The conference theme urges us to think about how work is changing. But interventions or actions regarding changing jobs and job environments must consider that for these to succeed, a sound foundation is necessary. This study can help us on how to better understand and establish such a sound foundation concerning social relations at work. This study is relevant for the SDG's related to IWM, with the strongest connection to "decent work and economic growth" and "good health and wellbeing".

*Keywords: workplace bullying, bystanders, qualitative study*

## Symposium S090

### **Multi-Level Perspectives on Teamwork. Motivational, Affective, and Cognitive Team Emergent States, their Antecedents, and Consequences**

Rebecca Müller, Conny Herbert Antoni | University Trier

science

What will be covered and why. With the increasing amount of information that has to be processed in today's working environment, the implementation of teams become more prominent in various work contexts. Teamwork provides positive outcomes, such as improved performance, reduced individual information-processing demands, and increased social support. However, teamwork also poses certain challenges, such as team members' thwarting behavior, social loafing, low team identification, or different understandings of how the work is done (i.e., different mental models). These challenges may influence outcome variables, such as the psychological contract fulfillment, emergence of motivation and team identification, or satisfaction with teamwork. The relationships between input and outcome variables in teamwork are described in so called input mediator output input models (IMOI model). The IMOI model implies variables on the individual, team, and organizational level in a nested structure that influence each other. Although individual- and team-level variables may influence each other, these relationships are rarely considered in previous research on teamwork. Previous research on teamwork often aggregates individual level variables on team level and does not employ multilevel analyses, which would provide insights in mutual influences among different levels of variables. This symposium aims to contribute to existing research on teamwork by investigating critical teamwork variables, such as the emergence of team motivation and team identification, psychological contract fulfillment, and shared/different mental models by using multi-level perspectives.

Study 1 analyzes the emergence of team motivation and team identification. Results are based on a laboratory experiment with 150 members in 50 teams. Team members' supportive or thwarting behavior on individual level influences need satisfaction/frustration with the team and this, in turn, influences the development of team identification. Further, it shows that need satisfaction predicts team-level changes in team identification over time.

Study 2 investigates the effect of social loafing on psychological contract fulfillment or breach moderated by team identification. Results are based on a field study with 344 members in 65 teams. It shows that a higher level of social loafing leads to lower collective perceptions of psychological contract fulfillment on individual and team level. This relationship is moderated by team identification, but only on the individual level. If team identification is high, the relationship between social loafing and psychological contract fulfillment becomes slightly positive.

Study 3 investigates the effect of shared vs. different mental models of information and communication technologies as a team level variable on the individual level variables of technostrain and satisfaction with teamwork. The hypotheses are analyzed in a laboratory experiment with 207 members in 69 teams. Results based on multilevel mediation analyses show that if team members have a similar understanding of their ICT-use (i.e., shared mental models) compared to different mental models of ICT-use, the individual perception of technostrain is reduced and satisfaction with teamwork is improved.

The discussant will reflect the importance of different team emergent states (i.e., collective perception of psychological contract fulfillment, team motivation, team identification, shared mental

models), their antecedents, and consequences on both individual and team level. Considering this, the aim is to highlight the importance of using multi-level perspectives when analyzing teamwork.

Relevance to the Congress Theme. In line with the congress theme “The Future is Now: the changing world of work” our symposium focuses on the challenging demands today’s organizations face. With the technical progress and the increased digitalization, organizations and their employees have to process an increasing amount of information. Teams can serve as transactive memory systems that reduce individual information-processing demands. However, teamwork must also be resource-oriented and health-friendly to be sustainable and effective in the long-term. Our symposium provides insights of which aspects are important to consider to benefit from successful teamwork.

Research/Practical Implications. It is intended to illustrate that research on teamwork should incorporate more multi-level perspectives, in which both individual and team level variables can influence team processes and outcomes. From a practical perspective, we highlight how organizations and team leaders can take this multi-level perspective of variables into account for improving both team processes and outcomes as well as team member well-being.

Overall conclusions. Team processes and emergent states that influences each other among different levels are essential for a successful teamwork and individual well-being.

discussant: Jan Häusser, Justus-Liebig University Giess

*Keywords: Team Motivation and Identification; Social Loafing; Shared Mental Models*

## Paper 1

### **A STUDY ON THE DYNAMICS OF THE INTERPERSONAL FEEDBACK LOOP AND ITS IMPACT ON TEAM MOTIVATION**

Sandra Merino, Universidad Carlos III de Madrid; Thomas O'Neill, University of Calgary and Haydn Williams Fellow at Curtin University; Marylène Gagné, Curtin University; Ramón Rico, Universidad Carlos III de Madrid

Research goals and why the work was worth doing : Interest in explaining the processes through which work teams themselves are motivated, and why, has increased in the last years. Despite a rich body of research has empirically addressed the foundations of individual motivation, scarce attention has been paid to motivation at the team-level. To address this gap, this study explores the influence of team members' supportive behaviours on their individual needs satisfaction and team identification. This is what we have defined as the interpersonal feedback loop. We thus hypothesise that the dynamics of such feedback loop would impact the emergence of team identity, which would ultimately affect team motivation.

Theoretical background : The conceptualisation of motivation from self-determination theory (SDT; Gagné & Deci, 2005) offers a framework to disentangle team motivation from other team processes and to investigate how team motivation is impacted by the interpersonal feedback loop. Our model focuses particularly on the impact of support coming from team members on their needs satisfaction. Additionally, drawing on SDT, the effect of supportive behaviours on team members' need satisfaction may lead them to interpret and feel they are important to each other, triggering the construction of a team identity. Finally, building on dynamic processes to explain how team motivation might develop over time, we hypothesised that team identification might impact team motivation, as highly identified team members may be more motivated in the team.

Design : We conducted a laboratory experiment using a 2 x 3 mixed design, with two experimental conditions (supportive vs thwarting behaviours) and three measurement times. Each three-person team (N = 50 teams; 150 undergraduate students) worked on a computer-based real-time command-and-control fire fighting simulation (NFC; Omodei et al., 2003) for approximately 2 hours.

Results : Manipulation checks revealed that our manipulations worked out, as t -tests for the difference in the means of our variables of interest between both experimental conditions yielded significant results. In testing our main hypotheses, we were able to check through cross-lagged regression models that: (1) supportive/thwarting behaviours within teams fosters need satisfaction/frustration within the team; and (2) need satisfaction/frustration within a team influences the development of team identification. Regarding the emergence of team identity, consensus emergence modelling (CEM, Lang et al., 2018) allowed us to test that need satisfaction is a relevant predictor of team-level changes in team identification over time. Ultimately, after aggregating data to the team level, we ran linear regression models which supported the hypothesised influence of team identity on team motivation.

Limitations : Despite our results support our hypotheses, they are subject to limitations. Probably the most obvious are the fact that our research design only allowed us to observe newly formed teams over a limited period of time, and the contrived lab setting in which we could gather our data. Although our results concur with dynamic approaches of team motivation emergence suggesting that the interpersonal feedback loop may affect team motivation trajectories differently over time, we

call for future research to investigate teams working together for longer periods of time and to complement these findings with field samples. That will help to draw more reliable long-term and generalizable implications from our findings.

Conclusions : Results of the present study contribute to complement and extend extant theoretical models of team dynamics, addressing previous calls to better understand team motivation. Furthermore, this study has practical implications in promoting supportive environments for teamwork through training interventions.

Relevance to the Congress Theme : Our results will be relevant for current organisations increasingly relying on teams to address the demands of the changing and complex current socio economic environment.

Relevant UN SDGs : Results of this study are crucial for creating healthier productive workplaces, contributing to improving employees' health and well-being .

*Keywords: Need satisfaction, supportive behaviour, team identity and motivation*

## Paper 2

### **“Well, that’s ok”: How team identification moderates the association between social loafing and psychological contract fulfillment in teams**

Jeroen de Jong, Radboud University; Irina Nikolova, Maastricht University; Nina Mareen Junker, Oslo University

#### Research goals

Empirical evidence and theory both support the idea that successful collaboration in teams is highly dependent on the relationships between the members of the team. More specifically, research on social networks in teams shows that more tight-knit networks in teams, where information flows and social support is provided between team members, are associated with the highest team performance outcomes. Psychological Contract Theory (PCT) argues that parties within social exchange relationships (such as between one team member and the rest of the team) can form mental models about reciprocal obligations within these exchange relationships. Team members can expect from their colleagues that they meet deadlines, that they provide feedback, but also that they provide social support when necessary. Moreover, PCT argues that when these perceived obligations are breached, this can have several negative implications for employee outcomes. In this research, we aim to better understand how these collective beliefs about reciprocal obligations in teams emerge.

#### Theoretical Background

To benefit from working together, all team members are expected to contribute actively to team goals. However, there is strong evidence that variation in efforts exists in teams and that some team members may exert less effort when working in groups compared to when they work individually. This phenomenon is defined as social loafing, which has a rich history in group research. We propose that social loafing in teams is negatively associated with perceptions of the fulfillment of obligations by the team towards focal team members. When the team is characterized by higher levels of social loafing, fewer efforts are made to fulfill obligations towards each other, relating to higher (collective) perceptions of breach (H1). Yet, team identification (ID) (i.e., “the personal, cognitive, emotional and behavioral bond between individual and team” Somech et al., 2009, p. 363). might moderate this negative association. Specifically, high team ID might mitigate the negative effects of social loafing as team members are more likely to make additional efforts when their colleagues are contributing less to the team, and are more likely to focus on the social aspects of teamwork, such as providing emotional support. Therefore, we expect that the negative association between social loafing and fulfillment of obligations is weaker for teams characterized by high team ID compared to teams characterized by low team ID (H2).

#### Methodology

We test our hypotheses using a dataset of 65 teams and 344 team members. The teams were all operational teams working in different sectors in the Netherlands, ranging from education to the banking sector. We used validated scales to measure our main variables. A multilevel analysis was used to test our hypotheses, in which we distinguish between- and within-team effects.

#### Results obtained

The results show that social loafing has a negative association with perceived contract fulfillment on both the team (between) and individual (within) level. This confirms H1. Second, our results show that team ID moderates the association between social loafing and psychological contract fulfillment on the within-level. Specifically, the relationship between social loafing and psychological contract fulfillment is negative for low team ID, but becomes slightly positive when team ID is high, which partly confirms H2.

#### Limitations

The present study used a cross-sectional data set, which limits the possibility to comment on the temporality of the obtained associations.

#### Conclusions – research and or practical implications

This research contributes to the literature by expanding the scope of PCT to team psychological contracts and shows initial evidence of antecedents of team psychological contract fulfillment. The moderating role of team ID pinpoints the importance of team identification, while at the same time raising the question of what the underlying mechanisms are. For instance, it could be that individual team members increase their efforts to compensate for their colleagues' social loafing. However, it could also be that members with a high team ID have more insights into each other's' lives, which helps them rationalize social loafing in a more positive way by attributing it to more understandable reasons (e.g., underlying health or family issues) compared with low team ID.

#### Relevance to the Congress Theme

Teamwork has been steadily increasing in the last century and will further increase in the near future, which makes it crucial to understand team processes in more detail.

#### Relevant UN SDGs

This research particularly contributes to the UN SDG of decent work and economic growth .

*Keywords: Team Identification, Social Loafing, Psychological Contract Fulfillment*

### Paper 3

## **TECHNOSTRAIN AND TEAM SATISFACTION IN TEAMS: THE EFFECT OF SHARED MENTAL MODELS OF INFORMATION AND COMMUNICATION TECHNOLOGY**

Rebecca Müller, Conny Herbert Antoni, Benedikt Graf & David Schischke | University Trier

Research goals and why the work was worth doing: Challenges related to the use of information and communication technology (ICT), such as technostrain, have become more and more prominent in the changing world of work. Previous research has primarily focused on individual level causes, such as conscientiousness, ICT-competence, and self-management. Only few studies, have yet assumed dysfunctional team information exchange as team level causes of information overload or technostrain. Thus, also factors on team level can be considered as causes of individual technostrain and satisfaction with teamwork.

Theoretical background: Research has shown that shared mental models (SMM) are an important and prominent factor on team level for successful teamwork. SMM are common knowledge structures about relevant aspects of the working environment among team members. If team members have SMM about, for example, ICT-use (ICT SMM), they have similar expectations regarding their ICT-use within the team (e.g., which ICT to use for which task or purpose). Previous research has shown that, if team members have SMM, explicit coordination is reduced and motivational and affective team emergent states as well as team performance is improved. Transferring the previous insights of SMM on ICT SMM, we assume that if team members have ICT SMM, they perceive less technostrain and more team satisfaction, mediated by reduced explicit coordination of ICT-use and perceived workload.

Design: In a laboratory experiment, 69 three-person teams ( N = 207 students), worked on a virtual decision-making task for forty minutes. To communicate with each other, team members could choose four different ICTs. We manipulated ICT SMM as a between-subject variable on team level, as thirty-four teams were allowed to plan their ICT-use beforehand, and thirty-five teams were not allowed to plan their ICT-use and received different ICT-preferences. Technostrain, satisfaction, and perceived workload were assessed by Likert-Scales after the teamwork. Explicit coordination of ICT-use was measured objectively by the communication content of the teams (i.e., questions about ICTs, discussion about ICT-preferences).

Results: A manipulation check showed that the experimental manipulation of ICT SMM worked. To analyse our hypotheses, we used multilevel mediation models in MPlus with ICT SMM as an exogenous variable (level 2), explicit coordination of ICT-use as an endogenous mediating variable (level 2), perceived workload as an endogenous mediating variable (level 1), and technostrain and satisfaction as dependent endogenous variables (level 1). Our results revealed that ICT SMM had a direct effect on satisfaction, explicit coordination of ICT-use, and perceived workload. Perceived workload and explicit coordination of ICT-use mediated the effect of ICT SMM on satisfaction and perceived workload indirectly on technostrain.

Limitations: Limitations of our study are the experimental design and the use of a student sample. Thus, the external validity of our study is limited and should be improved by follow-up studies using employee working teams in field studies.

Conclusions: This study contributes to existing research by showing the causal effects of ICT SMM on technostrain and satisfaction as well as by clarifying perceived workload and explicit coordination as underlying mechanisms.

Relevance to the Congress Theme: In the sense of the congress theme “The Future is Now: the changing world of work” our study focuses on the increasing implementation and use of ICTs. In our today’s world, be it at work, at university, or during leisure time, we heavily rely on ICTs to communicate with our peers. Among many benefits of these ICTs, they also pose new challenges and threats to us, such as technostrain. In our study, we provide a starting point for how teams can avoid these challenges.

Relevant UN SDGs: Good health and wellbeing: The health-oriented treatment of employees promotes the social sustainability of organizations. Satisfied employees lead to less absenteeism due to illness and less fluctuation. Thus, our study makes a significant contribution to social sustainability and gives organizations a starting point (i.e., encouraging ICT SMM in teams) to promote it.

*Keywords: Shared Mental Models of Information and Communication Technology (ICT SMM), Technostrain, Team Satisfaction*

## **Symposium S091**

### **Moving science on workplace bullying into the future (II)**

Philipp E. Sischka, University of Luxembourg; Jose M. Leon-Perez, Universidad de Sevilla

science

What will be covered and why

Workplace bullying (WB) refers to repeated and systematic negative acts towards one or more targets during a prolonged period of time (Einarsen et al., 2020). Although previous research has made significant contributions to better understanding why and how workplace bullying emerge at work (e.g., Salin & Hoel., 2020; Gupta et al., 2020), there are still some shortcomings in the field. From the theoretical and methodological side, the field needs both more longitudinal studies that allow us to know better the dynamics and patterns of workplace bullying, and multisource and multilevel designs that help to capture the group processes that interplay with organizational and personal factors in the bullying development. From the practical side, we lack information about the success of interventions to prevent and deal with workplace bullying at different levels of analysis.

In this symposium, we aim to overcome some of the above-mentioned limitations. Indeed, we have divided the symposium in two parts. The first part tries to shed some light on the bullying process and stages as well as on the role that different actors play (e.g., managers, bystanders). In the first contribution, Notelaers and colleagues explore the role of line managers (i.e., laissez-faire leadership) in how workplace bullying unfolds over time. In the second contribution, Sischka and colleagues address the interplay of workplace bullying exposure and perpetration from a person-centered approach (i.e., latent class modelling). In a similar vein, the third study conducted by Vranjes and colleagues investigate the longitudinal association between enactment of bullying and exposure to bullying. In the fourth contribution, Ng and Niven develop and validate a measure of workplace bullying bystander responses. Finally, Bastiaensen and colleagues explore bystanders' behaviors from a qualitative approach.

In the second part, we focus on a psychosocial risks approach to workplace bullying and the effectiveness of some interventions at different levels. In the first contribution, León-Pérez and colleagues confirmed cut-off scores of the Negative Acts Questionnaire in Spain and the relationship of risk categories with well-being indicators three months later. In the second contribution, Hamre and colleagues explore, in a multilevel design, the moderating role of job insecurity climate on the relationship between role stressors and workplace bullying. Then, in the third contribution, Balducci and colleagues conducted a diary study to explore the link between negative acts and post-traumatic stress disorder (PTSD) symptoms. In the fourth contribution, Rodríguez-Muñoz and colleagues present the results of an expressive-writing intervention at individual level aimed at minimizing negative consequences of being exposed to negative acts at work. Finally, Li and colleagues report a work-design intervention at the organizational level to prevent workplace bullying.

Relevance to the Congress Theme

The symposium aims to broaden our understanding of the bullying phenomenon in the context of an ever changing working world. Moreover, it discusses preventive measures and is therefore in line with the Sustainable Development Goals to foster good health and wellbeing and to create "decent work for all" (Fields, 2003).

Research/Practical Implications

The contribution of this symposium suggests that workplace bullying is a multicausal dynamic process that needs to be addressed by integrating the role of different agents and multiple levels of analysis. In addition, this symposium offers useful insights from longitudinal studies with different time lags between measures and provides findings from interventions that can help preventing and managing workplace bullying.

#### Overall conclusions

To move the science of workplace bullying into the future, it is of utmost importance to understand the bullying process and stages, which factors facilitate or inhibit the (de)escalation of this process and which interventions prove to be effective countermeasures.

*Keywords: workplace bullying, mobbing, work design*

## Paper 1

### **Risk groups of bullying exposure based on NAQ cut-off scores and its associations with employee wellbeing over time**

Jose M. Leon-Perez, Francisco J. Cantero-Sánchez & Alfonso Cárdenas-Miyar | Universidad de Sevilla

#### Research goals and why the work was worth doing

Workplace bullying refers to the repeated and sustained occurrence of negative acts directed towards one or more targets who, during the process, may be unable to defend themselves, usually due to being in a position of inferiority with respect to the perpetrator/s and/or lacking support from their remaining coworkers (Mikkelsen et al., 2020)

In recent years there has been an intense debate about the measurement of bullying at work and establishing whether a person is a victim of bullying (Nielsen et al., 2020; Notelaers et al., 2021). In this study we aim to provide further evidence of the cut-off points of the short version of the Negative Acts Questionnaire (S-NAQ) to establish three risk groups for exposure to bullying: low, moderate and high. As criterion validity of these risk groups we will use measures of well-being obtained three months later.

#### Theoretical background

Prevalence levels of bullying have been discussed in recent years, with data ranging from 0.6% to 79.1% in Europe, depending on the estimation method (Leon-Perez et al., 2021). Therefore, there is a need for more reliable methods to establish whether a person has been subjected to bullying in the work environment. Moreover, the consequences of bullying are devastating, bullying is considered to be one of the most relevant social stressors in the workplace, as people who suffer from bullying often manifest symptomatology similar to post-traumatic stress disorders, depression and even increased risk of insomnia (Hogh et al., 2021; Nielsen & Einarsen, 2018).

Previous research has focused on establishing cut-off scores that can help Occupational Health and Safety practitioners to differentiate risk groups of workplace bullying. However, previous research has relied mainly on cross-sectional data and lack of replications. We aim to corroborate the cut-off scores in Spain and explore potential negative consequences on employee well-being some months later.

#### Design/Methodology/Approach/Intervention

We conducted a two-wave panel study with a four-month time lag (Nt1 = 5000; Nt2 = 2500). At time 1, we measured workplace bullying and categorized participants' responses, considering the cut-off scores validated by León-Pérez and colleagues (2019), into high, moderate, and low risk of being bullied at work. Then, at time 2, we measured psychological distress (i.e., emotional exhaustion, and anxiety) and work engagement. We conducted an ANOVA with the bullying risk categories as between-subjects factor and psychological distress and work engagement as dependent variables.

#### Results

Our results confirm that the cut-off scores showed significant differences in anxiety levels ( $F(2,2002) = 157.94; p < .001$ ), exhaustion ( $F(2,2002) = 114.22; p < .001$ ) and engagement ( $F(2,2002) = 54.74; p < .001$ ). In particular, participants categorized into the high risk of workplace bullying ( $n = 281$ ) scored higher in anxiety symptoms ( $M = 1.37; SD = 0.81$ ) and exhaustion ( $M = 3.29; SD = 1.02$ )

than those in the categories moderate (M Diff. = .25; CI95% (.09; .42);  $p < .001$ ) and low risk of workplace bullying (M Diff. = .79; CI95% (.64; .94);  $p < .001$ ). Similarly, participants categorized into the high risk of workplace bullying ( $n = 281$ ) scored lower in work engagement (M = 2.87; SD = .93) than those in the categories moderate (M Diff. = .04; CI95% (.20; .14);  $p < .001$ ) and low risk of workplace bullying (M Diff. = .53; CI95% (.57; .47);  $p < .001$ ). Then, participants categorized into the moderate risk of workplace bullying ( $n = 557$ ) scored higher in anxiety symptoms (M = 1; SD = .67) and exhaustion (M = 3.04; SD = 0.94), but lower in work engagement (M = 3.04; SD = .89), than those in the low risk ( $n = 1167$ ) of workplace bullying (M Diff = .35; CI95% (.38; .33);  $p < .001$ ).

#### Limitations

The main limitation of this study is that it does not capture workplace bullying from a dynamic perspective (i.e., no transitions were explored). Future research may explore within-subjects transitions and the (protective and vulnerability) factors (both at individual, group and organizational level) that make it more possible to move from one risk group to another.

#### Conclusions

In conclusion, our findings support the established cut-off scores of the S-NAQ in Spain, showing that higher risk of being bullied is associated with higher levels of emotional exhaustion and anxiety, and lower levels of work engagement. Indeed, we challenge the idea that six months are required to label a situation as bullying because our results showed that even four months after categorizing people into risk groups can be associated with relevant negative consequences and therefore there is no need to wait to intervene in order to prevent further harm. Thus, our findings are relevant to the UN SDGs #8 Decent work and economic growth, and #3 Good health and wellbeing.

#### Relevance to the Congress Theme

#15 Stress and dysfunction

Relevant UN SDGs

#8 Decent work and economic growth

#3 Good health and wellbeing

*Keywords: workplace bullying prevalence, estimation methods, well-being*

## Paper 2

### **No offense, but I'm trying to retain my job. How a job insecurity climate amplifies the relationship between role conflict and workplace bullying**

Guy Notelaers & Ståle V. Einarsen | University of Bergen; Hans De Witte & Elfi Baillien | KU-Leuven; Kristina V. Hamre, University of Bergen

#### Research goals and why the work was worth doing

Workplace bullying, besides being a social stressor, is a social strain that is caused by various stressors from the work environment; referred to as the 'Work Environment Hypothesis'. Driven by this hypothesis, scholars have identified a wide range of work-related stressors of bullying (e.g., Balducci, Conway, & van Heugten, 2018) of which role conflict is the most prominent one (Van den Brande, Baillien, De Witte, Vander Elst, & Godderis, 2016). However, despite extensive empirical evidence for role conflict as a stressor of bullying (e.g., Reknes, Einarsen, Knardahl, & Lau, 2014) some scholars failed to replicate similar findings (Hauge, Skogstad, & Einarsen, 2011). One explanation could be that the role conflict – bullying relationship could be dependent on individual factors, such as the coping style of the target (cf. Van den Brande et al., 2020). On the other hand, role conflict and bullying are inherently social (Bowling, & Beehr, 2006) and their relationship could be sensitive to the social context in which these are embedded (Bishop, 2018). In this respect, this study introduces an emerging facet of the organizational climate in occupational health studies, namely the job insecurity climate, as a contextual factor. Relying upon Conservation of Resources Theory, we hypothesize that such a climate will strengthen the relationship between role conflicts and bullying.

#### Theoretical background

Conservation of Resources Theory (Hobfoll, 1998; 2008).

#### Design/Methodology

To test this cross-level interaction we employ a university sample from the Low Lands. The response rate was 48.8% and the total sample consisted of 1354 employees working in 134 units. We controlled for occupational position and took account for social support.

#### Results

The results show that in both low and high insecurity departments the relationship between role conflicts and bullying was positive. More importantly, however, the relationship between both was steeper in departments where job insecurity was high.

#### Limitations

The cross-sectional and self-reported nature of the design.

#### Conclusions

The current study contributes to a more complete understanding of the circumstances under which bullying may occur. Although in this organization workplace bullying and role conflict are positive related in either case, the finding that the relationship is stronger in high insecure environments brings an aggravating condition to the fore that seem to function as the opposite of resources passageway. Demands across levels have not only an additive effect but also an interaction effect,

making the situation worse for those in these environments. Therefore, guiding and communication about organizational change and prospect of future employment is advisable to prevent both the additive and the interaction effect of job insecurity climate.

Relevance to the Congress Theme

#15 Stress and dysfunction

Relevant UN SDGs

#8 Decent work and economic growth

#3 Good health and wellbeing

*Keywords: workplace bullying, job insecurity climate, group processes*

### Paper 3

#### **A weekly diary, within individual investigation on the relationship between exposure to bullying behavior and post-traumatic stress symptomatology**

Cristian Balducci, University of Bologna; Michela Vignoli, University of Trento

#### Research goals

Most studies on bullying have adopted a between-person approach, focusing on individual differences in exposure to bullying and linking these differences with work-environmental and personal variables. However, the evidence built on between-person studies completely neglects the existence of within individual variance in workplace bullying, the modelling of which is essential for elucidating processual aspects and mechanisms involved in the phenomenon, which is naturally dynamic in nature. Thus, the present study will adopt a within individual approach with the main aim of investigating whether weekly fluctuations in the experience of bullying explain parallel fluctuations in post-traumatic stress disorder symptomatology, which has often been found to be associated with bullying at the between level.

#### Theoretical background

It has long been recognized that the different symptoms commonly reported by victims of bullying such as anxiety and irritability, sleeping problems, and concentration difficulties are very similar to those characterizing Post-Traumatic Stress Disorder (PTSD), a very debilitating anxiety-related disorder. Although it may be questioned whether bullying has similar characteristics to those events which have been often observed in association with PTSD, it is also true that trauma may be defined as an event or situation with the capacity to shatter the individual's basic cognitive schemas about the world, other people, and the self and that bullying may satisfy such definition. Based on recent discoveries on traumatic experiences and PTSD (e.g., Nadal, 2018), we contend that even short-term exposure to low intensity bullying behavior – such as the exposure that characterizes a worker when the time window considered is a working week – may already have an important psychological impact as indicated by the experience of PTSD symptoms. Additionally, we also hypothesise that the development of workplace phobia reactions may act as a mechanism linking exposure to bullying during the week and the reported PTSD symptomatology. This is because the fear reactions associated with bullying may first manifest in the form of workplace phobia (i.e., a context-specific form of anxiety) and then generalize to a more extreme and debilitating form of anxiety (i.e., PTSD symptomatology) transcending the workplace and impacting more significantly on the individual psychosocial functioning.

#### Design/Methodology

We had available data on 158 employees, who provided a total of 860 weekly observations with a mean of 5.44 observations per participant ( $SD = 1.00$ ). The final sample was made by women in 60.1% of the cases and had a mean age of 36.76 years ( $SD = 11.95$ ). Participants worked an average of 36.23 hours per week ( $SD = 9.76$ ) and in 75.9% of the cases, their work requested direct contact with customers/clients. Data collection was carried out electronically via the web platform Qualtrics and consisted in the administration of a preliminary questionnaire and six weekly diary surveys which were filled in by the participant each Monday for six consecutive working weeks. Each weekly survey collected information regarding the previous week. The links to the different surveys were sent to the e-mails of the participants and each survey included an anonymous code made by factual

personal information which preserved anonymity. At the end of the study the different datasets obtained (i.e., one dataset for each survey) were matched through the anonymous code. We measured the crucial study variables (bullying, PTSD and workplace phobia symptoms) with adapted scales, which showed adequate psychometric properties at both the between person and within person levels. To test the study hypotheses we implemented multilevel modelling.

## Results

The weekly measures showed a substantial amount of variance at both the within and between levels ( $.58 < ICC < .74$ ). Results of multilevel modelling revealed that weekly bullying was significantly and positively related with weekly PTSD symptoms ( $b = .19$ ;  $p = 0.015$ ) at the within level, which supported our first hypothesis. Additionally, at the within level, mediation analysis revealed that weekly-level bullying was significantly related with weekly workplace phobia ( $b = 0.44$ ,  $SE = 0.07$ ,  $t = 6.31$ ,  $p < .001$ ) and weekly workplace phobia was significantly related with weekly PTSD symptoms ( $b = 0.26$ ,  $SE = 0.04$ ,  $t = 6.34$ ,  $p < .001$ ). The direct relationship between weekly-level bullying and PTSD symptoms was not significant when controlling for workplace phobia. A test of the postulated within indirect 'effect' resulted significant (estimate = 0.11,  $SE = 0.025$ ,  $Z = 4.45$ ,  $p < .001$ ) with Montecarlo confidence intervals ranging from 0.067 to 0.166. This supported our second hypothesis, with workplace phobia fully mediating the within relationship between bullying and PTSD symptoms. Further analyses on moderating variables are underway.

## Limitations

The most important limitation is the convenience sample obtained, including participants from different occupations and sectors. Additionally, the relatively low number of participants (i.e., level-2 units) may constitute a further study limitation.

## Conclusion

Exposure to bullying behavior significantly fluctuates from week to week and such fluctuation is consequential in terms of experiencing workplace phobia and PTSD symptoms within individuals. The results suggest that even non-persistent forms of exposure to bullying, such as those that may be captured during an exposure period of one week, may already produce significant health impairment and initiate trauma-like consequences in the targeted individual. This accentuates the need to move towards primary preventive interventions on bullying, that is, acting before even more milder forms of the phenomenon takes place.

## Relevance to the congress theme

Bullying and intimidating behavior at work constitute relatively prevalent problems with the capacity to impact profoundly workers' mental health. There is a need of change toward zero-bullying work environments to create better and healthier working conditions in post-pandemic workplaces.

## Relevant UN SDGs

#8 Decent work and economic growth

#3 Good health and wellbeing

*Keywords: workplace bullying, post-traumatic stress symptoms, diary-study*

## Paper 4

### **Workplace bullying and expressive writing: An intensive longitudinal randomized trial**

Alfredo Rodríguez-Muñoz, Francisco J. Estupiñá, Paula Ruiz-Zorrilla & Mirko Antino | Universidad Complutense de Madrid

#### Research goals and why the work was worth doing

This research aims to test the effectiveness of a longitudinal randomized trial to reduce the negative consequences of exposure to workplace bullying behaviours on different well-being indicators.

#### Theoretical background

An extensive body of research has indicated the negative repercussions that the workplace can have on employees' health and well-being (e.g., Nielsen & Einarsen, 2012). Within this context, the past decade has witnessed a growing interest in conducting interventions for preventing bullying and minimizing the negative outcomes of this phenomenon. In this study, we respond to the call to conduct brief and low-cost interventions (e.g., Kazdin, Rabbitt, 2013). One promising intervention is expressive writing.

#### Design/Methodology/Approach/Intervention

All the participants had to answer 3 weeks of daily questionnaires. The first week represents our baseline. At the end of the first week, we executed the intervention (both experimental and control group), randomly assigning the participants to the emotional writing condition or the neutral writing condition. We repeated the intervention at the end of the second week, and we ended the intensive longitudinal data collection after the third week. Long-term follow-up is actually under execution. Participants data: n level 1 (day level) = 1812, N level 2 (person level) = 151.

#### Results obtained

Provisional results show a high amount of within-level variability. It shows more effects during the first week than during the second week (when comparing the impact on a double discontinuity growth model). Results will be discussed by comparing the evolution of the outcomes with and without the inclusion of an objective counting of the emotions that were expressed during the intervention, as we observed a high variability within the experimental group.

#### Limitations

Data collection is not completed, although the long-term effects (3 months and 6 months follow-up) will be available and discussed. The online nature of the data collection seems to have generated a high variability in emotional content within the experimental group. To understand the validity of this experimental approach, we consider that analysis run on the definitive sample will provide some light.

#### Research/Practical Implications

Despite the pernicious effects of bullying, there is a surprising lack of empirical intervention studies in this area (Nielsen & Einarsen, 2018). The paper offers clues about the validity of an intervention from an established approach such as the expressive-writing.

#### Relevance to the Congress Theme

Our research is in line with the congress delivery line. How do we mitigate harassment? Is it effective?

Relevant UN SDGs

This research relates to the UN Sustainable Development Goal of decent work and economic growth.

*Keywords: intervention, workplace bullying, longitudinal*

## Paper 5

### Changing the underlying conditions relevant to workplace bullying through organisational redesign

Yiqiong Li, School of Business, University of Queensland; Annabelle Neall, School of Psychology, University of Queensland; Alice Rose & Michelle Tuckey | Centre for Workplace Excellence, UniSA Justice & Society, University of South Australia

#### Research goals

The overarching goal was to implement and empirically evaluate an organizational intervention for the prevention of workplace bullying, based on theory and research on workplace bullying antecedents. The present study describes the background, design, and protocol of the intervention with a focus on changing/improving organizational systems, procedures and practices relating to how people are managed and coordinated. It also evaluates the effectiveness of the intervention using objective and subjective criteria.

#### Background

When seeking to prevent workplace bullying through evidence-based approaches, there is a discrepancy between anti-bullying approaches used in organisations, which typically treat bullying as an interpersonal problem, and the academic evidence base, which highlights job characteristics as the primary contributing factors. For example, half of the 12 bullying intervention studies in Hodgins et al.'s review (2014) did not tackle aspects of work and organizational design. Rather, the interventions addressed individual-level factors only, consistent with the notion that bullying is routinely viewed as an individual interpersonal problem.

Two potential reasons may explain this discrepancy. The first reason is that the general advice based on existing academic evidence may not be specific enough to guide practical risk management efforts to prevent bullying and the associated harms. The second reason is the lack of intervention studies to bridge the knowledge gap between existing research findings and tools that can be applied in practice. The evidence on prevention and intervention initiatives is severely limited (Hodgins et al., 2014), especially primary interventions (Hershcovis et al., 2015). Most intervention studies centered on improving social interactions in the workplace focus on broad and general issues such as respect or dignity instead of specifically and explicitly addressing bullying (Einarsen et al., 2020). Few workplace bullying intervention studies have been empirically implemented and evaluated for efficacy and effectiveness (Caponecchia et al., 2019; Einarsen et al., 2020; Escartín, 2016). Moreover, few intervention evaluation studies have been conducted with a high-quality research design (Einarsen et al., 2020).

#### Intervention and approach

Rather than focusing on the workplace bullying policy (which alone does not shape effective organizational responses to bullying) or on negative acts themselves (which can be regarded as a product of problems in work and organizational systems), our study aims to tackle the underlying risk conditions for workplace bullying by identifying, monitoring, and changing aspects of the risk contexts. We focus on improving people management practices in nine different contexts (e.g., managing underperformance, clarifying job roles and duties, coordinating working hours, and entitlements). During the intervention, the risk contexts were assessed to identify problems using a diagnostic risk audit tool, generated and validated based on analysis of 342 workplace bullying

complaints officially lodged with the local work health and safety regulator (Tuckey et al., 2022). Based on the diagnostic information participatory processes were used to support staff and managers to generate and implement solutions targeting these risk contexts.

The highlight of this intervention is the use of a co-design approach throughout the intervention, manifested in five phases: Preparation, Diagnosis, Solutions, Implementation and Evaluation.

## Method

The intervention was implemented across 10 stores of an Australian supermarket stores within one Australian state. All store employees were invited to complete a pre-intervention diagnostic survey (Time 1) and a post-intervention evaluative survey (Time 2), administered 10 months apart. A total of 399 and 339 respondents across 10 stores responded the surveys at Time 1 and 2, respectively, whose responses were aggregated for store-level analysis. Further at department-level, 34 departments had 261 and 246 participants at Time 1 and 2 respectively, used for department-level analysis. Respondents were asked to rate people management practices using the risk audit tool, exposure to workplace bullying, job demands and job resources at Time 1 and 2.

## Results

The t-test results revealed that exposure to workplace bullying significantly reduced over the course of the intervention by a mean decrease of .25, 95% CI [.40, 2.10],  $t(9) = 4.01$ ,  $p = .003$  at store level, and by a mean decrease of .24, 95% CI [.19, .91],  $t(33) = 3.21$ ,  $p = .003$  at department level. These results support the effectiveness of the intervention on bullying reduction at both store and department levels.

The records of bullying compensation claims also demonstrate the effectiveness of the intervention at store level in comparison with neighbouring stores that were not exposed to the intervention. In the intervention stores, complaints decreased from 0.8 cases by store in the pre-intervention period January-September 2020 to 0.1 cases per store over the intervention period October 2020-June 2021. By way of comparison, in the 991 neighbouring stores, complaints increased from 0.5 to 0.6 cases per store over the same timeframe.

We further ran mediation analyses to explore the underlying mechanism that explains how the intervention, which is centred around changing people management practices, leads to bullying reduction. Given that there were only 10 stores, we did not run the mediation analysis at store level. Instead, the analyses were conducted at department level. At the department level, people management practices (Time 2) were positively related to job resources ( $b = .21$ ,  $p = .005$ ) and negatively related to job demands ( $b = -.23$ ,  $p = .004$ ) at Time 2, while controlling for job resources and demands respectively at Time 1. Workplace bullying was positively related to job demands ( $b = .44$ ,  $p = .000$ ) at Time 2 while controlling for workplace bullying at Time 1. The indirect effect between people management practice and workplace bullying via job demands was significant (indirect effect =  $-.11$ , Boot SE =  $.04$ , 95% CI [ $-.19$ ,  $-.02$ ]). However, workplace bullying was not related to job resources ( $b = -.17$ ,  $p = .113$ ).

## Conclusions

Building upon the risk audit tool, this project generates the specific information needed for effective bullying prevention and intervention by developing and evaluating an intervention framework that tackles the organisational risk contexts for bullying. These risk contexts offer clear focal points for risk management efforts to build an anti-bullying organizational system.

Relevance to Congress Themes

#15 Stress and dysfunction

#18 Well-being

#13 Safety at work

Relevant UN SDGs

#3 Good health and wellbeing

#8 Decent work and economic growth

#16 Peace, justice and strong institutions

*Keywords: workplace bullying, intervention, work design.*

## Symposium S093

### **(Hyper)Normalization and the New Normal: Interrogating Concepts of Normality and Normalizing an Ethics of Care**

Matthijs Bal, University of Lincoln

science

What will be covered and why (including the contribution of any discussant)

This symposium investigates concepts of normality, normalization and the New Normal. Since the start of the Covid pandemic, there has been talk throughout both global media and scientific circles about a 'New Normal'. During the Covid lockdowns, we suddenly witnessed dolphins swimming in the Venice lakes, and clear skies unpolluted by airplane emissions. There was suddenly space to envision a new reality, that in which people cared for each other, where there was appreciation and recognition of the work done by essential workers (health care, food industry, etc), and most importantly, a window was opened for the protection and restoration of our broken planet. However, the Covid pandemic lasted at least 2 years, and the conceptualizations of a potential for a 'New Normal' were quickly forgotten. What was left was a notion of new normalities with regards to remote and virtual working, and the possibility for people to have more flexible arrangements with regards to their work and private lives.

The goal of this symposium is to return to the concept of 'New Normal', and to interrogate the meanings of normal, normalization and hypernormalization in more depth. Moreover, our goal is to investigate how new normalities may be constructed through an ethics of care.

The symposium contains three presentations which follow up on each other in building an understanding of how normality unfolds, and how we can work towards the normalization of greater care in workplaces for people, the environment, and ultimately, the planet itself.

Matthijs Bal will start the series with a presentation on the hypernormalization of absurdity. Building on a recent book that has been published on this topic, Bal will discuss the theoretical notions of normalization processes, and how the normal is constructed on the basis of an ideological fantasy of what should be perceived as within the structures of normality, while at the same time excluding all that is considered to be abnormal or absurd.

John Mendy will follow up with an interrogation of the hypernormalization of Equality, Diversity and Inclusion (EDI) initiatives in organizations which have little impact on the realities of people at work, especially marginalized communities. Based on a study of focus groups of autistic employees, he shows the gap between authoritative discourse (i.e., formal EDI initiatives) and actual practice, as evidenced through the lived experience of marginalized groups.

The presentation by Sara Petrilli et al. forms a bridge to better understanding of the alternative frameworks that can constitute the new normal: based on interviews with managers, the authors three areas that exemplify a new normal that is caring: care for people, work and for organizations. The presentation shows how new normals can be constructed that extend beyond the perpetuation of the status-quo that is imminent to hypernormalization as shown in the first two presentations.

Finally, we have secured Edina Dóci to act as Discussant for the session. Dóci has ample experience in critical work in WOP, and based on her previous work around neoliberal ideology and inequalities in the workplace, she will be able to provide critical insights into the overall set of presentations,

seeing beyond the individual stories to conceptualize new understandings of how we can think of normal, abnormal and the hypernormal.

#### Relevance to the Congress Theme

The symposium is about the New Normal, which fits closely with the Future of Work.

#### Research/Practical Implications

The symposium offers research implications about how we can study the New Normal as emerging in the workplace, but also being critical of the perpetuation of the status-quo under a legitimization of authoritative discourse which bears little relationship with really existing practices. The task of the scientist is to critically evaluate such processes, and to be able to distinguish between what belongs to the space of imaginary discourse, and what can be considered to be actually taking place – this knowledge is key to generate, as this also constitutes a duty towards practice: to inform practitioners in the world outside of academia of the processes of normalization and constructions of New Normals.

#### Overall conclusions

This symposium offers an exciting set of presentations that are timely and investigate the ways through which we perceive the current world and workplace as 'normal'. Yet, we also offer insights into a more sustainable future by emphasizing the need to normalize an ethic of care in organizational life.

discussant: Edina Dóci, VU University Amsterdam

*Keywords: Normalization, New Normal, Ethics of Care*

## **Paper 1**

### **The Absurdity of a Hypernormalized Status Quo in Society and Workplaces**

Matthijs Bal, University of Lincoln

#### Theoretical background

The world and workplaces are in existential crisis – climate change, the breakdown of democracy and ever-rising inequalities threaten the viability and sustainability of our planet, our ways of living and our institutionalized economic systems. We are constantly faced with the absurdities of such manifestations, while at the same time, we are observing an increasing inertia towards tackling the greatest societal challenges of today. For instance, the wealth inequalities in global society have increased such that now eight men own as much as the poorest half of the global population. At the same time, there is little indication we are effectively addressing such inequalities, and as a result millions of people are struggling to survive, and not just in the global periphery, but across the world, and in the wealthiest nations, where people are forced to choose between ‘heating or eating’. The absurdity of this is that even though we know about this, we are unable to find effective solutions to such grand problems. The current paper addresses these absurdities and in particular focuses on how these absurdities are normalized. Borrowing from the Russian anthropologist Alexei Yurchak, we use the term hypernormalization to explain how absurdities are normalized in our contemporary society and workplaces. Hypernormalization denotes the process of the current status-quo is normalized as something that cannot be changed fundamentally. This plays out primarily through ideological fantasy. This means that absurdities that we are faced with (e.g., the absurdity of wealth inequality) are legitimized as a ‘normal’ consequence of the current structures, through which the winners are praised for their entrepreneurial spirit, while the losers are blamed for not having worked hard enough. Hence, ideological fantasy supports the status-quo, and even when absurdities are ‘exposed’, people can cling on even more strongly to their fantasies, as absurdity exposure may threaten ontological security of the human being.

#### New Perspectives/Contributions

The current paper is based on a book published in 2022 (Bal et al., 2022) on the absurd workplace and how such absurdities are hypernormalized. To understand why the status-quo remains perpetuated, and what can be done, we have used a hypernormalization lens to study the emergence of absurdity in society, and how this is ideologically maintained through the force of hypernormalization. We thereby contribute to a better understanding of absurdity in the workplace and in society, and how it is perpetuated. Understanding contemporary issues in society and the workplace as absurd and its related hypernormalization process provides a better perspective on where we are and how we can more effectively problematize absurdity, and find ways to overcome absurdity

#### Conclusions – research and or practical implications

The absurdity and hypernormalization lens offers many new insights, particularly in the field of WOP. While WOP research has been influenced profoundly by a natural science-like paradigm, whereby objective research is conducted on workplace attitudes and behaviors, an absurdity lens moves beyond this by studying how logic itself dissolves into the hypernormal. In this case, we are no longer studying phenomena in the workplace that are defined through logic and reason (e.g., the basis of social exchange theory, which postulates a rather rational exchange between employee and

organization), but workplaces where logic has dissolved altogether, and where an analysis of the workplace as absurd may provide new understandings of the more unconscious nature of behavior in the workplace.

#### Relevance to the Congress Theme

The theme of the conference pertains to the future of work, which is heavily influenced by notions of what can be considered normal in the workplace – i.e., interrogation of what is abnormal or hypernormal therefore aids to a better understanding of the future of work.

#### Relevant UN SDGs

The paper investigates not just the normality of our social constructions, but also questions them – in that spirit the SDGs should also be analyzed as a way through the status quo is maintained through authoritative discourse: the SDGs form the impression of meaningful engagement with the world's grand societal issues, but the question remains to what extent we are truly engaging in meaningful action to change our world.

*Keywords: hypernormalization, absurdity, climate inertia*

## Paper 2

### Reimagining Inequality in Contemporary Organizations and Society: A Hypernormalization Lens

John Mendy, University of Lincoln

#### Research background

Recent grand challenges around the world ranging from the Coronavirus health pandemic to the socio-political and economic disruptions (Caligiuri et al., 2020) affecting people's and organizations' sense of 'normalcy' highlight that the world is already in a new state of the 'hypernormal' – a construct that makes meaning of the disconnect between authoritative and often authoritarian discourse on reality and people's mutative, experienced understandings of that reality. This study focuses and problematizes how the official, traditional and authoritative discourse of EDI highlights absurdities of inequality experienced by marginalized groups such as autistic jobseekers in workplaces and society. I focus on the absurd irrationality felt by autistic jobseekers when they encounter hiring and retention practices that are significantly paradoxical to the authoritarian rhetoric of principles of libertarianism, equality, diversity and inclusion in EDI discourse Caligiuri et al. (2020) among others.

#### Research goals and why the work was worth doing

To investigate how the authoritative and authoritarian EDI discourse has paradoxically created/entrenched a hypernormalized state of workplace, work and worker inequality and an ethics of injustice and authoritarianism in contemporary workplaces and society.

To reimagine workplace and worker inequality from the foundational paradigm of EDI by showing what a less authoritarian and autocratic discourse of autistic jobseekers' perspectives could offer in addressing organizational and societal inequalities and insecurities.

To problematize hypernormalization of the absurd EDI and HRM practices of hiring and retention within a postsocialist Soviet Union and a postcolonial world where emerging digitalization and the flexibilization of work, the workplace and the worker pose renewed challenges to equality of opportunities and possibilities.

To propose a contemporary and more meaningful framework to EDI and the UN SDGs to help in meaningfully addressing the current hypernormalized state of irrationality of workplace and worker inequality.

Whilst previous studies have normalized the benefits of the Equality, Diversity and Inclusion perspective, I highlight the need for a new normal of EDI, by problematizing the disconnect between the enunciated EDI benefits and their re-conceptualized realities from marginalized communities. The proposed reconceptualization and reimagination examine how renewed calls to digitalize (Colber et al., 2016), to flexibilize and hybridize (Bal & Izak, 2020), to technologize and to show official HR proceduralist practices around hiring and retention of already marginalized workers have increased (Georgiadou & Antonacopoulou, 2021), instead of reduced workplace and worker inequality. This unsustainable state of hypernormalization of inequality has warranted my development of a framework on worker, work and workplace ethicality, equality and sustainability which shows the institutional, ideological, cultural and socio-politico-economic conditions of the hypernormalized inequality and the accompanying necessary conditions out of the contemporary state of inequalities.

## Theoretical frame

Hypernormalization is this study's theoretical focus. It is the normalization of absurdity or irrationality in contemporary society and organization (Yurchak, 2003, 2005). It is a construct that helps in identifying and understanding the divide between ideological, authoritarian and autocratic enunciations of the rulers in the Soviet Union of the 1960s – 1980s. Absurd ideologies, practices and measures thrive on fantasy (Žižek, 1989) in order to create safe spaces for their internalization, materialization (Yurchak, 2015) practicalization and securitization in individuals in society and workplaces (Mitzen, 2006). When such hypernormalization is attained, it paradoxically creates a fundamental gap between the official rhetoric/enunciation on EDI, for example, (e.g. organizations' strategic value statements on treasuring equality, diversity, inclusion and wellbeing) and the practical realities of how staff and potential employees experience EDI interventions (e.g. lack of access to promotion, to career development, to employment access, to the entrenchment of inequality). I therefore extend Yurchak's hypernormalization to include how marginalized worker communities (e.g. autistic jobseekers) experience a persistent, stagnant state of absurd employment practices whose normalization has hypernormalized inequality in workplaces and worsened their quality of life. Furthermore, I show the socio-economic, political and cultural, institutional, structural and ideological conditions that have led to this state of hypernormalized inequality in workplaces, and, by extension society. This process helps in further developing our understanding of hypernormalization by moving it beyond Yurchak's dichotomous divide between authoritarian discourse and the public's reality of that discourse. By focusing on exposing and problematizing conditions and processes of hypernormalization, I not only reflect and critique the individual and collective ideological fantasies and internalizations but show how the gaps between the official and the real could be bridged by a more sustainable framework including the conditions, processes and problematization of hypernormalization. In the proposed frame, I problematize, reimagine, reconceptualize and ethicalize a hypernormalization framework for equality in contemporary and future workplaces.

## Methodology

The study's methodological design is based on focus group with from 24 autistic jobseekers in the UK. The thematised results are used as the basis to develop an epistemology and ontology toolkit that managers can use in developing a meaningful understanding of how to identify and address autistic jobseekers' workplace needs and mitigate against the grand inequality challenges of the workplace of the future. This design and analysis highlight the paradox between the authoritative discourse of EDI framework, the experienced socio-economic and political, ideological logics of autistic jobseekers in the tradition of hybridity discourse analysis (Bhabha, 2012; Said, 2012) and moves the debates and discussions on hypernormalization beyond discourse-reality to include conditions, processes, problematization and ethicality.

## Results

The initial results highlight:

employment brick walls faced by the autistic jobseekers when they attempted to transition into work in the UK. Whilst this finding concurs with previous studies conducted (Lai & Szatmari, 2019; Hedley et al. 2017b; Raymaker, 2017), it highlights the hypernormalization of inequality.

socio-cultural and financial discrimination which aligns with Ngoasong and Groves (2016) but differs from Nicolaidis et al. (2015b) and Kaboski et al. (2017) whose advocacy for greater agency for communities suffering from inequality does not concur with the hypernormalized state of inequality experienced by autistic people.

entrenched marginalization as confirmed earlier by Guerci (2019) but in contrast with Bardoel et al. (2014) who expected faster adaptation despite the hypernormalized inequality experienced by autistic people

Relevance to Congress

This study fits the congress's theme.

Relevance to UN SDGs

This study is relevant to issues around inequality, the normalization of exclusion and marginalization in workplaces and society, peace, justice and strong institutions and the future of workplaces.

*Keywords: societal and worker inequality, authoritarian discourse, experiential discourse, hypernormalization*

### Paper 3

#### **Care Ethics management and redesign organization in the New Normal: Individual and Organizational implications of the Covid 19 Pandemic**

Sara Petrilli, Silvio Carlo Ripamonti & Laura Galuppo | Università Cattolica del Sacro Cuore

##### Introduction and conceptual background

This contribution aims to highlight the dimensions of care and ethics put in place by HR managers in COVID-19. The objective that animated the authors have focused on the HRM level of medium and large companies to highlight the protective actions towards people and the organization in the period COVID 19, highlighting what were the ethical values and actions of care put in place.

In the scenario of New Normal, it seemed crucial to us to understand how in the accounts given by managers of organizational processes, who had the task of transitioning their organization during the pandemic period, they evoked themes related to the ethics of care in the management of people while simultaneously keeping in mind the survival of the organization.

##### Theoretical background

In the present article, we refer to the theme of care ethics proposed by Gilligan (1982), drawing inspiration from which we can define organizations as a network of relationships whose quality can be safeguarded by specific managerial actions. Some of these actions can support the construction of trust, while others can undermine the feeling of interconnectedness in the organization.

The concept of care ethics does not assume an agent who autonomously and rationally decides the course of actions. Still, it considers the possibility of giving people a voice and making the interests in the field visible by taking into account their diversity of desires and interests (Gilligan, 1995).

##### Design/Methodology/Approach/Intervention

The researchers interviewed 45 managers, including 21 women and 24 men. The managers interviewed are all university graduates, aged between 40 and 55 years old. The sectors they belonged to were manufacturing, IT, and services. Public companies were not included in the sample. The following diagram details the type of organizations involved in our Italian context.

The respondents were given a narrative interview outline that primarily touched on the following points:

Effects of COVID on HR management policies.

Proposed projects to support people.

Management priorities over the next 12 months.

Reconfiguration of how we work with other functions.

The interviews were recorded and disgorged, and we obtained a 380-page corpus. The interview analysis methodology was guided by content analysis (Braun and Clarke, 2006).

Results obtained or expected

The results were organized by identifying some core themes. All the references to the concept of “caring” were grouped into three different categories, representing three different levels/objects of care: people, work, and organization.

### 1 Caring About People

In this first category are the narratives of managers who, in the pandemic period and in the New Normal reorganization that follows, were focused on safeguarding the possibility that people could work in an acceptable state of well-being (Raya and Panneerselvam, 2013). The issues governing their managerial activity centered on helping people contain the time they worked remotely, modulating the commitment over time, and providing support to have a sustainable life-work balance (Koinig and Diehl, 2021).

### 2 Caring About Work

In this category, there are narratives of managers who assumed that the pandemic changes altered the very nature of work. Here again, two main challenges emerged: a) The polarity efficiency vs. creativity expresses a considerable challenge that impacted on HRMs’ concerns and b) Challenge between increased commitment and possible retention over time.

### 3 Caring of Organizations

In this third category, the caring efforts concerned the organization as a “complex social subject” (reconfigured and fragmented work, acceleration of new technologies and psychological contract).

#### Limitations

The sample size is not large. Another limitation could be found in the limited and heterogeneous sample involved that cannot allow the generalization of results. Finally, the sample used in this study were just from Italy; there might be a specific bias in the perception of sustainability, onboarding and organizational practices due to the particular Italian labor market.

#### Conclusions – research and or practical implications/Originality/Value

The three “clusters” of care highlighted in the interviews showed how human resource managers had difficulty containing the situation’s complexity in the pandemic and in the New Normal period.

The most challenging HR managers interviewed was specifically this ability to “take care in the New Normal” of the interactions between the three levels, work organization and people (Giancaspro et al., 2021).

#### Relevance to the Congress Theme

We think our research is in line with the themes of the congress because it talks about change in the world of work and how people live within this change. In addition, we feel it is important to bring times such as care and ethics into organizations because now more than ever, in an ever-changing world of work, these should be the reference values and not only those of commitment, satisfaction, achievement and socialization.

#### TOPICS:

- 1) Careers and the labour market;
- 2) Engagement and motivation;
- 3) Organizational design and development;

Relevant UN SDGs

Decent work and economic growth

Good health and wellbeing

*Keywords: New Normal, Ethics of Care*

## **Symposium S094**

### **Employee Physical Activity: Antecedents, Processes, and Outcomes**

Sascha Abdel Hadi, Justus-Liebig University Giessen; Malte Roswag, University of Hildesheim

science

What will be covered and why

Being physically active has well-known beneficial effects on various health- and performance-related outcomes as indicated by a plethora of research. Studies show that physical activity is not only a promoter of physical health but also mental well-being. However, studies show that individuals (at least in industrialized societies) are becoming increasingly inactive and that this might be also due to work-related factors. Building on these findings, this symposium is dedicated to an integrative evaluation of current research on the dynamical interplay between work and physical activity. We aim to bring together research with multiple perspectives on consequences as well as antecedents of employees' physical activity. The symposium has three objectives: Firstly, it aims to shed light on positive effects of physical activity looking at various potential work-related outcomes of physical activity that is pursued at different times of the day. Secondly, the buffering role of physical activity for the adverse effects of workplace stressors will be discussed. Finally, the presentations will focus on work-related factors that are proposed to influence employee physical activity.

In the first study, Roswag et al. investigate the role of physical activity before work on appraisal of workplace stressors on the same day, and how these effects subsequently extend to work-related well-being during the workday.

In the following presentation, Calderwood et al. test the resource generating potential of physical activity with a special focus on explaining a physical activity spillover to various work-related outcomes across different time frames and aspects of physical activity (e.g., duration, intensity).

In the presentation by Junker et al., physical activity is considered as a buffer against negative work-related influences. The authors examine the moderating effect of physical activity on the relationship between daily challenge versus hindrance stressors, and work-family conflict and work-family enrichment.

The final studies by Koch et al. and Abdel Hadi et al. focus on the role of work-related factors and mechanisms to explain how work affects physical activity and well-being. Koch et al. examine whether detaching from work on days with high work stress serves as a mediator between workload and after work-physical activity, while Abdel Hadi et al. apply an experimental paradigm to test for differential effects of different subtypes of job demands on physical activity through self-regulatory capacity.

Relevance to the congress theme

A better understanding of the interplay between work-related aspects and employee physical activity is highly relevant to the topic of the EAWOP '23 theme: "The future is now: the changing world of work". Increasing knowledge about how physical activity affects individuals as well as how physical activity is affected by work is important to shape a positive relationship between work and leisure. This is important to sustain and increase work-related health and well-being.

Research/practical implications

The symposium brings together different perspectives on employee physical activity that complement each other and add to a broader understanding of the interplay between work and physical activity. Gaining a deeper understanding of how these factors are related to each other helps to develop theory-building in the context of occupational health psychology and increases our understanding of the role of physical activity for employee well-being. On a practical note, the studies presented in this symposium highlight the importance of an active lifestyle not only to maintain health and well-being but also to improve work-related outcomes. Furthermore, it points to the relevance of job characteristics as factors that influence physical activity.

#### Overall conclusions

Integrating the findings of the presentations, physical activity is a crucial factor to employee well-being and other work-related outcomes. Hence, taking actions toward supporting physical activity has positive implications for both employees and employers. Considering work-related factors as facilitators of the engagement in physical activity can help to better understand how organizations can positively influence individual functioning.

*Keywords: employee physical activity, well-being, work design*

## Paper 1

### **The Daily Relationship Between Physical Activity and Employee Well-Being: The Mediating Role of Appraisal of Workplace Stressors**

Malte Roswag, University of Hildesheim; Sascha Abdel Hadi, Justus-Liebig University Giessen;  
Andreas Mojzisch, University of Hildesheim; Jan A. Häusser, Justus-Liebig University Giessen

#### Research goals and why the work was worth doing

Physical activity is beneficial for employee's well-being, especially when it is pursued outside of the working time (i.e., leisure time physical activity; Wiese et al., 2018). However, we still lack understanding of the mechanisms mediating this effect, which is highly important for better theoretical and practical understanding of physical activity in the work context. While previous research has predominantly investigated physical activity as a recovery activity after work (e.g., van Hooff et al., 2019) this framework neglects the idea that physical activity may also have positive effects for employee well-being when it is conducted before work. In a preregistered study, we addressed this limitation by examining the mechanisms through which physical activity before work benefits employee well-being.

#### Theoretical background

Building on the transactional theory of stress (Lazarus & Folkman, 1984), we argue that physical activity before work changes how employees appraise their workplace stressors which, in turn, is positively related to employee well-being. As outcome variables, we measured three proximal indicators of employee well-being: work engagement, emotional exhaustion, and job-related anxiety. Integrating research on beneficial short-term effects of physical activity and the transactional theory of stress, our key hypothesis is that the effects of physical activity before work on employee well-being are mediated by employees' primary appraisal of workplace stressors. More specifically, we hypothesized and preregistered that physical activity before work increases challenge appraisal and decreases both hindrance and threat appraisal which, in turn, increases work engagement, and decreases emotional exhaustion and job-related anxiety. Thus, we propose three distinct pathways from physical activity before work to employee well-being: Physical activity before work is positively related to work engagement through challenge appraisal (Hypothesis 1), physical activity before work is negatively related to emotional exhaustion at the end of work through hindrance appraisal (Hypothesis 2), and physical activity before work is negatively related to job-related anxiety through threat appraisal (Hypothesis 3)

#### Method and results

We conducted a daily diary study over ten workdays with two daily measurements (one questionnaire at the beginning of the working time and one in the afternoon after work) to test our hypotheses. In total, 300 employees who worked at least 20 hours per week participated in our study and 269 employees who answered questionnaires on at least three days were included in the data analysis. Multilevel structural equation analyses showed partial support for our preregistered model. Physical activity before work had a positive indirect effect on work engagement through challenge appraisal (Hypothesis 1) and a negative indirect effect on job-related anxiety through threat appraisal (Hypothesis 3). However, we found no evidence for an indirect effect of physical activity before work on emotional exhaustion (Hypothesis 2). In an exploratory analysis, we further found that threat appraisal mediated the effect of physical activity before work on emotional exhaustion.

## Limitations

Besides many strengths (preregistration, large sample, various occupational types, time-lagged daily measurement) our study is subject to some limitations. First, our study is correlational and therefore does not allow causal conclusions to be drawn. Further, we used only self-report measures which are prone to recall bias, social desirability, and measurement reactivity (in the case of physical activity). Future research could therefore utilize experimental designs and measure physical activity objectively, for example through activity trackers.

## Conclusions – research and or practical implications

In conclusion, our study adds to the literature on the interplay of work and physical activity by showing that physical activity before work is beneficial for employee well-being and, furthermore, by identifying employee's appraisal of workplace stressors as a mediator of this relationship on a day-to-day basis. Finally, our results advance our knowledge on the transactional process of work stress by identifying physical activity before work as a situational predictor of employees' appraisal of workplace stressors. On a practical note, our study shows that being physically active before work can be a successful strategy to improve employee well-being and should be supported by employers.

## Relevance to the congress theme and UN SDGs

This study is relevant to the congress theme because it highlights the importance of physical activity in a changing world of work that is increasingly sedentary and, furthermore, because it shows that physical activity is also beneficial for organizational outcomes which should further incentivize employers to promote their employees' physical activity. We thereby also address the UN SDG of health and well-being.

*Keywords: employee well-being, appraisal, physical activity*

## Paper 2

### Understanding the Spillover of Physical Activity to Performance Criteria at Work and at Home

Charles Calderwood, Virginia Tech; Lieke L. ten Brummelhuis, Simon Fraser University; Christopher C. Rosen, University of Arkansas; Allison S. Gabriel, University of Arizona; Fiyinfunjah Dosumu, Virginia Tech

#### Research goals and theoretical background

Employee physical activity, which represents bodily movement produced by skeletal muscles that expends energy (Caspersen et al., 1985), is theorized within the resource-based model of physical activity to generate physical (e.g., lower fatigue), affective (e.g., greater positive affect), and cognitive (e.g., heightened attentiveness) personal resources that have downstream implications for performance criteria (Calderwood, Ten Brummelhuis et al., 2021). Within the Work – Home Resources Model (WH-R; Ten Brummelhuis & Bakker, 2012), personal resources of this nature are theorized to be the central linchpins that connect experiences at work to home outcome and vice versa. Accordingly, synthesizing the resource-based model of physical activity with tenets of the WH-R, it would be expected that physical activity at work (home) can generate physical, affective, and cognitive personal resources that employees carry with them across the work / non-work interface to invest in performance criteria at home (work). The goal of this project is to evaluate this potential physical activity spillover to performance criteria across the work/non-work interface, with particular attention to alternative temporal windows (e.g., within-day, across-days, weekday-to-weekend), various aspects of physical activity (e.g., steps, caloric expenditure), and specific personal resources (e.g., physical, affective, cognitive) that may be differentially relevant to this process.

The current project is intended to address three critical unanswered questions about physical activity spillover. First, from the perspective of alternative temporal windows that could be considered (e.g., day-to-day transitions from work to home or home to work; weekday-to-weekend or weekend-to-weekday transitions), within what timeframe(s) does physical activity spillover occur ( Research Question 1 )? Second, when considering that there are numerous ways to measure and operationalize physical activity engagement (e.g., steps, caloric expenditure, engagement in more intense physical activity; Calderwood et al., 2021; Van Hooff et al., 2019), what aspects of physical activity drive the process of physical activity spillover ( Research Question 2 ) to performance criteria? Third, when considering that a range of types of personal resources (e.g., physical, affective, cognitive) have been argued to link physical activity to performance criteria, which categories of personal resources are most critical to the physical activity spillover process ( Research Question 3 )?

#### Design

Participants were staff employees working full-time, five days a week in traditional business hours (Monday – Friday; 9 a.m. – 5 p.m.) at a large university in the Southeastern United States. A total of 106 participants accessed an initial opt-in survey, with 83 participants advancing to a subsequent 10-day daily survey period (Monday – the following Wednesday) during which participants completed three surveys a day ( morning survey , completed between 6 a.m. – 9 a.m.; afternoon survey , completed between 4 p.m. – 7 p.m.; bedtime survey , completed within 30 minutes before going to sleep) while wearing a research grade actigraph device (Actigraph, 2018) that continuously tracked physical activity across the entire 10-day daily survey period. After screening out 12 participants for various protocol compliance issues (e.g., little to no actigraphy data available; reporting not working

on a majority of weekday study days), the final sample consisted of 71 participants who provided valid study data at 2,019 out of 2,130 possible time points across the 10-day study (Response rate = 94.7%).

#### Preliminary results overview

While the full analysis of our data to evaluate our three research questions is still in progress, we have obtained numerous interesting preliminary results to date, including that (1) affective resources (e.g., state positive affect) appear particularly critical to linking daily workday physical activity to family performance criteria (e.g., family absorption, family social support), (2) taking more daily steps has downstream benefits for next-day job performance criteria (e.g., greater personal initiative), but engaging in particularly intense daily exercise may incur next-day job performance costs (e.g., lower next-day personal initiative, diminished next-day work goal progress), and that (3) the potential for physical activity to spillover to performance criteria within the day (e.g., workday physical activity to same-day family performance criteria) and across days (e.g., leisure time physical activity to next-day job performance criteria) appears more robust than the potential of physical activity to spillover to performance criteria across segments within the week (e.g., work week to weekend; weekend to next work week). In combination, we expect addressing the three research questions outlined in this project will significantly expand understanding and applications of physical activity spillover to a range of performance criteria at work and at home.

*Keywords: physical activity spillover, personal resources*

### Paper 3

#### **Challenging at Work and at Home? How and When Work-Related Rumination Prolongs the Consequences of Time Pressure to the Home Domain**

Nina M. Junker, University of Oslo; Thomas Rigotti, Johannes-Gutenberg-University Mainz; Jan A. Häusser, Justus-Liebig University Giessen; Julia Heimrich, Goethe University Frankfurt

##### Research goals and why the work was worth doing

Challenge demands, such as time pressure (i.e., the experience of not having enough time to accomplish one's work tasks; Maruping et al., 2015), not only affect workplace behaviors and well-being but also extend to the home domain. As a result, more challenge demands are associated with more work-to-family conflict (i.e., the perception that the work role interferes with participation in the family role; WFC; Greenhaus & Beutell, 1985). At the same time, these are inconclusively associated with work-to-family enrichment (i.e., the perception that the work role benefits the family role; WFE; Greenhaus & Powell, 2006; see Webster & Adams, 2019). To explain these inconsistencies, we propose two forms of work-related rumination (i.e., thinking about work during nonwork time; Cropley et al., 2012) as mechanisms through which challenge demands (here, time pressure) affect WFC and WFE and study how post-work physical activity affects this mechanism.

##### Theoretical background

Our research is grounded in the job demands-resources theory (Demerouti et al., 2001; Bakker & Demerouti, 2017), which proposes that job demands are resource-draining because individuals need to cope with such demands, thus diminishing their available resources and negatively impacting their well-being and family lives. Later extensions differentiated job demands into challenge and hindrance demands. Whereas hindrance demands are only resource-draining, challenge demands, such as time pressure, are also motivational. Thus, these have the potential to increase resources. We contextualize affective rumination (i.e., being stuck in negative emotions evoked by recurrent thinking about work during nonwork time; Cropley et al., 2012) as a mechanism through which the resource-draining consequences of challenge demands extend to the home domain, resulting in more WFC and less WFE. We further propose problem-solving pondering (i.e., constructively thinking about work during nonwork time; Cropley et al., 2012) as a mechanism through which the resource-gaining potential of challenge demands extends to the home domain, resulting in more WFE. We suggest that post-work physical activity (here, walking or running) buffers the resource-draining path but does not affect the resource-gaining path as it down-regulates negative emotions.

##### Design and methodology

We tested our assumptions in a diary study across 10 workdays and with two daily measurement points among a sample of 118 at least part-time employed individuals. We used established measures, which we adapted to the daily context to assess our variables.

##### Results obtained

Overall, our results support our assumptions. In particular, daily time pressure was indirectly and positively associated with daily WFC and negatively with WFE via more daily affective rumination. Conversely, daily time pressure was indirectly and positively associated with daily WFE via more daily problem-solving pondering. We found differential effects for work-related rumination assessed at

the beginning and at the end of leisure time. Moreover, post-work physical activity modulated the resource-draining path but did not affect the resource-gaining path of challenge demands.

#### Limitations

We used self-report measures. Although these are the most commonly used form of assessing our variables, they have the risk of common-method bias and social desirability, which might have affected our results. However, we took great care to reduce these risks when designing this study.

#### Conclusions – research and or practical implications

We advance job demands-resource theory by introducing two specific mechanisms through which challenge demands extend to affect the home domain, thereby providing an explanation for its inconsistent associations with WFE in prior research. Post-work physical activity represents a remedy against its negative consequences and is a cost-free activity that most individuals can use daily – and even when social distancing measures are in place.

#### Relevance to the congress theme

Due to recent changes in how we work, the boundaries between work and home get increasingly blurred, increasing individuals' tendencies to bring work home – not only physically but also mentally. Our study puts mentally bringing work home by continuing to think about work upfront and presents one way of coping with such mental integration.

#### Relevant UN SDGs

This study particularly speaks to supporting the goal of good health and well-being, which needs to include family-related well-being.

*Keywords: time pressure, work-related rumination, physical activity*

## Paper 4

### **Psychological Detachment Matters Right After Work: Engaging in Physical Exercise After Stressful Workdays**

Theresa J. S. Koch, Sabine Sonnentag, Jette Völker & Hadar Neshor Shoshan | University of Mannheim

#### Research goals

Regular physical exercise is beneficial for health and well-being. In contemporary work life dominated by sedentary behaviour, physical exercise during leisure is a crucial recovery activity. Interestingly, there seems to be a paradoxical pattern between work and physical exercise: Especially on stressful workdays, employees tend to engage less in physical exercise (Ng & Jeffery, 2003; Sonnentag & Jelden, 2009), although physical exercise would be beneficial for their well-being (Rost et al., 2021; ten Brummelhuis & Bakker, 2012). Considering the benefits of physical exercise, this paradoxical pattern raises the need for a better understanding of mechanisms hindering physical exercise after stressful workdays. We address this need and focus on psychological detachment right after work (i.e., mentally switching off from job-related thoughts; Sonnentag & Fritz, 2007) explaining the paradoxical pattern between job stressors, physical exercise, and – as a consequence – well-being.

#### Theory

We build our research on the recovery paradox (Sonnentag, 2018) stating that high levels of job stressors prevent employees from engaging in recovery, whereas recovery is needed most on stressful workdays. We apply this framework to physical exercise as an effortful recovery activity (Tenenbaum & Hutchinson, 2007). Specifically, we suggest that high levels of job stressors (workload, self-control demands) prevent employees from psychologically detaching right after work. Lower psychological detachment, in turn, should explain why employees engage less in physical exercise – namely, because of an ongoing focus on work. We further propose that physical exercise promotes employees' well-being (high vigour, low fatigue) the next morning. Taken together, we suggest a serial indirect relation between job stressors and well-being via reduced psychological detachment and physical exercise.

#### Methods and results

We collected daily diary data from 97 employees (534 days). Applying multi-level path analysis (Preacher et al., 2010), we found that psychological detachment right after work served as an explaining mechanism in the paradoxical relation between job stressors (workload, self-control demands) and physical exercise. Interestingly, we only found a negative direct relation between time spent on physical exercise and next-morning vigour (not fatigue), suggesting that employees felt less vigorous after spending more time on physical exercise. Thus, we also only found partial support for the serial indirect effect regarding well-being the next morning.

#### Limitations

Our findings may, however, be interpreted in view of limitations, because we only considered time spent on physical exercise as an indicator for physical exercise. Future research should address other aspects, such as timing of or happiness during physical exercise. Specifically, exercising before going to bed might hamper employees' sleep (Buxton et al., 2003), thereby negatively affecting vigour the next morning. Moreover, employees may feel less happy when engaging in physical exercise after a

stressful workday but feeling happy while exercising is essential for recovery (Oerlemans et al., 2014). These insights may allow a more fine-grained understanding of when and how physical exercise can be a beneficial recovery activity.

#### Implications and conclusion

Still, our research importantly contributes to literature on physical exercise and recovery from work. We advance the understanding of why stressful workdays impede physical exercise by showing that psychological detachment right after work can serve as an explaining mechanism. We thereby propose a new perspective on the timing of psychological detachment – which might not only be relevant in the evening as an outcome of physical exercise (Rost et al., 2021; ten Brummelhuis & Bakker, 2012), but also already right after work as a predictor of physical exercise. It might be a promising avenue for future research to apply this idea to other (effortful) recovery activities following psychological detachment right after work. Such insights may help to better understand of the role of psychological detachment as a necessary prerequisite for recovery activities.

Practitioners implementing interventions to increase physical exercise after work can gain an essential starting point from our research. Beyond addressing the increase of physical exercise directly, targeting an increase of psychological detachment right after work might be fruitful. Indeed, interventions for improving psychological detachment have been shown effective (Hahn et al., 2011). Overall, such interventions are important to foster employees' health and well-being – particularly after stressful workdays.

#### Relevance to congress theme and UN SDGs

In this context, our research ties in with the congress theme of the changing world of work by emphasising the need of physical exercise during leisure while employees are increasingly less physically active at work. Further relating to the UN Sustainable Development Goals, we hope to inspire research and practice in promoting good health and well-being.

*Keywords: job stressors, psychological detachment, physical exercise*

## Paper 5

### **An Experimental Study to Investigate the Effects of Emotional Versus Cognitive Job Demands on Physical Activity After Work**

Sascha Abdel Hadi & Jan A. Häusser | Justus-Liebig University Giessen; Andreas Mojzisch, University of Hildesheim

#### Research goals

This preregistered experimental study was to investigate the differential (negative) effects of emotional versus cognitive job demands on physical activity after work. Furthermore, we aimed to test self-regulatory capacity as an underlying mechanism for the effects of both job demands on physical activity.

We conducted an experimental work simulation with manipulations of emotional and cognitive job demands. Physical activity was assessed by a physical activity task (cycling on a bicycle ergometer) after participants completed the work simulation.

#### Theoretical background

Research shows that physical activity has important functions for employees' health and well-being. However, individuals frequently fail to exercise after work thereby setting health and well-being at risk. Theorizing points to the idea that work-related factors such as job demands could negatively impact physical activity behavior (Häusser & Mojzisch, 2017). However, looking at the empirical basis for such effects findings seem to be mixed as some studies found support for negative relationships whereas others revealed null effects. Differentiating between subtypes of job demands should increase knowledge about the relationships (Cavanaugh et al., 2000): On the one hand, research points to the idea that especially those types of demands with a hindering potential for goal attainment and motivation (hindrance demands, such as emotional demands) could be negatively related to physical activity. On the other hand, job demands that are positively related to goal attainment and motivation (challenge demands, such as cognitive demands) might be less harmful for physical activity behavior.

Furthermore, research on the underlying mechanisms of the effects is sparse. A few studies point to the role of self-regulatory capacity as a mediating variable (e.g., Sonnentag & Jelden, 2009): Job demands are assumed to negatively affect self-regulatory capacity, that in turn, is positively related to physical activity. We expect that the mediating effect of self-regulatory capacity should be especially evident with regard to emotional demands (compared to cognitive demands) as their negative impact on self-regulatory capacity should be more pronounced.

#### Methods

To test the causal relationships of emotional and cognitive demands, physical activity, and self-regulatory capacity, we conducted an experimental work simulation consisting of customer requests and arithmetic tasks. Emotional job demands were manipulated in terms of customer unfriendliness whereas cognitive demands were manipulated in terms of (arithmetic) task difficulty. After the work simulation, participants had to complete a physical activity task (cycling on a bicycle ergometer). We analyzed data of 120 participants. All participants were randomly assigned to one of three experimental conditions that had different levels of emotional and cognitive demands (i. low

emotional and low cognitive demands versus ii. high emotional demands [and low cognitive demands] versus iii. high cognitive demands [and low emotional demands]).

#### Results and conclusions

Preliminary analyzes point to no differences in the amount of time spent on the bicycle ergometer among the experimental groups and did not reveal self-regulatory capacity as a mediator. However, we found that, although unrelated to self-regulatory capacity after work, physical activity was positively related to self-regulatory capacity after cycling on the bicycle ergometer.

Hence, our first analyzes do not support the idea of differential effects of emotional versus cognitive demands on physical activity. However, we unexpectedly found that self-regulatory capacity was positively impacted by physical activity. Hence, our data suggest a beneficial effect of physical activity to replenish self-regulatory capacity.

#### Limitations

A limitation of this study is the use of a student sample to test the assumptions.

#### Relevance to the congress theme and to UN SDG's

Our research fits well with the congress theme of EAWOP '23 "The future is now: the changing world of work" and the UN SDG'S ("Good health and wellbeing" and "Decent work and economic growth") as it increases knowledge on the relationships between healthy workplaces and physical activity. Furthermore, it identifies strategies (i.e., physical activity) to overcome negative work-related effects.

*Keywords: job demands, physical activity, experimental work simulation*

## Symposium S095

### **The Future of Organizational Decision-Making: Advancing Research on Attitudes Toward and Outcomes of Using Artificial Intelligence at Work**

Sophie Kerstan, Federico Magni | ETH Zurich

science

Content: Organizations increasingly rely on Artificial intelligence (AI) in decision-making contexts to boost efficiency and accuracy. This trend is observable across various processes and domains, including human resource management, public administration, and healthcare. Although the literature on how people react to and leverage AI as a decision-making agent has been thriving in the past years, there are still many unresolved questions about (a) humans' preferences for how AI should be used, (b) how the implementation of AI-supported decision-making affects work processes, and (c) what the impact on work outcomes will be. This symposium compiles five research projects that shed light on these issues by considering the role of AI as a recommendation provider, evaluator of human decisions, and agentic decision-maker.

Specifically, Magni & Jeong look at AI in the role of an evaluator. They investigate how being evaluated by AI rather than humans influences people's decision-making (e.g., choosing between alternatives with different risk profiles) and their generative behaviors in the context of organizational creativity.

Mengchen and colleagues study people's emotions, intrinsic motivation, and perceived fairness when subject to a human manager's vs AI's evaluative decisions. By leveraging an experimental design, they compare people's expectations for algorithmic vs human management against their actual experiences.

Schneider and Leyer investigate how perceived trustworthiness and ascribing either governmental or corporate ownership to AI affect people's willingness to accept and use agentic AI in decision-making contexts. In a series of experiments, they further differentiate between the perspectives of people making decisions and those affected by them.

Through a qualitative, longitudinal field study, Bunzel and colleagues explore individuals' experiences around implementing an AI-based decision support system in a company. They apply a socio-technical system perspective to examine how multiple stakeholders shape the use of AI and how, in turn, AI shapes work over time.

Finally, Kerstan and colleagues investigate how decision errors that occur due to over- or under-reliance on AI-based recommendations can be prevented. They experimentally test whether holding ambivalent (rather than monovalent negative or positive) attitudes toward AI improves AI-supported medical decision-making.

Relevance to the Congress Theme: This symposium considers how the future of work is and will be characterized by using AI to inform decision-making in organizations. By advancing our knowledge of how people react to and interact with AI, the research projects cumulatively suggest ways to integrate AI into organizational processes to enhance performance and well-being. We point to a human-centered perspective in this matter by calling attention to humans' preferences for how much agency AI should receive and how human-AI collaboration at work should be configured to foster beneficial outcomes for individuals and organizations.

Research/Practical Implications: This symposium will help advance multiple theoretical pillars of the human-AI decision-making literature. Particularly, the featured work will deepen our knowledge about drivers of algorithmic aversion and appreciation, uncover biases that people hold when interacting with AI, and refine theories of trust in AI. In this regard, the contributions allow for much-needed comparison and differentiation between theories of organizational processes that solely involve human actors compared to those involving AI.

Concerning practical implications, we provide holistic recommendations for designing and implementing AI by considering the views of multiple stakeholders in organizational decision-making. Since the symposium comprises a range of AI application cases, we will further be able to uncover similarities and differences across contexts.

The symposium provides a theoretically grounded and practically relevant contribution by pairing experimental laboratory designs with field research.

Conclusions: The five research projects in this symposium investigate how humans react to AI, how AI shapes and is shaped by work processes, and what outcomes emerge from incorporating AI across different roles in decision contexts. Specifically, we compile work that considers AI as a decision-support system—e.g., providing recommendations—and as an active decision-maker—e.g., in a managerial or evaluative role—to provide a multifaceted perspective on the future of organizational decision-making with AI.

Based on the broad theoretical perspectives and methodological approaches applied throughout the featured studies, we will gather empirical evidence and advance knowledge about human-AI interaction at work. We also hope to help the practical implementation of AI in ways that are beneficial to individuals and fruitful for organizations and inspire future research on AI's involvement in decision-making.

*Keywords: future of work, human-AI interaction, organizational decision-making*

## Paper 1

### The Behavioral Consequences of Being Evaluated by AI in Terms of Organizational Creativity

Federico Magni, ETH Zurich; Martha Jeong, Hong Kong University of Science and Technology

**Research Goals:** As AI is increasingly prevalent in organizational processes, we aim to better understand how this phenomenon affects people's decision-making processes and organizational behaviors. Specifically, we study how appropriate people find the utilization of AI as an evaluator in diverse tasks and how knowing that one's work or choices will be evaluated by AI changes one's decisions and behaviors in the context of creativity at work.

**Theoretical Background:** The usage of AI in organizational processes such as recruiting, customer relations, and product development is booming. However, we still know little about how people react to the usage of AI in organizational processes, and specifically whether this affects their decision-making and their behaviors. Theories of algorithm aversion and algorithm appreciation both found empirical support, suggesting that individuals' reactions to AI-powered agents vary based on factors such as context, individual differences, and task characteristics. With this research, we aim to better understand how people react to instances in which their choices and productions will be evaluated by AI, and specifically how AI evaluation influences their decision-making in terms of risk and creativity. We expect that, given that AI analyzes objects based on a set of pre-determined criteria, people would be more conservative and norm-conforming in their choices when they know that they are evaluated by AI rather than humans, which can impair their creativity.

**Design/Methodology:** We conducted three studies: in Study 1, we assigned 504 participants to one of five tasks (creative writing, logo design, alternative use idea generation task, Lego building, and business pitch) and asked them to report their preferences for being evaluated by AI or human on that task and the reasons behind that preference. In Study 2 we asked 399 participants to come up with creative uses for a ping pong ball and told them that they would be rated by either an AI or a human. In Study 3 we presented 384 participants with two ideas (one described as riskier and more unconventional than the other) and told them to choose which idea they would submit to the evaluation of either a human or an AI.

**Results Obtained:** Study 1 results showed that people prefer a human evaluator for all five tasks, most strongly for logo design and least strongly for assessing a Lego building. The qualitative data showed that people base their preferences on factors such as emotions, fairness, perceived judgment capabilities (e.g., flexibility, creativity), being able to take advantage of the evaluator, and task characteristics. In Study 2 we did not find a significant direct effect of the evaluator's identity as AI (vs human) on idea creativity, but we did find a moderation by need for uniqueness (NFU), such that people with high NFU generated more creative ideas when they were told they would be evaluated by a human rather than AI. In Study 3 we found that people found human evaluators to be more moral, warm, and competent, with competence making participants more likely to select the less risky idea (against our prediction). We also found that the effect of the evaluator's identity on perceptions of the evaluator was moderated by people's algorithm aversion.

**Limitations:** So far, we have not found a direct effect of the evaluator's identity on either creativity or creativity-prone decision-making. We will test these hypotheses again with different designs. In Study 3, many participants failed the manipulation check, pointing that our design can be improved. Finally, no studies were in the field.

Conclusions: We found that people generally prefer human evaluators in a variety of generative tasks, and that the evaluator's identity as AI (vs human) seems to not have a direct— but rather a more nuanced—effect on decision-making and behaviors. Individual characteristics such as NFU and algorithm aversion impact this effect.

Relevance to the Congress Theme: Instances in which people need to engage in decision-making when interacting with AI evaluators in organizations are increasing, and the future of work will see an increase in AI-human interactions. For this reason, it is greatly important to understand whether knowing that one's work and decisions will be assessed by AI does impact decision-making and creativity.

Relevant UN SDGs: #3 Good Health and Well-Being, #4 Quality Education, #8 Decent Work and Economic Growth, #9 Industry, Innovation and Infrastructure, #10 Reduced Inequalities, #17 Partnerships for the Goals

*Keywords: AI-based evaluations, reactions to AI, algorithm aversion*

## Paper 2

### **Working in the Metaverse: Feelings and Behaviors Under AI Management in A Minecraft Game**

Mengchen Dong & Iyad Rahwan | Max Planck Institute for Human Development; Jean-François Bonnefon, Toulouse School of Economics; Xinyu Zhang & Shihan Wang | Utrecht University; Levin Brinkmann, Max Planck Institute for Human Development

**Research Goals:** The Metaverse may revolutionize people’s work experience in the near future, featured by interactions in the virtual space, through avatars, and with Artificial Intelligence (AI) agents. In a Metaverse-like Minecraft game environment, we aim to examine (1) people’s feelings and behaviors under AI versus human management, and (2) the extent to which people’s expectation resembles their actual experience of AI management.

**Theoretical Background:** The concept of Metaverse has recently attracted massive business attention and inspired many product innovations. While customers and service providers may be equally excited about creating a more immersive experience, it may not be the case in work-related contexts where employees and employers have unequal power and status. A recent survey shows that employees can be less enthusiastic about working in the Metaverse, partly due to concerns about the systematic deployment of AI for surveillance and management. However, people’s negative expectations may not necessarily represent actual feelings after experiencing AI management in the Metaverse. On the one hand, previous studies on algorithmic management suggest that, as compared to human management, people expect AI managers to be demotivating, dehumanizing, and unfair. On the other hand, psychological research also suggests that people are not good at predicting future emotional states and can have overly vigilant reactions when a situation implies their inferior status. Then, is AI management in the Metaverse still demotivating and unfair after (vs. before) experiencing it? And would the virtual environments and avatars blur the boundary between human and AI management?

**Design/Methodology:** Participants will complete a two-wave experiment. They will first be invited to take a survey about expected emotions, motivation and fairness under AI management. On a different day, they will be invited to participate in the Minecraft experiment, working in an “iron pickaxe factory” for three repetitive rounds. Participants will be randomly assigned to an AI manager or a human manager condition. For those who are assigned to the human manager condition, participants will be further assigned to a manager or a worker role. In contrast, participants will all be assigned to the worker role in the AI manager condition. The AI manager is a three-level classifier model trained on random forest algorithms. Both human managers and the AI manager will monitor workers in real time on building an iron pickaxe, and then evaluate their performance at a beginner, intermediate, or advanced level – corresponding to different monetary incentives. Before receiving the evaluations, workers will indicate their experienced intrinsic motivation. And after receiving the evaluations, they will be asked about actual emotions and fairness perceptions.

**Results Expected:** We will systematically compare people’s expected emotions, motivation and fairness with their experienced ones, and observe how these feelings change over the course of working on the repetitive task. We will also compare feelings in the AI and human management conditions, and explore whether people behave differently in the two conditions.

**Limitations:** The iron pickaxe task comprises multiple subtasks and can be completed in different ways, which allow people to form different impressions of AI in evaluating them. However, as

compared to many subjective tasks requiring intuition or creativity, our task may be seen as relatively easy to quantify and thus acceptable in the case of AI management.

Conclusions: To be continued after data analysis.

Relevance to the Congress Theme: While the Metaverse has triggered heated discussion in the business world, little empirical evidence can be drawn to understand its psychological and ethical implications. Our work simulates the future workplaces in the Metaverse in a game environment, and may shed light on facts and challenges of human-centered management in the context of intelligent and autonomous machines.

Relevant UN SDGs: #3 Good Health and Well-Being, #4 Quality Education, #8 Decent Work and Economic Growth, #9 Industry, Innovation and Infrastructure, #10 Reduced Inequalities, #17 Partnerships for the Goals

*Keywords: AI management, Metaverse, expectations toward AI*

### Paper 3

#### **Whom Do We Trust in Decision-Making? Perceptions of Managers and Politicians vs. Agentic AI**

Sabrina Schneider, Management Center Innsbruck; Michael Leyer, University of Marburg

**Research Goals :** This study aims at exploring the perceptions of trustworthiness that decision-makers and those affected by decision outcomes have of agentic AI as decision agents. More precisely, we aim to answer the following research question: How do perceptions of trustworthiness of (a) agentic AI and (b) the agentic AI's owner effect one's acceptance and usage of agentic AI in decision-making? This work is worthwhile doing as we live in a world with increasingly powerful and available AI-enabled solutions for decision-making (e.g., Lindebaum et al., 2020; Wing, 2021). We however know that humans tend to be reluctant to use agentic AI due to negative predispositions (such as algorithm aversion, e.g. Berger et al., 2021; Burton et al., 2020; Dietvorst et al., 2015, 2018) and anxieties (e.g., Dirsehan & Can, 2020; Suseno et al., 2020). Learning how we can overcome such reluctance will not only help organizations and society to remain competitive, but also to influence the design how we use agentic AI in the future.

**Theoretical Background:** Theoretically, this study builds on agency and organizational trust theories. We discuss the perception of trustworthiness of AI-enabled, technological agents acknowledging that machine agency exists, despite being different and weaker than human agency (e.g., Leonardi, 2011; Puranam & Vanneste, 2022). We thereby rely on the traditional understanding of trust as a three-part relationship in which one trusts another to do something (Kim & Routledge, 2022) and trust depending on subjective perceptions of the trustworthiness of the decision agent and one's personal trust propensity (Mayer et al., 1995; McKnight et al., 1998).

**Design/Methodology:** Methodologically, this study builds on a series of experimental studies comparing perceptions of different decision-making agents (human vs. agentic AI) in situations of varying levels of decision magnitude (high vs. low) and different organizations (companies vs. governments) being in charge. Furthermore, we distinguish between the perspective of those offered to delegate a decision to a decision agent and those affected by a decision made by somebody else. The independent variables measured center on the trustworthiness of the decision agent and its owner. Our dependent variables focus on one's willingness-to-use a technological agent or to accept the decisions made by the agent. In total, the study's sample comprises more than 400 participants.

**Results Obtained :** Our findings show that agentic AI changes whom we trust. Perceptions of trustworthiness of both the decision agent and its owner/principal influence decision acceptance and delegation. Further, individuals prefer human decision-makers only in corporate, but not in governmental, decision contexts. Additionally, our findings reveal that individuals find it easier to accept decisions made by agentic AI than to delegate decisions to agentic AI.

**Limitations :** Limitations of this study include the scenario-based, experimental research design; the national emphasis on one cultural background (Germany); and the failure to measure novel elements of trustworthiness relevant for AI-enabled, but not human agents.

**Conclusions :** This paper contributes to the literature on agentic AI in decision-making. In line with recent contributions, we show the need to focus on perceptions of trustworthiness (Puranam & Vanneste, 2022). Going beyond this, however, we emphasize the relevance of the role of the trustee's owner—a perspective that has often been neglected in traditional trust concepts (e.g., Mayer et al., 1995; Schoorman et al., 2007). Further, we highlight the relevance of trustee

benevolence and integrity, in combination with the challenge that we are not capable of identifying motivating behaviors of agentic AI, as a major hurdle to achieving perceptions of trustworthiness. This emphasizes the need to consider human-in-the-loop constellations that allow for sufficient justification of the decision-making behaviors for all actors involved.

Relevance to the Congress Theme : This study contributes to the congress theme emphasizing the changing world of work by looking at novel, technological decision agents that challenge established perceptions of exclusive human agency in managerial decision-making. The emergence and further diffusion of agentic AI in corporate decision-making is likely to change the role of managers and consequently, it will affect work design considerations.

Relevant UN SDGs : Relevant UN SDGs addressed directly in this research are #8 “Decent Work and Economic Growth” in combination with #9 “Industry, Innovation and Infrastructure”. However, given the potential impact of agentic AI in decision-making to improve the overall quality of decision-making, the study’s indirect contribution can contribute to a much broader range of UN SDGs.

*Keywords: agentic AI, trust, acceptance of AI*

## Paper 4

### **Friend or Foe? - A Qualitative Study on the Socialization Process of AI-Augmented Decision-Making at a Public Organization**

Carlotta Bunzel, University of Amsterdam; Robert Verburg, TU Delft; Deanne N. den Hartog & Corine Boon | University of Amsterdam

**Research Goals:** Using artificial intelligence (AI) to augment decision-making bares the promise to increase efficiency, consistency and quality of decisions. Despite a growing body of experimental studies on AI decision-making, there is a noticeable lack of studies that examine the intra- and interpersonal effects of implementing AI decision-support systems (Langer & Landers, 2021). Thus, in the present study we examine the implementation of an AI decision-support in a public organization with a qualitative, longitudinal, multi-stakeholder approach. By integrating socialization and work design perspectives, we address the following questions with our research: How do individuals experience and shape the implementation of an AI decision-making system, and how does the AI system affect individuals' work design over time?

**Theoretical Background:** The Socio Technical Framework of AI Socialization (Makarius et al., 2020) defines AI socialization as a core process that the determines the success of integrating AI into organizations. The authors underscore the centrality of employee experience in the socialization process for creating intangible socio-technical capital. Based on the idea of AI socialization we aim to explore the implementation of an AI decision-support system. In doing so, we not only focus on how individuals shape the meaning of AI but also how AI is shaping the design of individuals' work. Therefore, we combine the AI socialization framework with a work design approach (Parker & Grote, 2020) to examine how the experience of job autonomy, skill variety and use, feedback, and relational aspects of work evolve throughout the AI socialization process.

**Design/Methodology:** In the present study we take a qualitative, longitudinal approach to accompany an implementation of AI decision-support at a public organization in the Netherlands. The AI decision-support was built and trained to support employees in the handling of special support requests. For example, individuals can request special financial support for when costs occur in their daily life that they cannot finance on their own. Across three points in time (pre-, per-, post-implementation) we conduct semi-structured interviews and investigate how multiple stakeholders perceive the implementation of the system: team members (N=8), team managers (N=2), as well as people who regularly rely on special support (N=3). Apart from the interviews we will also use available information provided by the start-up that provides the AI decision-support as well as from the public organization.

**Expected Results:** We will use a theoretically guided thematic analysis approach to analyze interview and case study data. Nonetheless, we plan to remain open for themes that might emerge during the data collection process. We conducted the pre-implementation interviews in the beginning of October 2022 and will most likely have finished the rest of data collection until early 2023.

**Limitations:** One of the main limitations of our study is the small sample size which is grounded in the size of the department where the decision-support is implemented. Another limitation concerns the generalizability of our study as we are examining the implementation within one single public organization department.

Research/Practical Implications: With our present study we aim to provide new insights into the effects of implementing AI-augmented decision-making. Through our unique methodological approach, we examine how multiple stakeholders are affected by the implementation over time. More specifically, we focus on how individuals shape the meaning of the AI-based decision support and how the system in turn shapes individuals' work. Thereby, we add to the socio-technical theory of AI socialization and work design. Finally, our study will provide valuable insights for practitioners on how they can support employees and other stakeholders throughout different phases of the socialization process.

Relevance to the Congress Theme: The implementation of AI-based solutions into organizational dynamics is redefining the nature and future of work. Therewith, new challenges for organizations and individuals arise. It is upon us as researchers to evaluate how new socio-technological systems are reshaping work and to provide guidance for individuals and organizations alike. Our study contributes to this goal by studying the socialization process of AI-augmented decision-making.

Relevant UN SDGs: Our study contributes to the UN SDG of "reduced inequalities". With the rapidly developing capabilities of AI decision-making systems, both the risk for creating more inequality, and for reducing inequalities between individuals increases. Thus, in our study we plan to carefully examine the effect on individuals when augmenting decision-making with AI. This allows us to provide recommendations on how AI can contribute to reducing inequalities rather than contribute to amplifying them.

*Keywords: AI-augmented decision-making, AI socialization, work design*

## Paper 5

### **Good AND Bad: Can Ambivalence Toward AI Help Mitigate Errors in AI-Supported Medical Decision-Making?**

Sophie Kerstan & Gudela Grote | ETH Zurich; Jan B. Schmutz, University of Zurich

**Research Goals:** The use of AI at work to improve decision-making is increasing. However, people tend to wrongfully accept or discard AI-based decision-making recommendations. In healthcare, such mistakes can be extremely costly. To identify ways to mitigate these errors, we examine how holding ambivalent attitudes toward AI might condition more thorough examinations of AI-based recommendations in medical image evaluations, thus fostering more accurate diagnostic decisions.

**Theoretical Background:** Research on human-AI interaction has conceptualized favorable vs unfavorable attitudes toward AI as opposing ends of a continuum. Based on this literature, wrongfully accepting or discarding AI-based advice is attributed to possessing attitudes toward AI that are either overly positive or negative. This view neglects ambivalence, as a state in which strong positive and negative thoughts or feelings toward an attitude object exist simultaneously. In the broader psychology and management research sphere, studies have shown that ambivalence is prevalent and influential in humans' daily lives. For example, being ambivalent can broaden people's attention scope and motivate them to engage in a more holistic and balanced consideration of available information. Particularly, being ambivalent can help to decrease decision-making biases when people correctly identify the source of their ambivalence. We project these findings onto AI-supported decision-making and argue that people with ambivalent attitudes toward AI will intend to rely on AI-based recommendations less than those with more monovalent positive attitudes but more than people holding negative attitudes. Furthermore, we hypothesize that people with ambivalent attitudes toward AI will make fewer mistakes in an AI-supported decision-making task than people with positive or negative attitudes.

**Design/Methodology:** In our first online experiment, we tested the success of manipulating attitudes toward AI as a between-subject factor (positive vs negative vs ambivalent) with 60 medical students. We also measured participants' intention to rely on AI-based advice in a medical diagnosis scenario. We apply the previously tested manipulation in a second online experiment (currently 40 medical students). In addition to the three experimental groups, we added a control group for which there is no manipulation of AI-related attitudes. All participants receive pre-recorded video training for a mammography evaluation task. They then classify mammographs regarding whether they show signs of cancer. The images are accompanied by what participants assume are AI-based classification recommendations.

**Results Obtained:** Experiment I revealed that participants in the ambivalent condition reported lower intentions to fully rely on AI than the positive attitude group and higher intentions than the negative attitude group. This finding is in line with our expectations. A preliminary analysis of experiment II data indicated that for cases where AI-based recommendations were incorrect, the ambivalent attitude group made fewer mistakes than all other groups. For cases where AI-based recommendations were correct, the ambivalent and positive attitude groups performed comparably and better than the negative attitude and control groups. These analyses will be repeated when data collection for experiment II (with a target sample size of 150) is complete, which we expect for December 2022.

Limitations: Beyond the uncompleted data collection for experiment II, our study has two main limitations. Firstly, our samples consist of students. Follow-up studies with working professionals are needed to replicate the findings. Secondly, the mammography decision-making task is highly context-specific, which prohibits the generalization of our findings. Future research could consider a broader range of decision-making contexts to examine the extent to which ambivalence toward AI affects AI-supported decision-making more broadly.

Conclusions: Our initial findings suggest that being ambivalent toward AI might help mitigate decision-making errors in AI-supported medical decision-making, especially in cases where AI makes mistakes. The main theoretical implication of this finding is that the literature on AI use might benefit from incorporating multidimensional attitudinal facets, e.g., ambivalence, compared to exclusively considering attitudes as a unidimensional, bipolar construct. Furthermore, the provided insights can help develop recommendations for training healthcare professionals interacting with AI.

Relevance to the Congress Theme: The fact that AI is increasingly deployed in organizations to support decision-making might make it seem as if the future is now. However, we must carefully address the biases and flaws that AI-supported decision-making introduces and have yet to find ways to contain these. In this regard, our study will help to outline how minding people's attitudes toward AI can support the design of a safer, more effective future of human-AI decision-making.

Relevant UN SDGs: #3 Good health and well-being; #8 Decent work and economic growth; #17 Partnerships for the Goals

*Keywords: attitudes toward AI, medical decision-making, decision-making biases*

## Symposium S096

### Times of precariousness: Happy, healthy, and productive workers within new forms of work

Annabelle Hofer, University of Cologne

science

What will be covered and why?

This symposium focuses on advancing the scholarly knowledge of new forms of work. Research in this area has gained significant momentum in light of the COVID-19 pandemic and the war in Ukraine, which increased the precariousness of workers and resulted in an increase in new forms of work (Spurk & Straub, 2020). New forms of work bring new risks and chances, which in turn ask for further personal and contextual resources to deal with them (Ashford et al., 2018; Ashford et al., 2007; Fieseler et al., 2019; Kuhn & Maleki, 2017). However, research is still developing, and further insights are needed to advance our knowledge in this area to understand better how it is possible for workers to be happy, healthy, and productive in precarious times within new forms of work. This symposium addresses existing gaps by using (longitudinal) quantitative research from Germany, Switzerland, and Ukraine on the factors shaping and the experiences unfolding in people's careers working within new forms of work and within/during precarious times such as war and COVID-19. The contributions cover diverse sample from nurses, academics, and gig workers. The four studies advance insights into workers' perceptions and behavior in precarious times.

The first study aimed to identify and describe nurse work arrangements and investigate the effects of fairness issues across and within different work arrangements. This study investigates inequity perceptions across 287 nurses with different work arrangements (staff, per-diem & travel) in Switzerland. The authors show how inequity perceptions are related to happiness (job satisfaction) and health (exhaustion).

The second study, „Successfully engaged in creativity? - The longitudinal interplay of career success, work engagement and creativity in academia.” addresses the career success of academic scientists in Germany. Data (N = 1385) were collected via a longitudinal online survey (four measurement points, one-year intervals) on academic scientists. The work conditions in academia are demanding due to short-term contracts, part-time payment, and insecure career perspectives. In a longitudinal design, this study tested a gain spiral between a personal resource, a motivational process (work engagement), and work performance (creativity).

While studies 1 and 2 focused on specific professional groups, studies 3 and 4 are devoted to various tasks performed in the gig economy in times of crisis (i.e., COVID-19, war). The third study aims to shed light on how women's employment on online platforms affects their future opportunities in the labor market and their gross wage income. Furthermore, the study provides insights into female workers' current activities, intentions, and perceptions. The author conducted a 300 female gig workers survey via a German micro-tasking platform. Two waves were collected shortly before the pandemic outbreak and shortly after. The study results are linked to objective career success (income) and address a specific career shock (i.e., COVID-19).

The war within Ukraine is affecting career-related decisions for working individuals. However, there needs to be more knowledge on how and if war-related circumstances are seen as career shocks and how these career shocks affect career-related outcomes. Therefore, the fourth study examines war-related career shocks and their impact on gig workers' career outcomes in Ukraine.

## Relevance to the Congress Theme

Our symposium fits the theme excellently, as it sheds light on new forms of work.

The future is now. Our symposium shows the extent to which work arrangements have already changed and how it has been possible for new forms of work to develop quickly.

The future is now! Our symposium highlighted the urgency of better understanding new forms of work.

The future is now? Precarious work arrangements are associated with advantages and disadvantages. For example, the gig economy provides short-term income when other sources of income are eliminated, but what are the longer-term consequences for workers, companies, and society?

## Research/Practical Implications

The symposium highlights the complexity and the factors shaping sustainable career development within new forms of work in precious times. We extend career research and foster further theory development by studying topical issues relating to new forms of work.

## Overall conclusions

This symposium shows that it is of utmost importance to understand precarious work types in precarious times better. In all, the symposium helps advance empirical knowledge of sustainable career development of workers, being happy, healthy, and productive within new forms of work.

*Keywords: new forms of work, career success, career shocks*

## Paper 1

### Successfully engaged in creativity? - The longitudinal interplay of career success, work engagement and creativity in academia

Larissa A. Reis, Simone Kauffeld & Markus Szczesny | Technische Universität Braunschweig; Daniel Spurk, University of Bern

#### Research goals and why the work was worth doing

The number of university graduates who start their career in academia is rising (Maher & Sureda Anfres, 2016). The work conditions in academia, however, are demanding: short-term contracts, part-time payment, insecure career perspectives; just to name some of the inherent problems (cf. Kauffeld & Spurk, 2019; Ortlieb & Weiß, 2018). To face these challenges young researchers need resources. We follow the recent resource perspective on subjective career success (SCS) and bring it together with creativity in academia as a desired outcome. In line with COR-theory (Hobfoll et al., 2018) we hypothesize SCS functions as a personal resource under stress, that increases employee's future work engagement and indirectly their future creative work performance. Furthermore, we state that performing creativity leads to a higher future perception of success. To sum up, we are testing a positive indirect feedback loop between SCS, work engagement, and creativity over time (SCS to work engagement to creativity to SCS).

#### Theoretical background

Connected to the beforementioned precarious work conditions in academia is also the predominant way to measure success in academia with quantity of publications, h-index and co. The German psychological society discusses the question of how to rate success in academia better. Quality of research (such as open access, creativity, and innovativeness of outputs) gains momentum when it comes to academic careers (Abele-Brehm & Bühner, 2016).

At once, a recent vocational research and societal focus is on subjective evaluation processes when it comes to success in careers (Akkermans & Kubasch, 2017 ; Spurk et al., 2019). SCS is defined as the individual evaluation or experience of valued career goals (Ng & Feldmann, 2014). Young generations prefer happiness and satisfaction over objective success, such as promotion (Lalić et al., 2020). Spurk et al. (2019) stated that it is not only interesting how SCS emerges but also if SCS can play a role as a resource for other desired outcomes in academia (such as motivation and creativity).

#### Design/Methodology/Approach/Intervention

Data (N = 1385) were collected via a longitudinal online survey (2014-2017; four measurement points, one-year intervals) on German academic scientist (PHD candidates and PHD holders). We specified a measurement model with sixteen latent factors conducting several measurement invariance analyses and found support for metric invariance. Therefore, we conducted the final cross-lagged panel model with constrained factor loadings over time (model fit:  $\chi^2(1871) = 3136.68$ ,  $p < .001$ ; RMSEA = 0.02; CFI = 0.96; TLI = 0.95; SRMR = 0.06).

#### Results obtained

Results show significant cross-lagged paths from SCS to work engagement (all  $\beta$ s = 0.04 - 0.05, all  $p$ s < .05) as well as from work engagement to creativity (all  $\beta$ s = 0.06, all  $p$ s < .01). As expected, an increase in SCS leads to an increase in work engagement over time, and an increase in work

engagement leads to an increase in creativity over time. However, we find no significant paths from creativity to SCS ( $\beta$ s = -0.02, all ps = .33).

#### Limitations

The study lacks an experimental design. Therefore, we cannot control for all possible influences of third variables. All variables were measured via self-report. Especially creativity should be discussed in this regard. All study variables show high stabilities over time.

#### Conclusions – research and or practical implications

This study tested a gain spiral between a personal resource (SCS), a motivational process (work engagement) and work performance (creativity) in a longitudinal design. We add new insights on the role of SCS as predictor/ resource in combination with COR-theory.

Our findings stress the need for frequent reflection over the own achievements as important instrument for a happy and productive career development in academia. The institutions need to provide time and latitude for self-reflections and creative research. Last, our findings support the need for a shift of career evaluations in academia.

#### Relevance to the Congress Theme

This work contributes to (1) Careers and the Labour Market, as it investigates a sample in precarious work conditions namely: part-time and short-term work in academia. Moreover, we add knowledge to (3) Creativity, Innovation and Risk-taking , as the results show that success and motivation foster creativity in academia.

#### Relevant UN SDGs

The work is related to the SDG 8: Decent work and economic growth , as we study an interplay of career- and work-related variables that foster a healthy and productive career development. Furthermore, facing climate change and contributing to worldwide SDGs it is worthy to study how creative solutions can be fostered in academia (SDG 9).

*Keywords: Subjective career success, Creativity, Cross-lagged model*

## Paper 2

### War-related career shocks and career outcomes of gig workers in Ukraine

Tetiana Tverdushka, Bern University of Applied Sciences; Annabelle Hofer, University of Cologne; Daniel Spurk, University of Bern; Caroline Straub, Bern University of Applied Sciences

#### Research goals and why the work is worth doing

The war within Ukraine is presumably affecting career-related decisions for working individuals. However, there is a lack of knowledge on how and if war-related circumstances are seen as career shocks and how these career shocks affect career-related outcomes. Therefore, this study examines war-related career shocks and their impact on gig workers' career outcomes. Gig work represents a substantial amount of paid work within the Ukrainian labor market and can be seen as a flexible and adaptable work type, which seems specifically relevant within the recent Ukrainian context.

#### Theoretical background

Research on career shocks has received increased research attention in the career literature. Seibert et al. (2013) and Akkermans et al. (2018) conceptualize career shocks as “disruptive and extraordinary events that are, at least to some degree, caused by factors outside the focal individual's control and that trigger a deliberate thought process concerning one's career”. Career shocks shape an individual's career path and can both hinder and enhance career development (Blokker et al., 2019; Hofer et al., 2021; Kraimer et al., 2019). Career shocks relate to an individual's job search behavior and can promote entrepreneurial intentions to start a business (Akkermans et al., 2021). Hence, it is a crucial research question how war-related career shocks affect career outcomes. Our assumption is that war-related career shocks are generally detrimental for career outcomes like career optimism and career satisfaction. Furthermore, we assume that career salience plays a buffering role for those relations. Because career shocks might also be positive and not only negative, we also examine whether war-related career shocks might have positive effects for some individuals and if gig work per se provides opportunities to adapt to war-related career shocks.

#### Design/Methodology/Approach/Intervention

Because it is the first study in this context, we chose a cross sectional design for a first understanding of our core constructs within a war context. We adapted the career shock measure to account for the war context and ask several career and war related questions to better understand how gig workers combine career and work-related issues with experienced circumstances due to the recent war. Besides this, we applied well accepted measures from past research (e.g., career optimism and career and job satisfaction).

Data will be collected in autumn 2022 and empirical findings can be presented at the EAWOP conference. The data collection is part of a larger research project on “Platform work in Europe” which is funded by the Swiss National Science Foundation as part of its National Research Program 77 for Digital Transformation.

#### Limitations

Due to shortage of time, we can present only cross-sectional data but plan to follow up with a second measurement point.

#### Conclusions – research and or practical implications

We hope that our research will inspire scholars both within and outside of the field of career research to better understand how career shocks may impact the way in which gig workers in Europe develop their careers. Moreover, this research is insightful for supporting gig workers within the Ukrainian war context and can provide useful insights for policy makers.

#### Relevance to the Congress Theme

The last year has changed the economic preconditions for the world of work. Gig workers that may work remotely and flexible on the global labor market can play a vital role within those changes. Against the recent Ukrainian background, the flexible gig work market may have a specifically relevant role for the population in general. Results of our study can help gig workers thrive in this new employment relationship and to prompt platforms and organizations to treat them fairly while benefitting from their contributions.

#### Relevant UN SDGs

This study will reveal important opportunities that platform work provides for Ukrainian gig workers these days, but it also raises important and relevant answers to UN SDGs questions on the sustainability and equality of this work.

*Keywords: gig work, war, career success, career shocks*

### Paper 3

#### Equity Theory Predictions Across (and Within) Different Work Arrangements

Caroline Gahrman, Petra Liselotte Klumb & Bernhard Piskernik | University of Fribourg

Research goals and why the work was worth doing . As the Covid-19 pandemic aggravated precarious working conditions in health care, nurses increasingly left the profession or chose temporary work arrangements that promised flexibility and better hourly pay. We consider nursing an exemplary case for professions in which different work arrangements coexist. Consequently, nurses may work side-by-side and take care of the same tasks but be employed through different contracts. This heterogeneity in contracts raises important questions regarding fairness. These questions deserve particular attention within the context of nursing, as nurses' skills are highly demanded, making social comparisons and fairness issues especially potent.

Theoretical background. To explain nurses' reactions to fairness issues, we draw on equity theory. Hence, we assume that nurses in all work arrangements use social comparisons to determine the relative distribution of received outcomes compared to invested input. Based on dynamics specific to the nursing profession, we assume that staff nurses perceive this distribution as less equitable than travel nurses who are employed by external agencies. In line with equity theory, we assume that inequity perceptions are positively linked to exhaustion and negatively linked to job satisfaction across nurse work arrangements. Furthermore, we extend equity theory predictions in two ways. First, we consider the role of resource trade-offs. Specifically, we posit that appreciation is an additional resource that buffers detrimental reactions to inequity. Second, we investigate how the accessibility of information for social comparisons may impact effects of inequity. More specifically, we investigate how staff nurses' exposure to temporary nurses influences their reactions to inequity.

Design/Methodology. A total of 366 nurses (246 staff, 120 travel) participated in the complete two-wave survey study. We used a three-step approach within a multi-group framework to investigate differences between arrangements. First, treating item responses as ordered categories in a confirmatory factor analysis (CFA), a (partially) invariant measurement model of all factors was established. Second, the CFA was expanded to a structural equation model to compare the main effects between groups. Lastly, invariance-adjusted factor scores were used in a random-slopes model to test whether the degree of moderation differs between groups.

Results . In line with our assumptions, staff nurses reported higher levels of inequity than travel nurses. Inequity perceptions were negatively related to job satisfaction and positively related to exhaustion across nurse work arrangements. As expected, appreciation buffered detrimental effects of inequity in temporary nurses. Contrary to our assumptions, effects of inequity on job satisfaction and exhaustion were stronger for permanent nurses who reported more (vs less) appreciation from colleagues. Lastly, exposure to temporary nurses strengthened the effects of inequity on exhaustion but not job satisfaction.

Limitations . We restricted data collection to Swiss nurses. While this approach enables precise conclusions about arrangement-specific differences in a sample that works under otherwise similar conditions, further research is needed to investigate whether these findings can be generalized to other contexts. In addition, while we separated assessments of predictor and outcome variables by two weeks, we cannot completely exclude common-method bias because of the reliance on self-

reports from one source. Finally, despite the temporal distance between questionnaires, our data are cross-sectional and prohibit insight into the directionality of effects.

Conclusions – research and or practical implications. Our work demonstrates that inequity perceptions and associated strain are harmful side-effects of contract heterogeneity. These side-effects can lead to severe disruptions in fields where labour markets are tight, and employees are highly coveted, allowing them to leave an unsatisfying situation for one with better conditions.

Relevance to the Congress Theme . Employment relationships are constantly evolving as advances in digitalization match longstanding trends towards the flexibilization of work. This trend applies to the nursing profession, where the percentage of nursing hours put in by temporary nurses who are booked for single shifts (per-diem nurses) is rapidly increasing. Our research offers insight into how these changes affect nurses' experiences, focusing on the role of fairness issues between different nurse work arrangements.

Relevant UN SDGs . Identifying and highlighting inequity in employment exchanges are first steps toward achieving "reduced inequalities" and "decent work" for employees across different work arrangements.

*Keywords: work arrangements, Equity Theory*

## Symposium S097

### **A world in change: Applying multiple lenses to examine change processes and interventions for individuals and organizations**

Pedro Neves, Nova School of Business and Economics; Regina Mulder, Universität Regensburg  
science

What will be covered and why

The world of work has gone through significant changes in the past few years, accelerated by a sequence of crises (financial and health) that forced individuals and organizations to quickly adapt. This symposium aims to provide a collection of studies on change, at the individual and organizational levels, to foster discussion on the challenges associated with such efforts. Changes in self-regulated learning, in learning activities as part of professional development and in social identification are focused on in the presentations. Furthermore, attention will be paid in this session to the determinants and conditions of these changes, such as at the individual level resistance to change, self-concept, and technostress, at the organizational level the learning culture, and at societal level dynamic contexts caused by for instance COVID.

The first study, conducted by Kaltianen and Hakanen, examines longitudinally how a move towards telework during the pandemic impacted changes in social identification in a sample of Finish employees. The authors draw from social identity theory to identify four profiles of identification change and provide new insights into how identification with different organizational entities evolved during a major organizational disruption.

Deronchène et. al., present a qualitative study on career changes of teachers. They examine how the prior experience of second career teachers adds value for the school context. The collection of interviews provides insights on the required personal resources and how organizational resources foster and/or restrain the applicability of such personal resources.

Cuyvers et. al., follow with the discussion of an intervention designed to help develop nurses' self-regulation of professional learning, a competence that is lacking in the clinical context. The study used a multiple baseline design to explore different patterns of response to the co-regulation intervention and to argue that there are no one-size-fits-all solutions.

Our fourth presentation (Neves & van Dam) explores the interplay between individual adaptability and leader-member exchange in fostering trust in change management and openness to change in a Dutch sample. The findings suggest that both elements – personal characteristics and situational factors - are important for change management and need to be integrated in managerial practices.

Finally, Mulder et. al., investigates the changes in work at the beginning of the COVID pandemic in the work of university teachers, the changes in learning activities as part of their professional development that caused, and what the mediating effects are of technostress and learning culture on the relationships between changes at work and the professional development that emanates from that. Analyses of the survey data among university teachers in Germany indicate that characteristics of work changed, led to several learning activities with mediated effects.

Relevance to the Congress Theme

The symposium precisely taps the center of the congress theme: the changing world of work. We examine these changes in multiple contexts (e.g., nursing, teaching, telework, diverse samples) and

combining different methodologies (e.g., intervention, interviews, survey, longitudinal/time-lagged designs) to provide a rich and nuanced view of the processes underlying individual and organizational change.

#### Research/Practical Implications

This collection of studies is clearly aligned with SDG 8 (Decent work and economic growth) and contributes for SDG3, Health and Well-Being (Cuypers et al; Kaltianen & Hakanen) and SDG16, peace, justice, and strong institutions (Neves & van Dam). The implications are as vast as the set of studies as described in each abstract.

#### Overall conclusions

Indeed, the world of work is changing. This collection of studies demonstrates how complex the processes of individual and organizational change are, and how solutions are (more often than not) clearly context bound.

*Keywords: Organizational change, individual change, context*

## Paper 1

### Changes in social identification at work amongst teleworkers during COVID-19: A person-centered approach

Janne Kaltiainen & Jari Hakanen | Finnish Institute of Occupational Health

#### Research goals and why the work was worth doing

Given the increase in teleworking due to COVID-19, it is essential to understand how teleworking may impact belongingness (social identification) at work and if such effects may differ across groups. This is important as social identification has been identified as a major predictor, for instance, of higher employee performance and well-being. We aimed to identify different emerging groups, i.e., heterogeneity in the sample of teleworkers, that may vary in levels and changes in identification (i.e., the person-centered approach). We also provide insights regarding the promotion and implications of social identification amongst teleworkers.

#### Theoretical background

Drawing from the social identity approach, we examined levels and changes in three foci of identification (organizational, supervisory, and co-worker identification) during a major shift to teleworking. Identification refers to the extent to which an employee defines her/himself in terms of the social entity such as membership in an organization and is manifested as an emotional and cognitive bond with an entity.

#### Design/Methodology/Approach/Intervention

We collected a three-wave longitudinal panel sample of teleworkers (N = 875) from seven Finnish organizations representing a wide range of industries across Fall 2019 (T1), 2020 (T2), and 2021 (T3) thus capturing time points before and after the COVID-19 outbreak. The sample included respondents who teleworked at least ¼ of their working hours at T2 and T3 and who reported increases in telework since the COVID-19 outbreak. Data were analyzed by growth mixture modeling.

#### Results

The analysis supported a solution of four theoretically meaningful profiles. The majority (55 %) belonged to a profile where all three foci of identification (organizational, supervisory, and co-worker) were high at T1 and did not change over time. For 26 %, identification levels were low and stable except slight decrease in co-worker identification. For 11 %, identification levels were relatively high but decreased substantially. For the minority (8 %), initial identification levels were low but increased notably. Taken together, the majority (81 %) belonged to profiles with no or only minor (co-worker identification) changes in identification levels.

Time spent teleworking increased the likelihood of belonging to a decreasing identification profile in comparison to an increasing identification profile. Especially those who belonged to profiles with initially high levels of identification reported more fairness, servant leadership, and social support at T1.

The profile of high and stable identification was characterized by lower turnover intentions and burnout and higher work engagement at T3 in comparison to other three profiles. Employees in this profile also generally reported more positive attitudes towards working also at the office (in contrast to full-time teleworking) at T3.

## Limitations

While we examined longitudinal data with matched respondents across time, our data was correlational and thus cannot establish causal effects.

## Conclusions – research and or practical implications/Originality/Value

This is one of the rare studies which have tracked levels of social identification with several different social entities over time. We provide new insights into how identification with different organizational entities evolved during a major organizational disruption (COVID-19 outbreak) amongst teleworkers and how such changes differed within the sample. Notably, we found four profiles that differed in how identification changed over time.

For most teleworkers, identification may remain stable at least across two years. Yet, a tenth of the teleworkers may experience a substantial loss of social identification with several entities at work and employees in this profile teleworked more than employees whose identification increased. Teleworking may impair especially co-worker identification as 36 % of teleworkers belonged to profiles where co-worker identification decreased.

Perceptions of organizational fairness, supervisor's servant leadership, and social support from co-workers are likely to promote organizational, supervisory, and co-worker identification. Also, high initial levels of identification may protect against identification decrease albeit for a small minority, low initial identification co-occurred with identification increases. While our findings further corroborate the negative effects of low and decreasing identification for employee well-being and commitment, we show that identification deterioration may also amplify employees' wishes to telework more also in the future. This may lead to spiraling effects between teleworking and decreasing identification, and its associated negative outcomes, in workplaces over time.

## Relevance to the Congress Theme

Teleworking is and will be a central way of working in the future as well. This study illuminates its potential consequences and ways to mitigate them in workplaces.

## Relevant UN SDGs

Good health and wellbeing

Decent work and economic growth

*Keywords: social identification, telework, person-centered approach*

## Paper 2

### **Transitioning into the teaching profession as a second career. A qualitative study examining the role of previous experiences for making this change**

Isabel Raemdonck, University of Louvain ; Thibault Coppe, University of Groningen ; Alexandra Deronchène, University of Louvain

#### Research goals

Second career teachers (SCT) are professionals who decided to leave a prior occupation to become teachers (Tigchelaar et al., 2010). In the scientific literature, they are seen as an important solution to tackle the growing teacher shortage (Paniagua & Sánchez-Martí, 2018) and as a resource for schools because of their previous professional background (Hunter-Johnson, 2015; Nielsen, 2016; Tigchelaar et al., 2008). In addition, SCTs experience is also a resource for themselves to facilitate their professional transition and overcome the well-known difficulties of the teachers' induction process (Wilkins & Combier, 2015). Indeed, part of SCTs successful induction is determined by the recognition of previously acquired skills and experience by the school staff (Coppe et al., 2022).

The literature seems to agree on the important role of SCTs' previous experience, although little empirical evidence is provided about the added value of these experiences for the school context and for themselves. As SCTs are becoming a significant and growing proportion of the teaching workforce (Coppe et al., 2021) the main objective is to gain insight into how SCTs' previous experience is a resource for the school and for themselves, and to what extent SCTs are recognized for that by the school staff .

#### Theoretical background

We built our theoretical framework using the Job Demand-Resource model (Bakker et al., 2007). This model is well-known for enabling to take different perspectives of analysis. In our case, this framework is relevant as it gave us insights into how personal resources can help to overcome the demands of the job (i.e., the difficulties pertaining to the induction process) and how personal resources in their own right positively impact engagement, growth and competence development (Van der Heijden et al., 2014; Xanthopoulou et al., 2007). Also, this model sheds light on how organizational resources can foster or restrain the personal resources of workers.

#### Method

This study built on a qualitative case study design (Yin, 2001). We interviewed nine SCTs in the early phase of their professional transition (< 5 years of seniority in the teaching profession). Our interview guidelines included questions regarding their experience of the transition process, how they live their induction in the teaching profession, what resources help them to overcome the difficulties, how they can participate actively in the development of their schools, if they feel valued for the resources they bring to the school etc. We first assigned codes to the quotes of the participants. Second, we regrouped these codes into categories. Third, we aggregated these categories within relevant themes.

#### Results

SCTs professional background serves as an important resource for making their first step into the teaching profession. They built their credibility in their classrooms using concrete examples from

their previous professional practice. They prepare their lesson with the learning objectives in mind and with the aim of preparing the students to implement what is learned in real work situations. Our participants also reported knowing how to make use of the resources available in the workplace, as they learned to do so in their previous professional life. SCTs proactively built their social capital by interacting with colleagues. Finally, as they already experienced one (or several) induction process in their career path, they have constructed a psychological capital making them resilient in times of change.

SCTs perceive their own experience as an added value to the school. The participants are convinced that they actually can contribute to the school at an organizational level. Their colleagues and the leadership team however, do not seem to perceive their value added. Although SCTs are willing to participate in school development initiatives, they are often refrained by the school leader or are not taken seriously by their colleagues.

#### Limitations

The main limitation of this study is our sole focus on the voice of the SCTs. Interviewing leaders and first career teacher colleagues could have provided additional information regarding how the school perceives the SCTs as resource.

#### Conclusions

This study highlights the added value of SCTs experience for the school workplace. School leaders should be aware of the importance of previous experiences and make optimal use of them.

Relevance to the Congress Theme: Career transitions are the norm in the changing world of work

Relevant UN SDG's: goal 8 decent work as SCTs have the right to be recognized for their professional work experience by the school

*Keywords: career transition, teaching, prior experiences*

### Paper 3

#### Development of self-regulated professional learning, nurses, single-case experiment

Katrien Cuyvers, Department of Training and Education Sciences, Faculty of Social Sciences, University of Antwerp; Veerle Struben, Spaarne Gasthuis, Hoofddorp; Maaïke Endedijk, Department of Educational Science, Faculty of Behavioural, Management and Social Sciences, Universiteit of Twente; Catharina Van Oostveen, Spaarne Gasthuis, Hoofddorp

#### Research goals

Research on nurses' self-regulation of professional learning (SRpL) showed that this competence is not so adequately developed (Cuyvers et al., 2021). Also, although there is a growing awareness on the importance of co-regulation involving transitional and flexible stimulation of self-regulated learning (SRL) (Hadwin et al., 2018), research investigating how its (further) development beyond graduation should be promoted, is scarce (Brydges et al., 2020). This study aimed to investigate the impact of a co-regulation intervention on the development of SRpL of nurses.

#### Theoretical background

Nursing is a dynamic profession where in the midst of continuing technological and healthcare innovations high standard quality care needs to be delivered (Adriaansen, 2018; Liljedahl, 2018). As a consequence, the ability to self-regulate one's professional learning is assumed to be of major importance for ongoing performance improvement in the clinical environment (Cuyvers et al., 2021; Brydges et al., 2020).

SRpL in the clinical environment refers to the ability to engage in behavioral, cognitive, metacognitive, and affective strategies to shape the learning process evoked by the challenges of daily practice (Cuyvers et al., 2021). The different SRpL-strategies engaged in (see Figure 1), are conditional (readiness strategies) for initiating (agents), advancing (mechanisms), and appraising (appraisals) the learning process dynamically. Interrelated strategies (marked with arrows in Figure 1) and feedback loops dynamically compose the unfolding SRpL process over time (Cuyvers et al., 2021). SRpL is evoked by work but can also be interrupted by work and/or be highly integrated with work (Cuyvers et al., 2021).

In the existing literature, fostering self-regulated learning (SRL) is referred to as co-regulation (Hadwin et al., 2018). In co-regulation, the engagement in SRL strategy-use is facilitated in interpersonal interactions, and/or technological tools. Thereby, the learner is transitionally supported towards productive SRL strategy-use (Bransen et al., 2022; Hadwin et al., 2018). Co-regulation interventions aim to support the shift in regulatory ownership to the individual, and as such develop SRL.

#### Methodology

A multiple baseline design (MBD) with additional post-intervention phase, as a type of single-case experimental design (Cuyvers, 2021; Tanious & Onghena, 2019) was used to investigate the effects of a co-regulation intervention on the development of SRpL. Five nurses of the surgical department in a hospital in the Netherlands participated. Ethical approval was obtained. A multi-method approach with repeated quantitative and qualitative measurements was used to collect data on SRpL. The co-regulation intervention was designed and implemented by the first author who is educated in educational sciences and coaching in organisations, and as a physical therapist highly

acquainted with the healthcare context. Here, we report on the results of the work-daily short questionnaire. The data were first explored using visual analysis, which has been the primary method of data-analysis in single-case research (Wolfe et al., 2019). Further, the baseline corrected TAU analysis was used, investigating the within-person change in SRpL between the different phases in the MBD (Tarlow, 2017; Wolfe et al., 2019).

## Results

Visual exploration of the data showed that positive changes in SRpL-strategies based on the co-regulation intervention could be expected for three participating nurses. The statistical analysis first showed that no significant baseline trends could be found. Furthermore, diverse results with significant effects in some SRpL measures between phases were found. For one nurse in particular, strong positive effects were found on all the SRpL-strategies between the baseline and the post-intervention phase, indicating the hypothesized change in SRpL.

## Limitations

As 'work in progress', all mixed-method data should be interpreted in relation to each other, to gain more converging evidence on the impact of the co-regulation intervention. Further, the most recent methodology literature points at the baseline corrected TAU as a method for investigating intervention effects in single case experimental research. However, different other indices can be found, and there is a lot of debate in this field.

## Conclusions

Different intervention effects for different nurses were found indicating that no one-size fits all intervention can be designed to support the development of SRpL of all nurses in a hospital or other healthcare organisation. Further research should investigate which interventions impact the development of SRpL under different context and tasks specific circumstances.

## Relevance to the conference theme

In a changing world of work, SRpL is assumed to be a very important competence. This contribution offers important insights on the development of this competence and is as such highly relevant.

## Relevant UN SDG's

Continuous SRpL important to deliver high-quality healthcare, related to UNSDG3.

SRpL is assumed to play an important role in sustainable career paths and employability, related to UNSDG8.

*Keywords: Development of self-regulated professional learning, nurses, single-case experiment*

## Paper 4

### **Adapt but don't forget to connect: How adaptability and LMX foster openness to change**

Pedro Neves, Nova School of Business and Economics; Karen van Dam, Open University of the Netherlands

#### Research goals

The purpose of this study is to examine whether LMX enhances the impact of employee adaptability on his/her change responses. In light of Uncertainty Reduction Theory, we argue that employee adaptability is an important precursor of trust in change management, which in turn should promote openness to change. We also put forth that adaptive behavior, like all employee behavior, takes place within the socio-political arena of an organization, and therefore, the quality of the social exchanges should serve as an important condition for employees' responses to change (Sweet et al., 2015).

#### Theoretical background

The increasing turbulence within and around organizations has led to a growing need for an adaptive workforce, with employees who are open to changing and cope with uncertain work situations (Baard et al., 2014; Carpini et al., 2017; Jundt et al., 2015). As employees play an important role in implementing workplace changes and are expected to proactively address the challenges that arise from change implementation, employee adaptability and openness to change is crucial for organizations undergoing change (Cullen et al., 2014; Van Dam, 2013).

Given that employee behavior occurs within a social system, employees' perceptions of the social relationships in which they are engaged at work are key aspects of their work environment (Sweet et al., 2015). The exchange relationship employees have with their supervising leaders, i.e. the Leader-Member Exchange (LMX) relationship, should be an important factor in determining the positive impact of employee adaptability on responses to change. LMX theory (Dansereau et al., 1975; Graen & Uhl-Bien, 1995) and Uncertainty Reduction Theory (URT; Berger & Calabrese, 1975) emphasize the role of reciprocity and predictability as key concerns in interactions, particularly in uncertain situations.

#### Design/Methodology/Approach/Intervention

Participants were Dutch employees of different organizations that were undergoing large-scale organizational changes. Data were collected at two times with a 4-week interval. Respondents were recruited by approaching organizations and managers via e-mail, telephone, or social media, explaining the purpose and conditions of the study.

In total 468 participants completed the questionnaire at Time 1 and 244 participants completed the questionnaire at Time 2 (response rate 52%). Respondents reported that their organization was undergoing a change process that was either at the beginning (15%), in the middle (73%) or nearing the end (12%).

#### Results

The findings support the relevance of adaptability as an individual characteristic for employee change responses. Highly adaptable employees were more open to the change that was taking place in their organization, as measured one month later, compared to employees with low adaptability.

Compared to low adaptable employees, highly adaptable employees also reported more trust in the managers who were responsible for the change, which in turn was an important precursor for their openness to the change. Finally, we also found that LMX influences (i.e. moderates) how adaptability is transformed into higher levels of trust in change management and openness to change, the latter also via increased trust (i.e. moderated mediation effect). Highly adaptable employees who were in high-LMX relationships experienced more trust in the management responsible for the change and were more open to change.

#### Limitations

We only used one source of information (i.e., employees) and account only for two moments in time. Future research should use cross-lagged panel designs to test for causality and use other sources such as peers or supervisors.

#### Conclusions

This study contributes to the literature in several ways. First, we support earlier research showing that better adapters show less resistance to change (Van Dam & Meulders, 2020). Second, we provide evidence on one of the underlying mechanisms (trust in change management). Third, our findings suggest that, in order to determine whether employees trust change agents, we need to take into account personal characteristics, such as adaptability, as well as situational factors, such as the quality of the relationship between subordinates and supervisors.

#### Relevance to the Congress Theme

Adaptability is a core competence to cope with the changing world of work, as reflected in our findings. Openness to change is a key indicator of the ability of organizations to create the future now.

#### Relevant UN SDGs

Decent work and economic growth (8); Peace, justice, and strong institutions (16).

*Keywords: adaptability, LMX, openness to change*

## Paper 5

### **Learning culture and technostress in the professional development of university teachers emanating from technology-driven changes in their work**

Regina Mulder, Faculty of Human Sciences, University of Regensburg; Mireille Post-Hubers, Faculty of Behavioural, Management and Social Sciences, University of Twente; Louisa Reinheimer, Faculty of Human Sciences, University of Regensburg

The Covid-19 pandemic changed the work of university teachers by demanding innovative, digital teaching methods (Li & Wang, 2021). Changes triggered by technological developments can disrupt routines and complement the execution of work tasks which can lead to changes in work characteristics such as autonomy (Beer & Mulder, 2020). To successfully deal with such changes, professional development (PD) is required. PD contains 'elaborating' learning activities such as reflection, 'expanding' learning activities such as asking colleagues and 'externalizing' learning activities which leads to team or organization development (Simons & Ruijters, 2004). Empirical evidence on organisational aspects supporting PD in universities is needed to remain competitive and deliver high-quality teaching, but is scarce. Therefore, the research question is: What changes in PD emanate from technology-driven changes in the work of university teachers?

The JD-R theory distinguishes job demands and job resources (e.g. Bakker & Demerouti, 2007) which both can affect PD. PD may be fostered by a supportive environment such as an organisational learning culture (Kyndt & Baert, 2013). Moreover, university teachers that are required to adapt to technological developments may experience technostress causing negative consequences (Li & Wang, 2021). The second research question is: To what extent do organisational learning culture and technostress creators and inhibitors moderate these relationships? We hypothesize moderating effects of organisational learning culture (OLC: organisation's effort to create learning opportunities for all members; Marsick & Watkins, 2003) and organisational technostress creators and inhibitors (TSC: organisational aspect that create stress caused by technologies; TSI: organisational mechanism that can reduce stress caused by technologies; Ragu-Nathan et al., 2008).

With a cross-sectional study data was collected from 350 teachers at different universities in Germany after the first semester under Covid-19 restrictions. The questionnaire contained: (1) a 3x3-items Change in PD scale, capturing changes in 'elaborating', 'expanding' and 'externalizing' learning activities with a range from 1=much less often to 7=much more often; (2) four items measuring perceived change in work (in autonomy, workload, complexity and role expectations with a range from 1=strongly decreased to 7=strongly increased); (3) 21-item short version of the DLOQ (Kortsch & Kauffeld, 2019) measuring OLC; (4) a 4-item scale measuring TSC and a 4-item and 5-item scale measuring TSI (Ragu-Nathan et al., 2008) were used with a six-point Likert-scale answering mode. All scales had satisfactory Cronbachs  $\alpha$  (.72–.94).

An increase in performance of all three categories of learning activities ( $M=4.47-5.2$ ) was found. Correlations were found between elaboration and complexity and role expectations ( $r = .29$ ;  $r = .28$ ) and expansion and autonomy ( $r = .18$ ). Externalisation correlated with complexity and role expectations ( $r = .11$ ;  $r = .17$ ) as well as OLC and TSC ( $r = .18$ ;  $r = .13$ ). Furthermore, the direction of the change (increase/decrease) and the intensity (no, little and strong change) seem to have different effects in relation to the changes in PD. The results of preliminary linear regression analyses indicate that perceived changes in role expectations and OLC positively relate with an increase in

externalising learning activities. The results of further analyses will be elaborated on in the presentation.

One limitation was that the sample was not equally divided among the different scientific disciplines. The DLOQ does not seem to fit optimally to organisations such as universities. This is a cross-sectional study, and there might be additional changes (apart from the technological ones) that might have affected in part changes in PD.

The actual perceived changes in work as a result of new technologies have been measured. These changes affect the different components of PD and technostress seems to be a mediator.

This study measures changes at work caused by the use of new technologies and the changes in professional development of university teachers caused by them.

UN SDG8: Decent work and economic growth

*Keywords: learning culture, technostress, professional development*

## Symposium S092

### **How can i-deals facilitate work in a BANI environment?: individual, group and organizational contributions.**

INÉS MARTÍNEZ-CORTS, University of Seville, Spain; PATRICIA ELGOIBAR, University of Barcelona, Spain

science

What will be covered and why?

Today we have moved from VUCA (Volatile-Uncertain-Complex-Ambiguous) environments to BANI (Brittle-Anxious-No Linear-Incomprehensible) environments, which is leading organizations to make continuous changes at the helm and face complex and changing challenges. In these environments, it is particularly important to focus on a differentiation approach in human resource management practices instead of a traditional and standard perspective. The negotiation of idiosyncratic deals (I-deals) or put it differently the negotiation of individualized work agreements, is one of the most important tool in the differentiation perspective. In addition, the context of (post) pandemic offer on one side, many companies the possibility to think outside the box and adapt to employees needs in terms for example of working from home. On the other side, from employees 'perspective, asking for individual agreements is becoming a trend for example in terms of development I-deals in order to gain employability. However, "not all that glitters is gold" and the dark side of this individualization needs to be also analyzed. In that, the fairness perceived by co-workers whom don't get these agreements, or the dignity of workers are key aspects to explore under the new trend of individualized human resources practices as I-deals.

Drawing in different theories –e.g. social exchange theory, social comparison theory, job-demands theory- the literature explains why employees and employers negotiate i-deals and the conditions under which they are effective in achieving a mutually beneficial outcomes. In this symposium we aim to discuss how i-deals contribute to the new work environment exploring the individual level – power and influence in the negotiation process, employees' career development; group level – i-deal effect on coworkers; and organizational level – diversity and dignity.

This symposium is structured in two parts. In a first part the focus will be at organizational level understanding the impact of organizational factors in the initiation and development of I-deals as well as at group level. At the end of this part professor Dr. Euwema and will lead the discussion. In the second part, the focus will be on presenting empirical works analyzing I-deals and its impact on employees, taking into consideration the context in which the organizations are embedded (i.e. Start ups, SMEs) as well as personal factor such as gender or power and influence. At the end of this part professor Medina will lead the discussion.

Relevance to the Congress Theme

Nowadays, managing i-deals at organizations is a key issue for the effectiveness of sustainable human resource practices and talent retention because I-deals aim to meet either organizational and other stakeholders (e.g. employees) needs. This symposium is aligned with the goals proposed by the United Nations for the 2030 agenda. Specifically, we want to contribute to the Sustainable Development Goals: Good health and well-being; Gender equality; Decent and economic work; and Reducing inequalities.

Research/Practical Implications

Theoretical implications at organizational, group and individual levels are presented. Among the organizational level implications we can highlight the understanding of the human dignity at work in relation to the I-deals phenomenon; or the creation of a scale to measure the “i-deal” climate, incorporating facilitators and barriers for I-deal negotiations at organizational level. At group level, the theoretical implications of studying the emotions and perceptions of fairness of co-workers, stakeholders of the I-deals however, studies focusing on them are still in an initial phase. And finally at individual level, the impact of the gender in the I-deals negotiation, the relation with well-being and the diverse perspectives about this phenomenon for employees and employers in SMEs and Start up.

Regarding practical implications, the studies presented in this two-parts symposium have a strong applicability in organizations, particularly in SME and start ups. This is due to the trend towards the individualization of human resources to attract, motivate and retain employees. For organizations, I-deals are becoming a relevant tool under the current circumstances and managers as well as employees need to be aware of the diverse factors that can impact a successful negotiation and management of I-deals at the three levels (individual, group and organization).

#### Overall conclusions

The overall conclusions of this symposium provide insights about the relevance of the role of the organizations in the I-deal negotiation process. This is understood from a theoretical and empirical perspective through the different works presented. In summary, organizations are key actors to promote diversity and dignity for workers in the current context, also when applying the I-deal managerial tool. During the time for discussion in each part, these conclusions will be considered

discussant: FRANCISCO J. MEDINA, University of Seville, Spain

*Keywords: I-DEALS, DIGNITY AT WORK, NEGOTIATION*

## **Paper 1**

### **A Workplace Dignity Perspective on Idiosyncratic Deals at Work**

Matthijs Bal, University of Lincoln, UK

#### Theoretical background

Research on idiosyncratic deals (i-deals) has received increasing attention in the last decade(-s). Many relevant insights have been generated by the rise of empirical and conceptual research on the topic. However, thus far, i-deals have remained conceptualized largely within a neoliberal-capitalist framework, emphasizing the instrumental benefit of i-deals for organizations in terms of employee productivity and retention. Such approach risks the potential value of i-deals to be instrumentalized and exploited for corporate benefit beyond individual concern. The current paper attempts to humanize research on i-deals by arguing the distinct role of the individual human being in negotiation and distribution of i-deals in workplaces. The paper introduces the new paradigm of human dignity to study and understand i-deals better and in new ways. If human dignity is central in the negotiation and distribution of i-deals, the question is no longer about who is best in negotiating i-deals, and how people may compete for i-deal negotiation, but how each human being can be treated with inherent respect and how resources can be distributed in a way that they respect the dignity of workers inside the organization and people beyond the organization (e.g., communities; Bal, 2017; Bal & De Jong, 2017).

#### New Perspectives/Contributions

This paper argues for a dignity perspective on i-deals. Through a critique of i-deals as being anchored in neoliberal-capitalist ideology, the current study asks whether and how it is possible to move beyond such narrow limitation of restricting i-deals to purely instrumental needs of both workers and organizations. Such perspective neglects the inherent dignity of the worker as a human being, and the workplace as a space not merely existing for profit generation, but also as a space where people connect with each other and find meaning in life. By explicitly integrating human dignity perspectives into i-deals research, new questions and research avenues can be defined in relation to the conceptual development and research on i-deals.

#### Conclusions – research and or practical implications

The implications of this paper are threefold. First, it introduces a new paradigmatic approach to the study of i-deals through which radically new meanings can be found for i-deals research and practice. Through the introduction of a dignity perspective into the i-deals literature, new meanings can be found for individual deals in organizations. Second, the implications of this research extend beyond i-deals, and pertain to the notion of individualization of work (arrangements). Through integration of a human dignity perspective on individualization at work, new meanings can be found for the role of the individual in the workplace, whereby a dignity perspective takes into account both the need for individuality (and individual expression) of each human being (i.e., to be an individual in the workplace, and treated as such), and the need for belonging, which can be expressed through the relationality of dignity manifestation: it is through the relationships between people that dignity can be articulated, expressed, and respected. Finally, this paper provides implications for practice, as organizations may be guided better in terms of how they can approach the process of individualization of work relationships. While the norm for a long time has been that employees should be treated the same to ensure fairness, a dignity perspective provides an alternative

perspective focused on equality and equity: that is, people should be treated with respect for their human dignity, which takes into consideration the background, personality and individuality of each human being.

#### Relevance to the Congress Theme

The paper has radical meanings in relation to the theme of the conference: the Future is Now: the paper provides a dignity perspective on WOP concepts, and thereby highlights how the future of the discipline may develop, in line with the respect for the dignity of each human being on this planet.

#### Relevant UN SDGs

The paper is strongly related to the broad range of SDGs, and in particular the focus on human dignity, which has been the underpinning of the Universal Declaration of Human Rights in 1949. In this sense, the focus on dignity at work underpins the very foundation of the UN, and thereby the SDGs.

*Keywords: I-DEAL, DIGNITY, NEGOTIATION*

## Paper 2

### Looking for the “I-deal” climate: scale development and validation

INÉS MARTÍNEZ-CORTS, FRANCISCO J. MEDINA & DONATELLA DI MARCO | University of Seville, Spain; PATRICIA ELGOIBAR, University of Barcelona, Spain

#### Research goals and why the work was worth doing

Recent studies on I-deals development have largely conclude the benefits that this managerial practice has for the employees and the organizations, such as job performance, well-being, and motivation among others. Surprisingly, not many employers and employees utilize them. In that, we wonder how organizations have a supportive or a hindrance role to negotiate I-deals. Investigating organizational factors is important, because by facilitating the negotiation of I-deals, organizations can gain the mutually beneficial effects of I-deals for the employees and for themselves.

Literature emphasizes that the organizational level impacts the way employees feel about negotiating I-deals. As stated by Bal and colleagues (2012, p. 312) “for management practices, such as I-deals, to have an effect, an appropriate organizational climate is necessary”. Despite this previous evidence, a scale measuring to what extent organizations are “pro I-deals” or avoid this phenomenon to happen has not yet been developed. In this study we aim to develop and validate a scale that measures the organizational climate in relation to I-deal negotiation, named “I-deal climate”.

#### Theoretical background

We draw on theoretical concepts such as voice, procedural and informational justice, and psychological safety as a framework to provide the basis for the development of the I-deal climate scale.

#### Design and methodology

We conduct 4 sub-studies. In study 1 we follow a qualitative methodology to identify the most salient constructs to define the organizational climate for initiating I-deals negotiation. For this aim, we interviewed 51 employees and 17 employers in Spain. In study 2, based on findings from study 1, items are developed for measuring the I-deal climate. We conduct a quantitative study to analyze the factor structure of the scale and we check the construct validity analyzing the relationship with other related constructs -e.g. organizational justice, voice climate, psychological safety climate-. In study 3, in a quantitative study we test the scale criterion validity in relation to the type of I-deal. In study 4 we conduct a multi-group validation to analyze if this “I-deal climate” is indeed ideal for everyone or if the organizational variables impact differently by groups (i.e. gender, age, seniority...). Data for all the quantitative studies will be collected through a survey distributed among a sample of employees who had registered at the website Prolific Academic (<https://www.prolific.ac>).

#### Results expected

In study 1, through a thematic analysis we identified organizational (e.g. informational and procedural justice), supervisor (e.g. trust, emotional support, negotiation openness) and coworkers (e.g. emotional, instrumental and cognitive support) related factors to be included in the scale. Hindrance organizational (e.g. standardized process), supervisor (lack of ambition) and coworkers

(e.g. envy, task independence) factors were also identified. Results of the planned studies 2, 3 and 4 are expected to be available for its presentation at the conference.

#### Conclusions

Across four studies, we will develop a reliable scale with a multidimensional factor structure and replicate it across separate samples. Study 1 was aimed at appropriately identify the organizational factors that facilitate or inhibit I-deals negotiation. In Study 2, a measure of I-deal climate is developed and confirmed its reliability and factor structure. Studies 3 and 4 provide further evidence for the psychometric properties of the I-deal climate measure.

#### Research and practical implications

These four studies contribute to the theory on I-deals by first developing and validating a scale that measures the organizational climate that facilitates I-deal initiation. Although different constructs have been identified in previous studies (justice, voice, etc.) as I-deal negotiation motivators, an “I-deal climate” scale goes a step further by putting together both motivating and hindrance factors and analyzing their interactive effect on the initiation of the I-deal negotiation.

From a practical perspective, this study contributes by providing a tool to measure how organizations facilitate the initiation of I-deals. Given the competitive business context and the difficulties organizations face to retain talent, ensuring that employees perceive their organization is open to the negotiation of I-deals can contribute to positive outcomes for all the parties. Moreover, following Bal (2022), we expect that finding the right climate for I-deals contributes to increasing the dignity of workers by encouraging the initiation of I-deals to everyone.

#### Relevance to the Congress Theme

This study contribute to develop a new WOP concept such as i-deal climate allowing organizations to evaluate how they facilitate or hindrance i-deals negotiation between all their employees.

#### Relevant UN SDGs

This work is related to the SDG 3: Good health and well – being; and the SDG 8: Decent work and economic growth

*Keywords: I-DEALS, ORGANIZATIONAL CLIMATE, INCLUSION*

### Paper 3

#### **Negotiating idiosyncratic deals to attract, motivate and retain STEM value-added employees from start-ups**

IRENE SÁNCHEZ, CLAUDIO CRUZ & PATRICIA ELGOIBAR | University of Barcelona, Spain

Research goals and why the work was worth doing.

Employees individual negotiations about their job conditions are known as idiosyncratic deals (i-deals for short) and are a prominent trend in today's employment that has been accelerated by the COVID-19 pandemic and by a decline of the collective bargaining. Despite the relevance of i-deals and the recent literature on the topic, little is known about how it relates to start-ups. However, start-ups have a decisive impact in the economic and social development of countries by fostering new innovations and rapid job creation. Indeed, on average across OECD countries start-ups with 5 years old or less account for about 20% of employment and create almost half of new jobs. Therefore, employees with valuable work competences are an indisputable source of competitive advantage for start-ups and i-deals could be an essential tool to attract, motivate and retain (AMR) them, reducing turnover and increasing job satisfaction.

Hence the objective of this qualitative study is to understand how the i-deals phenomenon work in the context of health technology start-ups in Spain. Specifically, how heterogeneous i-deals are in time, scope and content, how they relate to higher talent AMR and what are the needs and aspirations of i-dealers particularly in competitive fields such as science, technology, engineering and mathematics (STEM).

Theoretical background

Theoretical concepts of i-deal, social exchange and resource exchange theory are used as a framework to provide a better description of the exchange derived from i-deals negotiations between STEM employees, C-level employers and their start-up.

Design/Methodology/Approach/Intervention

Forty-two semi-structured interviews have been conducted with a STEM employee and a C-level employer from 21 health technology start-ups in Spain. For transcripts coding and analysis Atlas.Ti has been used.

Results obtained

The findings show that in start-ups a range of i-deals are negotiated not only for personal needs but also for organisation needs in terms of funding, resources and tasks evolution. I-deals related to radical changes in tasks, salary or a reduced working hours present great difficulties in their implementation and are perceived as more difficult or not possible to be negotiated. The results support SET and RET proof as a combined explanatory mechanism of i-deals. Given that start-ups limited access to funds and headcounts, there is a tendency to substitute hard concrete i-deals such as salary, radical tasks, or certain forms of schedule flexibility i-deals by soft and symbolic i-deals as phantom shares, developmental and location flexibility i-deals. Those i-deals negotiations are facilitated by the start-up culture of flexibility and open communication and employees' proactive behavior. A successful i-deals negotiations promote a good work environment, helping start-ups to AMR value-added employees and gaining competitive advantage through employee performance.

## Limitations

Despite the start-ups sample was diverse with an equal distribution of working technologies, the organizations represented in the study were micro and small enterprises. It is therefore unknown whether these same findings are prevalent in bigger organizations or organizations with different leadership norms and structures, such as family firms or multinationals.

## Research/Practical Implications

From a theoretical perspective this study represents a first exploration of i-deals in the innovative context of start-ups. Previous research has mainly focus on big and medium-sized organization or public institutions. Secondly, our research push beyond the dominant perspective of the SET and explores i-deals from a SET and RET. Adding the RET perspective contribute to understanding how start-ups limited resources influence how and which i-deals are negotiated and granted. Thirdly, our findings suggest that existing types of content i-deals need a refinement at least for start-ups. A new category of 'phantom shares' have been defined as financial in-kind contributions. In addition, flexibility i-deals seem to be granted by the nature of the organization, in comparison to previous research.

On a practical level, the research should be useful to support health technology start-ups to promote, individualized working arrangements that can be leveraged to AMR outstanding and highly qualified employees. As i-deals content are occupation specific, it is critical to foster a culture of communication in which in one hand employees feel empowered to express their personal needs button-up and on the other hand, the start-up set up periodic top-down updates to set up expectations for requesting and granting i-deals.

## Relevance to the Congress Theme:

I-deals are a key tool in the changing world of work, and particularly for Start ups, a context in which this managerial practice has not been explored yet.

## Relevant UN SDGs

This work is related to the SDG 3: Good health and well – being; and the SDG 8: Decent work and economic growth.

*Keywords: I-DEAL, START-UPS, NEGOTIATION*

## **Paper 4**

### **I-deals and conflict in start-ups**

MARTIN EUWEMA, KU Leuven, Belgium; GOSIA KOZUSZNIK, Ghent University, Belgium

#### Research goals:

Start-up founders often find themselves in highly challenging conditions. On one hand they are free to define their own job, however they also team up with co-founders, and lead a young and usually turbulent company. This is highly stressful and creates all to often conflicts.

In this study we focus on female founders of start-ups and explore how they work together, also in perceived regulation of their jobs. Particular focus here is on the type of composition for the startup; are women teaming up with friends, family, life partner, or business partner, and does this impact the way they organize their i-deals?

#### Theoretical background

This research is informed by theories on stress, conflict and role theory, specific work-home balance.

#### Design/Methodology/Approach/Intervention:

We interviewed 50 female start up founders in the Netherlands.

#### Results obtained or expected:

We show clear differences between type of i-deals of female founders of start=ups in relation with the type of partners in their business.

*Keywords: I-DEALS, INTERPERSONAL CONFLICT, GENDER*

## Paper 5

### **How are i-deals negotiated in small and medium enterprises? The perspective of the employer and the employee**

SANTIAGO RENEDO, INÉS MARTÍNEZ-CORTS, FRANCISCO J. MEDINA & DONATELLA DI MARCO,  
University of Seville, Spain

#### Research goals and why the work was worth doing

Small and medium-sized enterprises (SMEs) represent a significant segment of the economy in many countries (e.g., 99,0% in Spain and 99,7% in Europe). SMEs differ from large companies in that they do not usually have formal HR policies; the owner and the manager overlap; relationships between employers and employees are usually closer and informal; and tasks are more flexible. In this context, employers and employees might have a better understanding of each other's needs, facilitating the negotiation of idiosyncratic deals (i-deals). I-deals are special employment conditions granted to an employee. Success in such negotiations might depend on the ability to exert influence and power, which might be different for women and men. So far, few studies have focused on the negotiation of i-deals in SMEs, taking into account the power and the influence of people involved in the negotiation. Therefore, the goals of this research are to identify what types of i-deals are negotiated in SMEs and to understand power and influence dynamics in negotiating i-deals from a gender perspective.

#### Theoretical background

Currently, negotiations between employers and employees have become widespread, making i-deals a resource for fostering employee's motivation and attracting and retaining talented employees. So far, theories on i-deals negotiations have focused on individual needs, social comparison and consequences of the negotiation. However, they ignore the role of the relative power of the actors involved, and how it is materialised through the influence tactics (Simosi et al., 2021). The current study tries to understand the i-deals negotiation process applying a theoretical framework based on power and influence theories, such as the approach/inhibition theory of power (Keltner et al., 2003). In addition, gender role theories are used to explain differences between women and men in this process.

#### Design/Methodology/Approach/Intervention

Semi-structured interviews were conducted with 51 employees and 17 employers in Spanish SMEs from different sectors. Data were analysed with the software ATLAS.ti 8, thematic analysis was carried out.

#### Results obtained or expected

Three themes were identified: types of ideals, influence tactics and power to negotiate. Results show that task and flexibility i-deals are particularly relevant in SMEs. The results also suggest that SMEs reproduce a traditional Human Resource Management System, where employers initiate the negotiation with empowered employees, assuming that they have sufficient power to negotiate. However, employees need to perceive themselves with sufficient power to initiate the negotiation. Moreover, results show that rational tactics are used to negotiate aspects related to work development; soft tactics are implemented to negotiate aspects connected to employment; and hard

tactics are used for negotiations related to work flexibility. Gender differences in the negotiation process of i-deals in SMEs have been found (e.g., men used more hard tactics than women).

#### Limitations

Although gender diversity was considered in this research, other groups (e.g., employees close to retirement or employees with disabilities), with special needs, should be included in future research. Furthermore, the study analysed successful negotiations. However, unsuccessful negotiations could be explored to identify which influence tactics were used and what power relations were established at that moment. Finally, given that the study was carried out in Spain, it would be necessary to conduct cross-cultural research to identify specific cultural aspects that may influence the negotiation of i-deals.

#### Conclusion/research and or practical implications

This study sheds light on the black box of i-deal negotiation in SMEs. This study, through a dual perspective (employee-employer), analyses the process globally, identifying the power and influence tactics used in the negotiation of i-deals by both parts. It also sheds light into the gendered power and influence dynamics in SMEs.

#### Relevance to the Congress Theme

In this changing world of work, SMEs need committed employees to face the continuous changes arising from the turbulent socio-economic environment. Nevertheless, employees are empowered to proactively manage their own career development. Describing power and influence dynamics will contribute to improve both employers and employees i-deals negotiation skills.

#### Relevant UN SDGs.

This study is strongly related to the broad range of SDGs, specifically with the promotion of decent work and economic growth (goal 8) and gender equality (goal 5). The negotiation of i-deals implies a win-win solution between employee and employer and helps to achieve full and productive employment and decent work for all women and men (target 5 and 8).

*Keywords: I-DEALS, POWER, INFLUENCE*

## Paper 6

### **Gender Differences in the Relationship Between I-deals and Eudaimonic Well-being: A cross lagged panel study**

NURIA TORDERA, University of Valencia, Spain; ESTHER VILLAJOS, Politecnico University of Valencia, Spain; HILAL KEKLIK, University of Valencia, Spain

#### Objectives and Theoretical Background

Idiosyncratic deals (i-deals) are defined as voluntary, personalized agreements of a nonstandard nature negotiated between individual employees and their employers. Although i-deals exist in work settings for long, only recently, with growing need for a more active workforce and workers' heightened expectations for a voice on matters affecting them at work, the subject gets considerable attention. I-deals are expected to contribute positively to employees and their organizations, and empirical research has found them to be related to performance and well-being of workers. However, despite the research about hedonic well-being outcomes of ideals, eudaimonic well-being outcomes are less explored. Research has also suggested that personal factors such as gender might moderate i-deals-well-being relationship. Thus, this study explores the effects of ideals on eudaimonic well-being in work settings and the role of gender differences on this interplay between ideals and eudaimonic well-being in the long run.

#### Method

A cross lagged panel design was used to test the proposed hypothesis. Data were obtained from 275 employees working in 12 different Spanish organizations at two time points. Hypothesis were tested through hierarchical regression analysis using SPSS 24.

#### Results

We found significant positive relationship between i-deals and eudaimonic well-being in both time points. We could not find support for the crosslagged effects of I-deals (T1) on eudaimonic well-being (T2), once the stability of eudaimonic wellbeing, and the levels of I-deals at T2 were controlled for. However, changes in i-deals from T1 to T2 were positively related to changes in eudaimonic well-being from T1 to T2. We also found support for the moderator role of gender on this relationship. Changes in i-deals showed a higher effect on changes in eudaimonic well-being for men than women.

#### Conclusions

The study contributes to understand the relationship between idiosyncratic deals and well-being literature by extending this analysis to incorporate the study of eudaimonic well-being and showing evidence of how the changes in the former is related to changes in the later. Providing evidence for this connection has important implications for HR professionals.

*Keywords: i-deals, gender, eudaimonic well-being*

## Symposium S099

### Alternative Approaches to Assessing Validity and Effectiveness of Assessments in Use

Rab MacIver, R&D Director @ Saville Assessment

practice

What will be covered and why

The first paper, 'Exploring Operational Validity in Screening through Meta-analysis', explores three approaches to measuring the validity of personality assessment, one of which involves combining differentially-weighted individual scales to create an optimised scoring algorithm. The methods are compared through meta-analyses of local validation studies, with the results providing an insight into how operational validity can be optimised in practice within a job screening context.

The second paper, 'Maximising Validity and Fairness in a New Way of Assessing Potential', outlines the approach taken to develop a new algorithm for identifying future leadership potential. This approach utilised over 15 years of personality and performance data, as well as international fairness data. The result was a measure of potential which cross-validated in three different samples and demonstrated no difference between scores for men and women in two different samples.

The third paper, 'The Validity and Utility of Virtual Candidate Feedback on Personality and Business Reasoning Assessment Results', shares the results of an ongoing research programme to investigate the effectiveness of virtual feedback, straight after and three months after receiving feedback. The research was undertaken following a shift from face-to-face to virtual feedback to understand what impact this may have on candidate reactions to feedback. It was found that despite the virtual format of the feedback, most respondents reported very positive experiences.

Relevance to the Congress Theme

The three papers relate to the theme 'The Future is Now: the changing world of work' as they are focused on how assessment across different applications has adapted based on the changing workplace environment. The first paper explores how the measurement of personality assessment validity has progressed, and continues to evolve based on how assessment measures themselves are evolving in their format and practical implementation to meet the changing needs of recruiters and job applicants. The second responds to the need to move away from traditional ways of identifying high potential individuals, which can lead to inaccurate identification of potential and a leadership pipeline lacking diversity. Finally, the third paper reflects the shift towards delivering assessments and feedback in a virtual way, which was necessitated by the Covid-19 pandemic, but has resulted in a more enduring shift away from the default of in-person interactions.

Research/Practical Implications

The results of paper one provide evidence of how the operational validity of personality assessment varies dependent on how its scoring algorithms are created. This offers value within a screening context in particular, where in practice a single score is created and used for sifting job applicants. Optimising a score used for screening – and as a result maximising the assessment's operational validity – increases how effective it is in identifying individuals that are better suited to performing in a given role.

Paper two outlines the development of a robust predictor of potential based on over 15 years of competency potential and performance data. By building the reduction of adverse impact into the

development of the algorithm, more women will be identified for leadership roles than previously as organisations look to increase the skills and diversity of their leadership teams, and hopefully contribute towards reducing the gender pay gap.

The findings of the third paper endorse the candidate acceptance of the validity and diagnostic value of the assessment as a basis for the accuracy of the feedback experience. A key purpose of providing feedback is in itself to serve as an intervention to prompt development actions, and the current research findings demonstrate that even receiving virtual feedback can still prompt growth and development. Given the ubiquitous virtual context in which most are working, these findings can confirm the validity and utility of assessment feedback practices in a virtual environment.

#### Overall Conclusions

It is important that the field of psychometrics maintains a balance between remaining grounded in established research and recognising the changing world of work. Adapting to changes within the working world is an important challenge that the authors seek to meet, whether that is establishing new ways of increasing the operational validity of modern, flexible screening assessments, moving beyond traditional ways of identifying leadership potential, or providing effective feedback in a virtual format.

*Keywords: Validity, Assessment, Leadership*

## **Paper 1**

### **Exploring Operational Validity in Screening through Meta-analysis**

Jake Smith, Senior Research Psychologist @ Saville Assessment; Rab MacIver, R&D Director @ Saville Assessment

#### Research goals and why the work was worth doing

Accurately measuring the criterion-related validity of multi-scale personality assessments has historically been problematic. An early approach involved calculating a mean average of predictor scales and criteria. This is unrealistic in practice as not every predictor scale would be expected to relate to each and every criterion.

Subsequent research involved the creation of unit-weighted composite scales, combined from individual scales selected based on a priori mapping to different criteria. This more targeted approach yielded improved validities that were arguably more representative of true operational validity.

This thinking can be taken further; another method explored in this paper is the creation of a single differentially-weighted composite scale, with individual scales and weights determined through a combination of job analysis and local validation data, to measure performance in a specific job role. In this paper, this method is compared with the two aforementioned approaches through meta-analyses of local validation studies using hard and soft criteria.

The research goal is to gain a better understanding of the validities produced by these methods. In turn, this understanding may offer insight into how behavioural assessments can be optimally implemented in practice, particularly in a screening context where a single job fit score is typically created for efficient sifting of applicants.

#### Theoretical background

Early research into the averaging and unit weighting methods of validity measurement was carried out by Schmidt and Hunter (1977) and Robertson & Kinder (1993).

A meta-analysis review into the validity of different assessment methods was conducted by Hunter & Schmidt (1998). This was recently reviewed by Sackett et al. (2021) based on a fundamental concern of overcorrection for restriction of range.

#### Methodology

18 primary concurrent validation studies were ran for different organisations covering multiple roles. The predictor measure was Match 6.5, a 36 item behavioural assessment measuring 12 section scales, weighted into a composite based on the three methods outlined below. Criteria varied by study, including manager ratings of overall effectiveness, organisational annual performance ratings, and annual sales performance figures.

Criterion-related validity was calculated for each primary study using three methods:

Averaging the validity of the twelve Match 6.5 scales.

Creating a single, unit-weighted composite score from selected individual section scales that are deemed related to job performance in each particular study, based on a combination of their importance to the role (determined by subject matter experts) and individual scale validity.

Creating a single, differentially-weighted composite score. Alongside determining which scales should be included based on role importance and individual validity, weights were also applied based on this information.

Meta-analysis was run for each method using a Hedges-Vecchia random-effects model.

Results obtained

Mean effects observed (K=18, N=4121 for each meta-analysis):

Averaging method = .08 (95%-CI [.05, .11], Z=5.01, p<0.01, Q=2.23, p(Q)>0.99, T<sup>2</sup> =0.00)

Unit-weighting method = .33 (95%-CI [.27, .40], Z=9.37, p<0.01, Q=82.78, p(Q)<.01, T<sup>2</sup> =0.02)

Differential-weighting method = .39 (95%-CI [.29, .48], Z=7.30, p<0.01, Q=195.74, p(Q)<0.01, T<sup>2</sup> =0.05)

Increased validity was found for the differential-weighting method (.39). This indicates that applying differential weightings when creating a composite scale can increase its operational validity.

Limitations

Local validation data was used in the differential-weighting method to support the selection of individual scales and weights for each job role. A clear limitation therefore is where validation data is unavailable. The method could still be employed, but based on using scale importance information determined by subject matter experts in isolation. Further investigation of this approach is required to understand any effect on the validity obtained.

Conclusions – research and or practical implications

The results provide evidence that the operational validity estimate of the Match 6.5 behavioural assessment can vary significantly according to the approach taken to how it is measured and how composite scales are created. Increased validity was observed for the differential-weighting method, suggesting this to be an effective approach to creating job fit scores that can be used for screening applicants in practice.

Further research might explore the effect of combining and weighting scores from additional assessments. For example, combining a differentially-weighted composite behavioural scale with a job relevant cognitive test scale or measure of situational judgement. A potential benefit could be gaining incremental validity, and a more rounded view of an individual's potential effectiveness for a specific job role.

Relevance to the Congress Theme

This paper furthers the evolution of validity research on personality/behavioural questionnaires, providing a more realistic picture of the operational validity of a behavioural tool when used in a screening application.

Relevant UN SDGs

This paper is relevant to the goal of 'decent work and economic growth', adding to our understanding of how the validity of behavioural assessments can be optimised in practice.

Assessments with increased validity provide assurance that better suited applicants will be recruited in roles and have more chance of succeeding in an organisation.

*Keywords: Validity, Screening, Meta-analysis*

## Paper 2

### Maximising Validity and Fairness in a New Way of Assessing Potential

Lauren Jeffery-Smith, Wave Portfolio Manager @ Saville Assessment; Rab MacIver, R&D Director @ Saville Assessment; Hannah Mullaney, Client Solutions Director @ Saville Assessment

#### Research goals and why the work was worth doing

To improve the diversity of leadership pipelines for a new world of work, we need to look at how individuals are identified as high potential. Most nominations onto leadership development programs involve the manager, however it is questionable the degree to which they can accurately identify potential. Where there is no structure, rigor or objectivity in a process involving people being assessed, this can lead to bias. Where leaders and managers identify those similar to themselves as high potential, for example, this may not only be inaccurate, but lead to a leadership pipeline lacking diversity.

#### Theoretical background

Organisations that have the ability to identify potential in individuals will have a competitive advantage (Silzer & Dowell, 2010) and investing in the right people will maximise an organization's profits. Research has also show that across different jobs and industries, high-potential individuals tend to share a range of measurable qualities (Chamorro-Premuzic, Adlet & Kaiser, 2017).

Increasing diversity is not only the right thing to do for DE&I, but will also increase the breadth of capabilities within the leadership pipeline. Research indicates that where there is greater variety of roles or ways of working by individuals in a team, they are likely to be more effective than those with less (Benne & Sheats, 1948; Belbin, 1996; Fisher, Hunter & MacRosson, 2001).

#### Design/Methodology/Approach/Intervention

An algorithm was developed to identify future leadership potential based on completions of an established and well-validated personality questionnaire. Initial development of this "i-Potential" equation focused on over 7,000 ratings to identify the behaviours in the model which are the best forecasters of potential. The preliminary equation was created based on this validity evidence.

A key development aim for i-Potential was to increase fairness and reduce adverse impact, as well as maximising validity. During the development process, fairness analysis was run and where potential adverse impact was identified, the equation was further refined. Specifically, initial versions of the equation were slightly favoring men, so behaviors which tended to be higher in males were deprioritised and behaviors which tended to be higher in females were brought in or weighted higher. It was initially assumed that this would slightly reduce the validity of the equation (an acceptable trade-off), however the validity did not drop.

#### Results obtained

##### Validity:

Our research showed that i-Potential was significantly related to external ratings of the criterion of 'Demonstrating Potential', which was measured using a 360 questionnaire. This is a critical underpinning of predicting potential and provides good evidence for the use of i-Potential to identify

future potential. Replicating this across different samples also demonstrates cross-validation evidence and means that these relationships are able to be generalised.

Concurrent Criterion-Related Validity of i-Potential matched against external ratings of Demonstrating Potential:

Study 1: Research Sample (N=369)

$r = .33$

$r_c = .53$

Study 2: Operational Sample

Boss (N=1887)

$r = .16$

$r_c = .24$

Peer (N=1976)

$r = .13$

$r_c = .28$

Study 3: Standardization Research Sample (N=622)

$r = .31$

$r_c = .50$

Correlations are statistically significant at the  $p < .05$  level (one-tailed). Corrected validities ( $r_c$ ) were corrected for attenuation based on the reliability of the criteria. No further corrections were applied (e.g. restriction of range, predictor unreliability).

Fairness:

The fairness of the algorithm was evaluated using Cohen's  $d$  in two large international samples (N=18,154 and N=24,827). For gender, there was no difference between scores for males and females in either group. For age and ethnicity, differences ranged from non-existent to small; no moderate or large differences were found.

Limitations

The i-Potential algorithm has been developed as a 'one size fits all' approach for identifying potential, but this may not always be suitable for more unique organisations. The algorithm provides a robust basis for general identification of potential but it is recognised it may need to be adjusted to fit specific organisational contexts.

Conclusions – research and or practical implications

We have developed a robust predictor of potential based on over 15 years of competency potential and performance data. By building the reduction of adverse impact into the development of the algorithm, more women will be identified for leadership roles than previously as organisations look to increase the skills and diversity of their leadership teams, and hopefully contribute towards reducing the gender pay gap.

#### Relevance to the Congress Theme

The new algorithm developed based on validity and fairness data responds to the need to move away from traditional ways of identifying high potential individuals, which can lead to inaccurate identification of potential and a leadership pipeline lacking diversity.

#### Relevant UN SDGs

Gender equality, decent work and economic growth, and reduced inequalities

*Keywords: Potential, Gender, Fairness*

### **Paper 3**

#### **The Validity and Utility of Virtual Candidate Feedback on Personality and Business Reasoning Assessment Results**

Hennie Kriek, Professor Extraordinarius @ University of South Africa and CEO @ TTS-Top Talent Solutions

##### Research goals and why the work was worth doing

The rapid shift to virtual working in uncertain economic conditions has exacerbated many challenges in the talent assessment space, with a key question for assessment practitioners being how to still demonstrate the value of assessment practices in a virtual environment. This is firstly to focus on the practical administration of assessment virtually, but a question that is not always addressed, is whether virtual feedback of assessment results still carries the same utility as face-to-face feedback. Addressing one avenue of this question, this paper shares the current results from an ongoing investigation into the experience and impact of virtual feedback practices.

##### Theoretical background

A key objective of providing assessment feedback is to present candidates with their assessment results and identify likely development areas and associated actions (Meyer, 1998). The provision of feedback alone is insufficient to guarantee candidates will act on their development areas though, as research suggests acceptance of feedback as valid and a truthful representation of the self, is critical for subsequent behavioural changes since candidates are more likely to engage in developmental efforts if they believe it will be worthwhile and accurate (Bell & Arthur, 2008). In this paper, the presenter will share an overview of perspectives on the importance of feedback and challenges experienced with delivering feedback virtually. Second, observations of candidates' experiences of receiving assessment feedback virtually will be shared, followed by a view of candidates' reflections three months after receiving the feedback. Finally, the presenter will share lessons learned from feedback providers and reflect on possible applications for increased validity of feedback acceptance.

##### Design/Methodology/Approach/Intervention

The research to be shared is part of an ongoing research program carried out by a South African based consulting company. Feedback recipients were invited to complete a short online survey following the completion of their feedback session (at the time of writing, N=1,190), and individuals responding to the survey then received a short follow-up survey three months after their original feedback session to evaluate behavioural changes over time (at the time of writing, N=258). All feedback recipients had received their feedback virtually, using MS Teams or a similar online platform that allows for video and file sharing. Learnings from virtual feedback providers were also collected through an online survey, complemented by anecdotal stories shared with the presenter.

##### Results Obtained

Despite the shift from face-to-face to virtual feedback sessions necessitated by the COVID-19 pandemic, most respondents reported very positive experiences. For example, 87% of respondents reported gaining new insights into their preferred style of behaving and accepted the accuracy of the feedback, while 94% were confident they would be able to improve in their developmental areas following the feedback. Three months later, 85% of respondents reported making more use of the

strengths identified during the feedback session to solve problems at work, and 92% reported still being motivated to change their behaviour in line with the feedback received.

#### Limitations

All the results and findings of the current study is based on self-report questionnaires completed by the candidates. It is possible to also involve third party observers in future studies, such as the candidate's direct manager.

#### Conclusions – research and or practical implications

The results of the current study were gathered from candidates who had undergone online Personality and Ability assessment. We believe these observations, as well as the learnings shared from the virtual feedback providers, are of value for practitioners for two main reasons. Firstly, these findings endorse the candidate acceptance of the validity and diagnostic value of the assessment as a basis for the accuracy of the feedback experience. Secondly, a key purpose of providing feedback is in itself to serve as an intervention to prompt development actions, and the current research findings demonstrate that even receiving virtual feedback can still prompt growth and development. Given the ubiquitous virtual context in which most are working, we believe these findings can confirm the validity and utility of assessment feedback practices in a virtual environment.

#### Relevance to the Congress Theme and UN SDGs

This paper is in line with the UN ADG of "Good health and wellbeing". This presentation and paper provides practical advice on the effective use of Online Psychometric Assessment results to ensure the personal growth and effectiveness of participants in development interventions.

*Keywords: Validity, Assessment, Feedback*

## Symposium S101

### When and why do people craft? Zooming in on predictors and the role of psychological needs

Lina Marie Müller, Department of Work, Organizational, and Business Psychology, Johannes Gutenberg University Mainz, Germany

science

What will be covered and why:

The three socioeconomic mega trends of rising competition, informatization, and globalization are driving factors in the changing world of work that impact job characteristics. A common characteristic of modern work, facilitated through the COVID-19 pandemic, is the blurring of spatial and temporal boundaries. For example, the significant increases in flexible work arrangements such as working from remote locations (e.g., at home, on the train, in a cafe) and flexible working hours can encourage employees to work at unusual hours in the evenings or during the weekends. These aspects seem not only driven by global, or societal trends, but also by changing needs, values, and preferences of employees. Instead of reacting passively to job characteristics and tasks, employees can proactively increase their job resources and challenging demands (approach crafting) and decrease hindering demands (avoidance crafting). These self-initiated behaviors, known as crafting, are shown to be beneficial for employees' health- and well-being. Therefore, it is important to examine drivers of this beneficial behavior. This symposium presents a collection of rigorous research projects that explore personal, job and contextual resources as predictors of crafting behaviors. In a set of four presentations and a discussion by Dr. Jessica de Bloom, we present new insights and explanatory mechanisms of crafting.

Contributing to the potential challenges and opportunities of boundaryless work, the study presented by Ho et al. provides an innovative approach by simultaneously investigating personal resources (e.g., energy levels) and environmental situational factors (e.g., nature exposure and relatedness, location, time of the day) as predictors of daily crafting behaviors of employees using intensive longitudinal data sampling across six days over two weeks. The study sheds light on the dynamic interplay between different life domains as well as personal factors related to crafting behavior, which in turn relates to well-being outcomes (e.g., work engagement and job performance).

Building on the needs-based job crafting model, Tušl et al. explore the role of proactive needs satisfaction in the gain spiral of the job demands-resources model. The study uses a two-wave longitudinal design to examine whether proactive needs satisfaction can build up resources and foster motivation at work. This presentation will thus critically examine the reciprocal relationships between job resources, sense of coherence as a personal resource, needs-based job crafting, and work engagement.

Adding the process of need satisfaction and frustration and relating subjectification opportunities and challenges of work, Bolschakow et al. will focus on the model of proactive motivation. Specifically, the "reason to"-state and basic psychological needs theory (competence, autonomy, and relatedness) are integrated and differential within- and between-person effects on job crafting will be examined. Parts of the Integrative Needs Model of Crafting will be tested using a daily diary study covering two work weeks.

Lopper et al. address the still limited understanding of the interplay of approach and avoidance crafting in interaction with job demands, health, and well-being outcomes. Combining Job-Demand-

Resources Theory and the propositions of the Conservation of Resources Theory regarding gain- and loss-spirals, daily diary data over five consecutive workdays are analyzed to reveal approach crafting causing higher levels of job resources. Further, the role of avoidance crafting as either an adaptive strategy to cope with high demands, or a maladaptive strategy which hampers personal development is investigated.

Relevance to the Congress Theme:

Crafting in different contexts provides opportunities for workers to increase the fit of their needs and job characteristics, which can greatly impact well-being and performance. Job crafting is highly relevant given the progressively increasing boundarylessness and subjectification of work.

Research/Practical Implications:

The insights presented in this symposium contribute to both research and practice. We offer new directions for future research and hands-on strategies to guide healthy and effective job crafting strategies during work and leisure time. A refined understanding of predictors of crafting behavior, underlying mechanisms, as well as relevant boundary conditions, will help practitioners to understand and support crafting.

Overall conclusion:

This symposium addresses important questions about the nature of crafting predictors and need satisfaction using diverse methods and time lags. We bring together four presentations that each provide unique insights on crafting conceptualizations as well as relevant predictors.

discussant: Jessica de Bloom, Department of Psychology, Tamp

*Keywords: Job crafting, Proactive Motivation, Psychological needs*

## Paper 1

### **Situational and daily crafting patterns across life domains during working days: The role of personal resources and environmental situational factors**

Kang Leng Ho & Georg F. Bauer | Division of Public & Organizational Health/ Center of Salutogenesis Epidemiology, Biostatistics, and Prevention Institute University of Zurich, Switzerland; Jessica de Bloom, Department of HRM&OB, Faculty of Economics and Business, University of Groningen, The Netherlands & Faculty of Social Sciences (Psychology), Tampere University, Finland; Philipp Kerksieck, Division of Public & Organizational Health/ Center of Salutogenesis Epidemiology, Biostatistics, and Prevention Institute University of Zurich, Switzerland

Theoretical background, research goals and why the work was worth doing:

Research has often examined crafting behaviors in the work and non-work domain, and at the boundary between the two domains (e.g., Demerouti et al., 2020; Petrou et al., 2012; see Rudolph et al., 2017; Frederick & VanderWeele, 2020). A large and growing body of evidence has consistently shown that crafting in the work and non-work domain positively predicted well-being outcomes (see Wang et al., 2016; Rudolph et al., 2017; Tims et al., 2021). Moreover, a few existing studies on short-term day-to-day crafting behavior in work and non-work domains investigated job as well as home demands and resources as antecedents of crafting (e.g., Demerouti et al., 2020; Petrou et al., 2012). However, little is known about how personal resources (e.g., energy levels) and environmental situational factors (e.g., nature exposure and relatedness, location, time of the day) can influence the daily crafting behaviors of employees in their naturalistic environment across life domains, as well as how these crafting behaviors are associated with well-being outcomes. Additionally, to gain more detailed insights to these dynamic mechanisms among crafting behaviors across life domains, its predictors and outcomes, these variables of interests could also be investigated repeatedly using shorter time intervals with higher frequency.

Using the recently developed needs-based crafting which aimed at satisfying six psychological needs (i.e., detachment, relaxation, autonomy, mastery, meaning, affiliation; DRAMMA) (de Bloom et al., 2020), this ecological momentary assessment (EMA) study therefore repeatedly assessed employees in real time and aims to investigate: (1) how needs-based crafting efforts change throughout working days across these different life domains, (2) how energy levels (i.e., vitality, fatigue) are associated with needs-based crafting and needs satisfaction across life domains throughout the day, (3) how environmental situational factors (e.g., nature exposure and nature relatedness, location, time of the day) influence the effect of energy levels on crafting behaviors, (4) how crafting throughout working days predicts well-being (i.e., work engagement and job performance).

Design/Methodology/Approach/Intervention:

Ecological Momentary Assessments were conducted from May to July 2022 across six working days over two weeks with six measurement points per day of three-hours interval between measurements. 415 German-speaking employees from Germany, Austria and the German-speaking part of Switzerland participated in the survey and responded to 10,922 questionnaires (  $M = 26.3$ ,  $SD = 8.62$ ). The survey covers needs-based crafting across life domains (i.e., job, off-job, both job and off-job), needs satisfaction across life domains, energy levels (i.e., vitality, fatigue), positive and negative affect schedule (PANAS), nature exposure and relatedness, location, time of the day, work engagement and job performance over the past three hours. The data will be analyzed with advanced mixed modeling methods for modelling time series intensive longitudinal data.

Results obtained or expected:

Results are not currently available and will be presented at the conference.

Limitations:

The EMA study examined nature exposure and relatedness and emotional states repeatedly across multiple time points and days can result in measurement reactivity (i.e., measures may inform participants of desired behavioural outcomes of the study, leading to more mindful self-monitoring which influences actual behaviors) (French & Sutton, 2010; Shadish et al., 2002). For example, participants are more likely to take walks in the parks when participating in the study than usual.

Participants are not likely to respond on measurement occasions when they are particularly busy, stressed or occupied with the actual crafting behavior, resulting in selective non-response.

Conclusions – research and or practical implications:

The findings will expand knowledge on the dynamic processes of crafting behaviors across life domains during the working day, as well as their associations with personal resources, environmental situational factors and needs satisfaction. We will also gain insights on how these crafting processes will affect well-being over time. In addition, the findings will have practical implications for companies to develop crafting interventions in employees' daily life to improve their well-being.

Relevance to the Congress Theme:

Covid-19 has intensified the blurring boundaries between work and life, and crafting is a worker-driven strategy to better fit employees' personal skills and interests in response to organizational changes, changes in their private lives and the interface of these two domains.

Relevant UN SDGs:

The study would be highly relevant for the UN SDGs: "Good health and wellbeing" and "Decent work and economic growth".

Topic:

Organisational Design and Development Well-being

*Keywords: Job crafting and work design, Thriving at work, Work Engagement*

## Paper 2

### **Needs-based job crafting and the gain spiral: Psychological needs as an explanatory mechanism**

Martin Tušl & Georg F. Bauer | Public and Organizational Health, Center of Salutogenesis, Epidemiology, Biostatistics and Prevention Institute, University of Zurich, Switzerland; Jessica de Bloom, Department of Psychology, Tampere University, Finland & Faculty of Economics and Business, University of Groningen, The Netherlands

#### Research goals:

Our study aims to examine whether a needs-based approach to job crafting (de Bloom et al., 2020) could explain the processes in the gain spiral of the job demands-resources model (JD-R; Bakker & Demerouti, 2017). Specifically, we examine the relationships between job resources, sense of coherence (SOC) as a personal resource, needs-based job crafting, and work engagement.

#### Theoretical background:

The gain spiral in the JD-R model describes how engaged employees can use job crafting to build up their resources and further strengthen their motivation (Bakker & Demerouti, 2017). The assumption of gain spiral implies reciprocal relationships between resources, work engagement, and job crafting. Although, there has been evidence for single paths within the gain spiral, there is still a lack of evidence for the full gain spiral.

A large body of evidence supports the core path of the original JD-R model (Bakker & Demerouti, 2007) from job resources to work engagement (Schaufeli & Taris, 2014). Less attention has been paid to the role of personal resources, but the evidence thus far supports their importance (e.g., Xanthopoulou et al., 2009; Vogt et al., 2016). The role of job crafting in the gain spiral is still somewhat unclear as the evidence on different job crafting strategies and the direction of relationship with resources and work engagement is rather mixed (Mäkikangas, 2018).

Thus, as an alternative approach, we apply the identity-based integrative needs approach to job crafting which sees psychological needs as the drivers and outcomes of job crafting efforts (de Bloom et al., 2020). Our study explores whether such needs-based job crafting could explain the processes in the gain spiral, as proactive needs satisfaction can build up resources and foster motivation. Furthermore, we examine the role of sense of coherence (SOC) as a personal resource in the gain spiral. SOC is the main pillar of the salutogenic model of health (Antonovsky, 1979, 1987) defined as a global orientation to life determining the degree to which life is perceived as comprehensible, manageable, and meaningful. SOC has been positively linked to job resources and work engagement indicating that it is a relevant personal resource in the work environment (Vogt et al., 2015).

#### Design and Methods:

The study has a two-wave longitudinal panel design with a time interval of six months between the waves. We collected data via an online questionnaire from Swiss and German adult employees in June 2022 and November 2022. The final sample will include approximately 1200 participants who will have completed the survey at both times. Job resources were assessed using an indicator tool developed by the UK Health and Safety Executive (Cousins et al., 2004). SOC was assessed using a German version of the 9-item scale SOC-L9 (Schumacher et al., 2000). Work engagement was assessed with the 9-item version of the Utrecht Work Engagement Scale (Schaufeli et al., 2006). Job crafting was assessed with the 18-item Needs-based job crafting scale (Tušl, Bauer, & de Bloom, in

preparation). Data analysis will be conducted in R 4.0.2 (R Core Team, 2022) using the lavaan package (Rosseel, 2012).

Expected results:

In line with the gain spiral (Bakker & Demerouti, 2017), we expect to find a positive reciprocal relationship between job resources, SOC, job crafting, and work engagement. Results will be available in January 2023.

Limitations:

Main limitation of the study is related to the method of data collection. To obtain a larger longitudinal sample, we collect the data using an online survey and self-reported data may be subject to common method biases (Podsakoff et al., 2003). We addressed this risk by implementing various strategies in the questionnaire such as using disqualifying items to prevent invalid answers. Moreover, we contracted a professional panel data service that guarantees high quality data and we conducted a thorough data cleaning prior to the data analysis.

Research and practical implications:

Our study contributes to the theoretical understanding of the gain spiral in the JD-R model via proactive needs satisfaction at work. In practice, our study will add to the evidence on the benefits of creating a resourceful work environment and strengthening job crafting behaviors among employees.

Relevance to the Congress theme:

The changing world of work brings more flexibility and increases opportunities for individuals to proactively shape their work environment and foster their workplace well-being. Therefore, it is relevant to examine the mechanisms that enable employees to create their own gain spiral.

Relevant UN SDGs:

Good health and well-being, Decent work and economic growth

*Keywords: Sense of coherence, Job crafting, Psychological needs*

### Paper 3

#### Needs and proactive motivation – drivers of crafting behaviours at work

Xenia Bolschakow & Lina Marie Mülder | Department of Work, Organizational, and Business Psychology, Johannes Gutenberg University Mainz, Germany; Thomas Rigotti, Department of Work, Organizational, and Business Psychology, Johannes Gutenberg University Mainz, Mainz, Germany & Leibniz-Institute for Resilience Research Mainz, Germany; Miriam Arnold, Leibniz-Institute for Resilience Research Mainz, Germany

#### Research goals:

Proactive behaviour at work, such as job crafting, is of increasing importance in our digitalized and flexible work settings nowadays. Outcomes and consequences of this behavior have been thoroughly studied since the introduction of job crafting two decades ago. However, it is essential to investigate motivational antecedents of crafting, especially because there is a consensus that engagement in such behaviours can also be costly for the individual as it might deplete their energy or meet resistance from others.

The model of proactive motivation posits three pathways: can do, reason to and energized to. Earlier empirical evidence for this model has focused on individual aspects, however, the present study contributes by including the interaction of all three motivational states in predicting actual crafting behaviour on a daily basis. Furthermore, we aim at theoretically and empirically integrating needs as reason-to state in the model of proactive motivation to refine our understanding regarding this motivational state. Furthermore, we examine oppositional assumptions regarding relationships of need satisfaction and need frustration with crafting behaviours.

#### Theoretical background:

Building on the model of proactive motivation and focusing on the reason to state, the present research integrates this framework with recent approaches to crafting which focus on needs. We hereby draw on basic psychological needs theory, showing that the needs for competence, autonomy and relatedness are universal and satisfaction of these is necessary for optimal functioning. We posit needs to act as reason-to state, constituting “why” individuals craft their jobs or other domains such as home or leisure. Building on the Integrative Needs Model of Crafting, we assume different crafting behaviours to be stimulated by different needs. For example, an individual whose need for relatedness is not fulfilled, will likely engage in crafting towards connection and community with others.

As needs can also be thwarted, need frustration is considered alongside need satisfaction in the present study. According to research building on the Two-Process-Model of Needs, need frustration may be the most motivating aspect of needs, initiating behaviour aimed at reducing this unfulfilling state. As only need frustration represents a state of threat, it should activate energy resources to counteract the need thwarting situation. In contrast, Self-Determination Theory argues that need frustration triggers engagement in compensatory behaviours and the pursuit of need substitutes, which do not help to ultimately satisfy the unfulfilled need. Similarly, Conservation of Resources Theory would also suggest dysfunctional behaviours following need frustration, positing that in such a state, individuals do not have sufficient resources and will therefore behave defensively to protect their remaining resources. Including both need satisfaction as well as need frustration in our study

allows for the empirical test of these two oppositional assumptions regarding the relationships of needs with daily crafting.

Design:

Data was collected using a diary study spanning two work weeks between June and September 2022, sampling employees of a German university. Participants provided information on motivational states (need satisfaction, need frustration, self-efficacy, and vigour) around noon and reported their job crafting behaviours in a second questionnaire after work.

Results obtained or expected:

Data will be analysed using multilevel modelling with interaction analyses. As data collection has just finished, final analyses will be presented at the conference. Preliminary analyses indicate differential relationships of need satisfaction and frustration with job crafting dimensions on the within- and the between-level.

Limitations:

As data was collected in a diary setting, motivational states were assessed using relatively short scales. Furthermore, generalizability of results to other work contexts may be limited as participants were all employees of the same university.

Conclusions:

The present research contributes by theoretically integrating need and proactive motivation frameworks. It will also provide deeper insight into the interplay of need satisfaction, need frustration and other motivational states in predicting daily job crafting behaviours.

Relevance to the Congress Theme:

This research addresses crafting behaviours at work, which are increasingly important in the “changing world of work” we live in. A comprehensive understanding of underlying motivational processes of such crafting behaviours is fundamental to foster and nurture behaviours which are sustainable and enable the well-being of individuals at work.

Relevant UN SDGs:

By shedding light onto antecedents of proactive work behaviour, this research promotes the goals of “Good health and wellbeing” and “Decent work and economic growth”.

Topic area:

5: Engagement and motivation

*Keywords: Job crafting, Needs, Proactive motivation*

## Paper 4

### Reverse effects within the JDR-model: The role of approach and avoidance crafting

Elisa Lopper & Annekatriin Hoppe | Humboldt University Berlin, Germany; Jenny S. Wesche, Freie Universität Berlin, Germany; Malte Roswag, University Hildesheim, Germany

#### Goals:

Combining Job Demand-Resources model (JD-R; Demerouti et al., 2001) and Conservation of Resources Theory (COR; Hobfoll, 1989), there is evidence that the often confirmed effects of job resources and job demands on work engagement and exhaustion respectively also occur in reverse. The present study examines underlying mechanism of the reverse effects and proposed that a) approach crafting mediates the link between work engagement and job resources (i.e., job autonomy, empowering leadership) and b) avoidance crafting mediates the link between exhaustion and job demands (i.e., time pressure).

#### Theoretical background:

Extending the propositions of unidirectional relationships within the JD-R model, recent studies have shown that job resources and job demands not only affect work engagement and exhaustion, respectively, but that reverse effects between these variables prevail. Building on the COR theory which states that employees strive to maintain, protect or enhance their resources at work, employees can be active and change their job resources and job demands depending on their experienced level of work engagement and exhaustion, respectively. Such self-initiated changes are called job crafting. Job crafting includes employee-initiated actions with the intent to expand (i.e., approach crafting) or reduce (i.e., avoidance crafting) aspects of the job. Research suggests that engaged employees are motivated to stay engaged and generate their own resources at work. Approach crafting (e.g., increasing job resources) includes employees' actions to optimize their work environment and create their own job resources. Thus, work engagement can trigger approach crafting which further leads to higher levels of job resources. In contrast, experiencing high levels of exhaustion can signal a possible loss of resources, which – according to COR theory – stimulates employees to conserve their resources. To preserve their resources employees can reduce aspects at work, for instances, by avoidance crafting. Although avoidance crafting is intended to help employees dealing with job demands, it might be rather maladaptive for the following reason: Avoidance crafting requires an investment of resources towards a goal that possibly cannot be achieved as job demands are given and often little changeable in today's work environment. Such a futile investment and loss of resources in turn may lead to higher levels of job demands. Consequently, exhaustion may stimulate avoidance crafting which further results in higher job demands.

#### Methodology:

Daily diary data were collected over a period of five consecutive workdays. Overall, 171 employees working from home were included in the data analyses.

#### Results:

Initial multilevel mediation analyses revealed that daily approach crafting mediates the link between daily work engagement and empowering leadership at the end of the working week. This result was

not found for job autonomy. Furthermore, daily avoidance crafting did not mediate the relation between daily exhaustion and time pressure at the end of the working week.

Limitations:

Results should be interpreted and generalized with caution as data were collected under the circumstances of COVID-19 pandemic.

Conclusions:

Results indicated that higher levels of work engagement motivate employees to expand positive aspects of their job (i.e., approach crafting) which can further increase the job resource empowering leadership. Engaged employees are able to craft their job and are, in turn, more often encouraged by leaders to act proactively. Thus, engaged employees can create their own gain spiral of resources through approach crafting. However, it seems that employees with high levels of exhaustion do not use their remaining resources to become active and try to conserve their resources by stepping away from negative aspects at work (i.e., avoidance crafting). Future research is needed to explain the reverse effect of exhaustion on job demands (e.g., Demerouti et al., 2004). For practice, job resources and job demands do not exclusively influence by managers or the organization (top-down) but can also be influenced via job crafting by employees stimulated from their work-related well-being. This can be considered when developing interventions.

Relevance to the Congress Theme:

In a changing world of work, it becomes more important for employees to be proactive and adjust aspects at work by oneself (i.e., job crafting). Also, organizations benefit from employees who craft their job. The study reveals how work-related well-being brings employees to optimize their work environment.

Relevant UN SDGs:

“Good health and wellbeing”, “Decent work and economic growth”

*Keywords: Crafting, Gain spiral, Loss spiral*

## **Symposium S102**

### **Psychosocial safety climate: Advances in research and practice (Part one)**

May Young Loh & Maureen Dollard | Psychosocial Safety Climate Global Observatory, University of South Australia

science\_practice

What will be covered and why

This symposium covers the latest research on psychosocial safety climate (PSC), an emerging construct that has received a vast amount of attention in theoretical, empirical, and practical work. PSC is the corporate climate for workers' psychological health. It is the leading indicator of workplace psychosocial risk factors and employees' work and health outcomes. Therefore, assessing PSC is important for building a psychologically healthy workplace. This is the Part one of a symposium that mainly focusing on the advancement in PSC theoretical propositions. In Part one of this symposium, we start with an introduction using system theory to understand the impact of PSC. This is followed by three presentations expanding the theory of PSC to positive behaviours, psychological needs, and illegitimate tasks.

The first presentation will be presented by Dollard, Loh and de Jonge . This presentation is a study using organisational system theory in exploring the top-down influences and emergent process of PSC, and how it influences leadership, which in turn reduces the likelihood of bullying and harassment. The authors used a multi-source data from Australian public sector organisations. A three-level structural equation model found that (1) senior management espoused PSC was positively related to mid-level supervisors' perceptions of PSC that related to bullying and harassment, and (2) agency PSC as perceived by mid-level supervisors' (only) boosted the effectiveness of their work unit supportive supervision in reducing bullying and harassment.

The second study included in this symposium is a paper by Idris and Idris . Using multilevel, multi-source longitudinal data, the authors studied the mediational pathway of PSC and employees' organisational citizenship behaviours (OCB) through supervisor support. The authors found that supervisors' supportive behaviours mediated the relationship between PSC on employees' OCB.

The third presentation is a study by Shee, Idris and Dormann on the role of PSC on worker well being through psychological needs. Using a two-wave longitudinal study from Malaysian workers, the authors found that within-organisation PSC related to work engagement and emotional exhaustion through increasing needs satisfaction and reducing needs frustration. Between-level PSC was related to collective needs satisfaction and frustration, but the indirect effect was not supported.

The fourth presentation is a study by Dormann and Munz . Using a four-wave diary study sample, they conducted cross-lagged models on the relationship between illegitimate tasks and worries. They analysed if PSC can moderate the reciprocal effects between the two vocal variables. The findings suggested that PSC is an important contextual factor to reduce the negative strain effect of worries on illegitimate tasks. Hence, when there is high PSC, workers who suffer with worries will be less likely to perceive illegitimate tasks.

The practical advancement in the PSC theory will be presented in the part two of this symposium.

Relevance to the Congress Theme

The world of work is changing with an increasing need for more profits and production creating a huge challenge to balance productivity and employees' psychological health. Designing a workplace with less psychosocial threats, using the theory of PSC, is hence important and timely. Our symposium responds to the call of UN SDG in relation to decent work and economic growth.

#### Research/Practical Implications & Overall conclusions

The symposium affirms the importance of PSC in reducing the prevalence of psychosocial hazards, such as bullying, strengthening individual personal resources, such as recovery experience and needs fulfillment, and improving employees' positive behaviours (i.e., OCB). It also helps to cease the vicious cycle between stressors and strains.

discussant: Christian Dormann, Johannes Gutenberg-University

*Keywords: psychosocial safety climate, psychological health, organisational behaviours*

## Paper 1

### **PSC and Leadership in an Organizational Systems Approach to Bullying and Harassment; A Multisource, Multilevel study**

Maureen Dollard & May Young Loh | Psychosocial Safety Climate Global Observatory, University of South Australia; Jan de Jonge, Eindhoven University of Technology

Research goals, why the work is worth doing and theoretical background

A multilevel paradigm is required to understand and prevent the devastating effects of workplace bullying and harassment on employee mental health and organizational productivity. Drawing on organizational systems and context theory, we explore top-down functional and structural level processes together. We propose that bullying and harassment experienced by workers is due to: (1) a mediated functional trickle-down process at the agency level whereby senior management set the tone for a specific climate (e.g., the psychosocial safety climate, PSC), and through climate-to-climate transmission and collective social learning shape mid-level supervisors climate aligned actions; and (2) a context cross-level structural moderator effect whereby PSC at the agency level affects mid-level supervisors' supportive leadership behaviors at the work unit level.

Methodology

Our multisource Australian public sector study linked data from hierarchical functional (1372 senior managers, 5341 mid-level supervisors, 22171 workers) and structural (33 public sector agencies, 413 work units) levels. A three-level structural equation model was conducted to test our hypothesis.

Results

We found, (1) senior management espoused PSC was positively related to mid-level supervisors' perceptions of PSC that related to bullying and harassment, and (2) agency PSC as perceived by mid-level supervisors' (only) boosted the effectiveness of their work unit supportive supervision in reducing bullying and harassment.

Limitations

We relied on secondary data which limited our capacity to influence measures (e.g., a single item may confound bullying and harassment). The cross-sectional design limits our capacity to draw causal conclusions.

Conclusion

Using an organizational systems and context framework exemplified in a three-level structural equation model, we provided a rare glimpse for scholarship into the internal multilevel functioning of an organizational system with implications for workplace bullying and harassment.

PSC emanates from the highest levels, and in a top-down power driven collective social learning process, transmits at the agency level from top/senior management to mid-level supervisors to affect average agency worker reports of bullying and harassment. In a downward safety signaling process, agency level PSC as perceived by mid-level supervisors, boosts the negative relation between supportive supervisory behavior and bullying and harassment at the work unit level, strengthening the relation when the climate is right (higher PSC). Despite the propensity for mid-level supervisors to act to prevent bullying and harassment they may lack power to do so when the climate is not

right. PSC as espoused by senior managers is an efficient marker for mid-supervisor PSC and workplace bullying and harassment.

Relevance to the theme and UN SDGs

This study is relevant to the aim of building decent work and economic growth in the changing world of work.

*Keywords: psychosocial safety climate; bullying and harassment; organizational climate*

## Paper 2

### **The Effects of Psychosocial Safety Climate on Employees' Citizenship Behaviour: The Role of Supervisor Supportive Behaviour as mediator**

Idasuzana Idris & Mohd Awang Idris | Dept. Anthropology/Sociology, Faculty of Arts and Social Sciences University of Malaya, Malaysia

Research goals and why the work was worth doing

Psychosocial Safety Climate (PSC) is an organisational climate that can boost job resources, and also functions as a safety signal that provide cues to the middle managers about ways of behaving and action according to the norm set by the upper-level management. While most studies to date have investigated the influence of PSC on several job resources with work engagement as an outcome, it remains unclear how PSC could increase employee-individual organisational citizenship behaviours (OCB-I) through supervisor support. Thus, the aim of the current study is to examine how organisational PSC could increase OCB, via supervisor support.

We postulate several hypotheses:

Hypothesis 1: Psychosocial Safety Climate (PSC) is positively related to Supervisors' Supportive Behaviour;

Hypothesis 2: Supervisors' Supportive Behaviour is positively related to employees' OCB-I; and

Hypothesis 3: Supervisors' Supportive Behaviour mediates the positive relationship between PSC and employees' OCB-I.

Theoretical background

As the espoused-enacted theory posits that the alignment between what has been said and what has been done is essential to ensure the most effective impact of an espoused theory. We hypothesised that PSC is important and useful in encouraging more positive organisational behaviours as a result of reciprocity. In which employees engage in positive behaviours when they perceived that their working environment is treating them in a good way. But this effect will be exemplified when the supervisor enacted the espoused climate through, their daily practices.

Methodology

Using Cole and Maxwell (2007)'s recommendation, we used a three-wave longitudinal design with 4-month time intervals among private sector participants in Malaysia. We randomly selected 200 organisations from a list of registered companies. An online questionnaire was provided to the selected organisations via email. A total of 192 organisations were willing to participate. Out of 690 participants from 192 organisations who had been approached, only 538 participants from 70 organisations remain in all three waves of data collection.

Results

Due to the nature of multilevel data, we used M Plus software to test all hypotheses. In general, as expected, we found that PSC Time 1 is positively related to Supervisors' Supportive Behaviour Time 2. We also found that PSC Time 1 predicted OCB-I Time 3. We also found support for our hypothesis that Supervisors' Supportive Behaviour Time 2 mediated the relationship between PSC Time 1 and OCB-I Time 3.

## Limitations

Our study has some limitations. First, we only tested a causality effect from PSC to OCB-I but did not investigate the reverse or reciprocal effect that might occur. It is possible that higher OCB-I will increase PSC in organisations. Second, while using longitudinal design may reduce some issues associated with common method variance, the self-rated questionnaires in the current study might lead to bias.

## Conclusion

Theoretically, our study adds new knowledge on the role of PSC in improving employees' OCB, particularly through supervisor support. Practically, our study suggests that training and coaching should be provided to improve PSC in organisations, which in turn influences supervisor support and employees' OCB-I. Ameliorating PSC and supportive managerial practices would improve OCB-I which benefits others within organisations. In conclusion, we found that PSC plays a pivotal role in increasing OCB-I, mainly via Supportive Supervisors' Behaviour which reinforced the importance espoused PSC on enacted supportive supervisors' behaviour. The expectation of top management (espoused theories) on work-related performance by supervisors' support is salient only if there is an alignment between what is being suggested (strategies and plans) and what is being acted (Settoon & Mossholder, 2002).

Relevance to the Congress Theme & UN SDGs

Organisational design and development

Relevant UN SDGs

Decent work and economic growth

*Keywords: Psychosocial Safety Climate, Citizenship Behaviour, Supervisor Supportive Behaviour*

### Paper 3

#### **Does Psychosocial Safety Climate Predicts Basic Psychological Needs at Work? A Longitudinal Multilevel Mediation Analysis**

Pay Yee Shee, Faculty of Arts and Social Sciences, University of Malaya; Christian Dormann, Johannes Gutenberg-University Mainz, Germany; Mohd Awang Idris, Faculty of Arts and Social Sciences, University of Malaya

##### Research goals and why the work was worth doing

Since the introduction of psychosocial safety climate (PSC) in 2010, it has been supported empirically as one of the precursors to job characteristics, specifically, the role of PSC in delineating job demands and increasing job resources. By using job-demand resource (JD-R) model as a guiding framework, PSC indirectly facilitates positive work outcomes and improves employee psychological wellbeing. However, the vast majority of PSC studies have used job characteristics model, it remains unclear how PSC influence employees' psychological needs at work. This is important as researchers have regularly hypothesized and consistently found that satisfaction of basic psychological needs is essential for optimal functioning and psychological wellbeing in a variety of settings, including workplace (e.g., Deci, Olafsen & Ryan, 2017; Van den Broeck, Ferris, Chang, & Rosen, 2016). Despite the theoretical and empirical attention paid to the role of PSC in workplace psychological health, past research barely explores how PSC relates to psychological need supporting/thwarting in creating a flourishing workplace.

##### Theoretical background

In the context of the current study, by integrating self-determination theory into PSC theory, our aim is to explore the effects of PSC on employee outcome (i.e., work engagement) and wellbeing (i.e., emotional exhaustion) via satisfaction/frustration of the employees' basic psychological needs (i.e., competence, autonomy, and relatedness). We predicted PSC to be positively related to work engagement and negatively related to emotional exhaustion and these relations would be mediated through need satisfaction/frustration.

##### Methodology and results

Data were collected using two-wave longitudinal design (with a time gap of 4 months) from 857 employees among 49 organizations within the industry of community and social services in Malaysia. All hypotheses were tested using Multilevel Structural Equation Modelling (MSEM) in Mplus 8.3. To test the hypotheses longitudinally, we used independent variable (i.e., PSC) as measured at T1, mediators (i.e., need satisfaction/frustration) and outcome variables (i.e., work engagement, emotional exhaustion) as measured at T2 (i.e.,  $T1 \rightarrow T2 \rightarrow T2[MD1]$ ). We further controlled for the baseline (T1) of the mediator and outcome measure. At the individual level, there were significant effects of within-organization PSC perceptions on competence need satisfaction, competence need frustration, autonomy need satisfaction, autonomy need frustration, relatedness need satisfaction, and relatedness need frustration. The indirect effects of within-organization PSC  $\rightarrow$  competence need satisfaction  $\rightarrow$  work engagement, within-organization PSC  $\rightarrow$  autonomy need satisfaction  $\rightarrow$  work engagement / emotional exhaustion, and within-organization PSC  $\rightarrow$  autonomy need frustration  $\rightarrow$  emotional exhaustion were significant. On the between level, PSC was significantly related to group means of competence need satisfaction, competence need frustration, autonomy

need frustration, and relatedness need frustration. The between-cluster indirect effects of the variables were not supported. [MD2]

#### Limitations

One possible limitation of the current research is the “half-longitudinal” design in which the mediators and outcome variables are measured at the same time point. As such, the final pathways in our model (need satisfaction/frustration T2 → work engagement/emotional exhaustion T2) were cross-sectional. Further studies involving three (or more) time points (i.e., T1→T2→T3) would permit the examination of a more accurate longitudinal mediational process.

#### Conclusion

Overall, we found that, PSC does not only precede working conditions as often discussed in the literature, but also manifested as an intrinsic form of motivation, satisfying the basic psychological needs of the employees. [MD3]

#### Relevance to the Congress Theme & UN SDGs

Organisational design and development

Relevant UN SDGs

Decent work and economic growth

*Keywords: psychosocial safety climate, psychological needs, emotional exhaustion*

## Paper 4

### Longitudinal moderation effects of PSC on reciprocal relations between illegitimate tasks and worrying

Dormann Christian & Julia Munz | Johannes Gutenberg-University Mainz, Germany

Research goals and why the work was worth doing:

The effect of stressors on strains has been studied many times. Interestingly, a longitudinal meta-analysis found that the reverse 'strain effect' of burnout on stressors is twice as large as the 'stressor effect' of stressors on burnout (Guthier et al., 2020). Thus far, reciprocal relations between stressors and strain have almost never been studied in diary studies. In particular, this applies to illegitimate tasks. Further, PSC as a potential and simultaneous moderator of both stressor effects and of strain effects was not yet investigated. Since such moderator effects are important as they could mitigate the vicious circle of stressors and strains, our study fills in this gap. In particular, we investigate PSC as a moderator of stressor effects and strain effects among illegitimate tasks and worries.

Theoretical background:

Illegitimate tasks are perceived as unnecessary or unreasonable (Semmer et al., 2010). Illegitimate tasks can threaten one's identity (Semmer et al., 2015). According to the Stress-as-Offense-to-Self (SOS) framework, illegitimate tasks as a stressor result from a task associated with a negative social message that can result in a threat to the positive self-image (Semmer et al., 2015). Any kind of threat (e.g., social, emotional, physical) causes stress reactions such as worries. However, work-related worries may also increase perceptions of illegitimate tasks. Therefore, we expect that both illegitimate tasks increase worries and worries increases illegitimate tasks. Since perceptions of illegitimate tasks is dependent on the context, we assume that the reciprocal effects will differ depending on the level of psychosocial safety climate (PSC). For example, in a high PSC environment where employees' psychological health is protected, people may be more likely to focus on positive aspects of stress. Thus, a reducing moderation effect of PSC can be assumed.

Design/Methodology:

Data were collected online, with 492 nurses registered to participate. Of these, 354 nurses participated at Time 1 (T1) and provided information on sociodemographic data (301 of them participated at T2, 230 at T3, and 192 at T4, which means a response rate of 54.2%). Of all participants, 79.5% were female. Mean age was 39.9 (SD = 11.7) years. On average, they worked 30.3 (SD = 9.4) hours per week and had a tenure of 14.7 (SD = 10.9) years. Most of them worked in shifts (81.0%), and 42.2% had managerial responsibility. The Bern Illegitimate Tasks Scale (Semmer et al., 2010) were used to measure supervisor-related and colleague-related assignments of illegitimate tasks. Work-related worries were assessed by means of a scale by Pereira et al. (2013). Data were analyzed with moderated structural equation modeling using random intercept cross-lagged models (RI-CLPM), which eliminate trait variance and yield within person effects.

Results

In line with Guthier et al, we found the strain effect of worries on illegitimate tasks assigned by colleagues was stronger than the reversed stressor effects of illegitimate tasks on worries. This applied to both CLPM and RI-CLPM. Similarly, in both types of models, PSC T1 significantly reduced the strain effect on illegitimate tasks assigned by coworkers. Thus, in PSC environments, people

suffering from worries are less likely to perceive illegitimate tasks assigned by colleagues compared to low PSC environments. For illegitimate tasks assigned by supervisors, no effect was found in RI-CLPM.

#### Limitation & Conclusions:

The results confirm the meta-analytical established effect of strain on stressors. Strain effects should therefore be considered in theoretical models and future studies to better understand how they emerge. Further, PSC moderates the strain effect on illegitimate tasks assigned by colleagues. There is a need to better understand how exactly this moderating effect emerges, and future studies should investigate this effect in more detail.

*Keywords: psychosocial safety climate, reciprocal relationship, illegitimate task*

## **Symposium S103**

### **Psychosocial safety climate: Advances in research and practice (Part two)**

May Young Loh & Maureen Dollard | Psychosocial Safety Climate Global Observatory, University of South Australia

science\_practice

In this symposium, we present recent research in relation to psychosocial safety climate (PSC) in workplaces, its influence beyond the work domain and its cost effectiveness across multiple cultural backgrounds and occupations. This symposium is the Part Two of a PSC symposium. Part one of this symposium has focused on some recent theoretical advancement. This part of the symposium includes studies in relation to PSC and organisational effectiveness in terms of workplace absenteeism, presenteeism, and turnover. We also expand PSC literature to different cultures by validating the PSC scale in a different language (i.e., Italian). Lastly, we provide some real case examples of how to build and improve PSC in organisations and its economic benefits.

The first presentation is by Mansour and colleagues on a study about the effect of PSC on workplace presenteeism during the pandemic. The authors conducted a two-wave longitudinal study among Canadian nurses. Using a moderated mediation model, the authors found that PSC reduced nurses' presenteeism through reducing work intensification. In addition, PSC was a moderator that reduce the negative effect of work intensification on presenteeism.

The second contribution of this symposium is by Fattori and colleagues who conducted a validation study on the Italian version of PSC-4 scale. Using cross-sectional data from Italian healthcare workers, the authors validated their PSC-4 tool and found that PSC related to job demands and job resources. They suggest that PSC should be used as a focus of an occupational health intervention in the Italian context.

The third presentation is a longitudinal study by Johari and Idris . The authors conducted a two-wave longitudinal study among Malaysian academics. They assessed the role of PSC and influences at work on the moderating effect of psychological detachment on the relationship between cognitive demands and emotional exhaustion. The findings revealed that PSC was a moderator of moderators providing resources to compensate for low detachment to reduce the impact of cognitive demands on emotional exhaustion.

The final presentation is by Loh and Dollard on two intervention case studies aimed to improve organisational PSC through an organisational participatory intervention. The authors conducted a follow-up assessment in two organisations on the level of PSC pre- and post- intervention. In addition, the authors estimated the cost of human capital and productivity loss that is averted using the level of PSC and sickness absence and turnover suggesting that medium sized organisations can save an estimated AU\$ 1-4 million dollars by improving PSC.

#### Relevance to the Congress Theme

The world of work is changing with an increasing demand for more profits and production creating a huge challenge to balance employees' psychological health with productivity imperatives . Designing a workplace with less psychosocial threats, using the theory of PSC, is hence important and timely. Our symposium responds to the call of UN SDG in relation to decent work and economic growth.

#### Research/Practical Implications & Overall conclusions

The symposium affirms the importance of PSC in improving organisational effectiveness and productivity. In addition it shows how PSC could benefit employees beyond their working lives. More importantly, the symposium provides practical insights and guidelines about how to improve PSC and the benefits gained through cost reduction associated with reduced sickness absence and turnover. Building PSC is important.

discussant: Christian Dormann, Johannes Gutenberg-University

*Keywords: psychosocial safety climate, psychological health, organisational behaviours*

## Paper 1

### **How Psychosocial Safety Climate Helped Alleviate Work Intensification Effects on Presenteeism during the COVID-19 Crisis? A Moderated Mediation Model**

Maureen Dollard, Psychosocial Safety Climate Global Observatory, University of South Australia; Sari Mansour, TÉLUQ University of Quebec, Montreal, Canada

#### Research goals and why the work was worth doing

Healthcare sector organizations have long been facing the issue of productivity loss due to presenteeism which is affected by psychosocial safety climate (PSC) and work intensification. Presenteeism has visibly increased among nurses during COVID-19 pandemic period. Presenteeism can be defined as employees' attendance behavior at workplace, when they don't exhibit adequate performance due to physical and/or psychological (i.e., cognitive, or emotional) problems or due to being ill. Presenteeism intensifies in a situation where pressures to remain working during illness persist for a longer period such as during pandemics of COVID-19. It is composed of two dimensions, that is, work completion (i.e., work outcome) and 'avoiding distraction' (i.e., work process). Researchers advance that employees continue working even when they are sick to balance health constraints and performance demands. Management of presenteeism is considered a long-term investment for both individuals' and organizational wellbeing and PSC could be an effective tool to do this.

#### Theoretical background

Grounded in the conservation of resources (COR) theory and sensemaking theory, the current study aimed to examine the role PSC plays as driver or moderator to reduce presenteeism by lessening work intensification over time and the impact of work intensification over time on presenteeism during the COVID-19 pandemic.

#### Methodology and results

Adopting a time-lagged research design, this study gathered data from randomly selected registered nurses, practicing in Québec, Canada in two phases, i.e., 800 at Time 1 (between October and November 2020) and 344 at Time 2 (between June and July 2021) through email surveys. The first lockdown in Quebec-Canada was on 15 March 2020). The study results showed that (1) PSC reduces presenteeism over time by reducing work intensification at time 1; (2) PSC moderates the relationship between work intensification at Time 1 and work intensification at Time 2; and (3) PSC as moderator also lessens the detrimental effect of work intensification at Time 2 on presenteeism at Time 2.

#### Limitations/Conclusions

Presenteeism among nurses affects their health and psychological well-being. We find that PSC is likely an effective organizational tool particularly in crises situations, by providing an organizational mechanism to assist nurses cope (through a resource caravan and management support) with managing intensified work. Although in general we might think that the level of presenteeism could have been decreased because healthcare workers were not allowed to go to work, this does not apply to our study conducted in the province of Quebec in Canada where the severe shortage of medical professionals has pushed the government and employers to allow those with COVID-19 but without symptoms to go to work. This is also less the case because our measure of presenteeism

excluded covid-symptoms and focused only on physical and/or psychological symptoms. This is plausible for the ongoing work intensification from T1 to T2 and due to the uncertainty and enhanced pressure on nurses during COVID-19, nurses are forced to expand their energies (i.e., additional resource investment) to manage the extensive workloads. Indeed, when nurses perceive a high workload, they may be afraid about the growth of COVID-19 which would intensify their workload in the future, leading them to continue working while being sick, especially with the shortages in healthcare organizations.

Relevance to the Congress Theme & UN SDGs

Organisational design and development

Relevant UN SDGs

Decent work and economic growth

*Keywords: psychosocial safety climate, work intensification, presenteeism*

## Paper 2

### **Psychosocial safety climate (PSC) at middle management level in the healthcare sector: A contribution to the Italian validation of PSC-4**

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#### Research goals and why the work was worth doing

Psychosocial safety climate (PSC) refers to workers' shared perceptions of organizational policies, practices and procedures for the protection of psychological health and safety. PSC offers a multilevel organizational approach that expands traditional models of workplace stress, giving a more comprehensive understanding of occupational health and safety issues. Although considerable research on psychosocial risks in the healthcare sector has been conducted, few studies have explored the role of PSC among healthcare workers at middle management level. Additionally, no validated version of PSC is available in Italian language.

#### Theoretical background

The aim of this study is to contribute to the validation of the Italian 4-item version of the PSC and to explore this theory within the Job Demands-Resources model (JD-R) among a sample of Italian healthcare workers by testing PSC at the middle management level.

#### Methodology and results

We used cross-sectional data from 276 employees working in 17 different wards in a large Italian hospital. Intra-class coefficient (ICC) coefficient and agreement index were used to test PSC as a climate construct (data nested to hospital ward level). We performed hierarchical linear models to test mediation and moderation effects. The Italian version of PSC-4 proved to have good psychometric properties and confirmed its role as a group-level construct. Multilevel random coefficient models showed PSC was associated with Job Demands and Job Resources. Results confirmed the indirect effect of PSC on Psychological (Burnout) and Occupational Health (Job Satisfaction) outcomes supporting the role of Job Resources and Job Demands as mediators. The multilevel analysis did not find a significant interaction terms between PSC and Job Demands on Burnout therefore the moderation hypothesis was not supported.

#### Limitations/Conclusions

The Italian version of PSC-4 is a valid tool to evaluate PSC. These findings sustain the multilevel framework of PSC and the significant role played by mid-leaders in both the health impairment and motivational path. Further studies should explore the buffering effect of PSC at higher baseline levels as well as the adoption of PSC as a target for occupational health intervention the Italian context.

#### Relevance to the Congress Theme & UN SDGs

#### Organisational design and development

#### Relevant UN SDGs

#### Decent work and economic growth

*Keywords: psychosocial safety climate, validation, healthcare*

## Paper 3

### Translating PSC research into practice: PSC intervention case studies and cost analysis

May Young Loh & Maureen Dollard | Psychosocial Safety Climate Global Observatory, University of South Australia

#### Research goals and why the work was worth doing

Work-related stress has enormous consequences for organisational productivity, absenteeism, performance and employee turnover. Considering this tense situation, all stakeholders should reduce psychological threats and promote decent work at workplaces globally (World Economic Forum, 2022). Scholars have increasingly directed attention towards improving employee well-being through organisational interventions. Studies have suggested that interventions that target the sources of work stress (i.e., job design and organisational system, such as Psychosocial Safety Climate [PSC]) should achieve an optimal effect. Psychosocial Safety Climate (PSC) is an organisational climate focusing on workers' psychological health. Previous research has consistently supported that PSC is a leading indicator of job design, such as job demands, job resources, and psychological health outcomes. Although PSC intervention research has gradually received attention in the field, this intervention research is often short-lived, and problems likely arise after researchers have left the participatory organisation. Therefore, we argued that one way to create sustainable change in an organisation is to build an intervention around the existing policies and day-to-day practices. In this presentation, we provide two examples of how organisations could incorporate intervention in their mainstream policies and psychosocial safety management system.

#### Theoretical background

In alignment with the proposition that PSC is the 'cause of causes' of employees' psychological health and safety (Dollard & Bakker, 2010), PSC is considered a lead indicator of several psychosocial factors, such as job autonomy, supervisor support, and rewards. In addition, PSC is also important for worker motivation and productivity. It is thus useful in the risk management process. Several studies suggest that PSC should be the main target of an organisational intervention to manage work stress and well-being, especially in turbulent times (Biron et al., 2018; Dollard & Bailey, 2021). Since PSC is a 'cause of the causes', we propose that improving the psychological health of workers should focus on PSC. We hypothesised that PSC would be improved by the actions taken to improve management priority, commitment, communication and participation.

#### Intervention

Two intervention case studies were included in this presentation. Following best practice principles in work stress intervention, two organisations conducted a risk assessment, created action plans, involved their stakeholders' participation and underwent follow-up assessment. We measured whether PSC changed over time and documented the activities and programs conducted in the organisations as evidence of an intervention and as examples for future interventions. The level of PSC in the organisations was collected through online surveys pre-and post-intervention. Intervention activities focused on the four main elements of PSC principles through different activities and programs such as leadership workshops, programs to reduce stigma on work stress, recruitment of employee representatives, and psychoeducation on coping skills. We also conducted a cost analysis on sickness absence and turnover due to low PSC and estimated how much an organisation could save when they improve their PSC.

## Results

We found that interventions that focus on the four PSC elements improved the PSC level over time in Case study 1 and sustained the PSC level in Case study 2. An economic analysis of sickness absence and turnover attributed to low PSC also informs the importance of building PSC in workplaces to enhance organisational productivity and save organisations significant amounts of preventable cost. From the cost analysis, we found that organisations can save nearly one million per year for productivity lost due to sickness absence and over 4 million per year due to the cost of turnover if they could improve their organisation PSC.

## Limitations

The case studies were not designed with the suggested gold standard of the randomised controlled trials (RCTs; Tetrick & Winslow, 2015) but focused on a field setting. No overall evaluation of the intervention components impact was conducted. The intervention conducted in the selected period was vast, and it is difficult to control specific intervention that most effectively boosts PSC over time.

## Relevance to congress theme and UN SDGs

This study has provided some examples of how to promote decent work and economic growth (UN SDG) in this new changing world of work that contains increasing psychosocial risks.

*Keywords: psychosocial safety climate, intervention, cost analysis*

## Paper 4

### **Psychosocial safety climate as a moderator of moderators of the relationship between cognitive demands and psychological detachment on emotional exhaustion**

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#### Abstract

Research goals and why the study was worth doing: Psychological detachment is recognised as an important recovery mechanism for mitigating the effect of job demands on employees' exhaustion. While vast research so far has supported the notion that individuals suffering from high job demands are looking for recovery, it is less clear how different job resources (e.g., psychosocial safety climate) would increase the effectiveness of recovery. Thus, the main aim of the current study is to investigate how psychosocial safety climate (PSC), as an important organisational resource, strengthens the effect of detachment and indirectly mitigates the association between job demands and emotional exhaustion.

Theoretical background: The conservation of resources (COR) theory is used to depict the role of resources in facing enormous job demands and improving psychological health. If some resources are threatened in an adverse work environment, employees may strive to restore resources through detachment during non-work hours. In alignment to COR theory, PSC can be portrayed as a resource caravan passageway for the protection and acquisition of other resources. PSC also helps buffer the detrimental effect of demands while simultaneously creating a spectrum of resources for employees.

Design/Methodology/Approach: We conducted our research among academics at Malaysian public universities. Data were collected from academics over a four-month period using a multilevel longitudinal design (two-wave survey, at Time 1,  $n=248$ ; at Time 2,  $n=125$ ). At Time 2, 125 academics (50% response rate) completed an anonymous web-based survey. All study variables were collected at both Time 1 and Time 2. Research hypotheses were tested using quantitative analyses via Hierarchical Linear Modelling (HLM) software.

Result obtained or expected: Psychological detachment did not act as a mediator, causing PSC to be unable to moderate the mediated relationships between job demands and emotional exhaustion via detachment. However, the study found that detachment acts as a moderator between job demands (emotional and cognitive demands) and emotional exhaustion. The three-way interaction of PSC, psychological detachment, and physical demands [PSC\*PD\*PH] revealed that PSC could moderate detachment in the stressor-detachment relationships. It demonstrates that PSC was a moderator of moderators providing resources to compensate for low detachment to reduce the negative effect of physical demands on emotional exhaustion.

Limitations: First, we only used a self-rated questionnaire. As a result of the common-method bias, the relationship between variables may be inflated. By employing a multilevel longitudinal design, our method may help in the elimination of common method biases (Cole & Maxwell, 2009). Second, we only used two-waves, indicating half-longitudinal data. Third, we used only two-dimensions of PSC scale (management support and commitment; and management priority) to represent PSC as a multilevel construct. Finally, the study's sample was primarily academics, which may limit its generalisability to other professions. Future research should consider using a multisource design with

multiple waves data to reveal the causal association between organisational resources and psychological health across different professions.

**Conclusions:** Given the importance of PSC as a moderator of moderators in stressor-strain relationships, it helps to mitigate the negative impact of cognitive demands on employees' emotional exhaustion. It offers empirically supported insights into PSC's role as a resource passageway in this model's supplementing range of resources. The findings can be used to create resources in organisational interventions to reduce the impact of employees' job demands and foster ability to detach from work. This may decrease employees' stress and help to maintain their psychological health and well-being.

**Relevance to Congress Theme:** Employees in contemporary's workplace experience greater demands and work under stressful conditions. Many researchers attempted to discover better ways to reduce stressor-strain reactions and promote better well-being. By prioritizing organisational resources such as PSC, it is possible to protect employees' psychological health at work. Indeed, PSC allows employers to provide more resources to their employees, such as improving psychological detachment during off-job recovery, resulting in decreased psychological strains. Detaching from work has significantly reduced the cost of mental and physical energy depletion.

**Relevant UN SDGs:** The working world is regarded as a critical source of work stress experiences, causing more employees to suffer from detrimental events. It has prompted many researchers to investigate stressor-strain issues in the modern workplace. The study contributes to the third Sustainable Development Goals in ensuring healthy lives and promotes well-being.

*Keywords: psychosocial safety climate, cognitive demands, psychological detachment*

## Symposium S104

### Examining the work-nonwork interface from special perspectives

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science

What will be covered and why: The work-nonwork interface has been recognized as an important research area within work and organizational psychology for several decades. The importance of understanding how individuals experience and manage the interplay of work and nonwork is illustrated by the steadily increasing number of studies in this area. However, despite the considerable advances that have broadened our understanding of many important facets of the work–nonwork interface, specific life phases and situations in which working people find themselves during their careers have not been considered sufficiently in research so far. This symposium brings together four empirical studies that draw attention on specific groups of people and the work–nonwork interface in their lives.

The first study focuses on single childless employees, a group that has received relatively little attention in research on the work–nonwork interface due to their less obvious family obligations. The authors examine the impact of perceptions of singles-friendly work culture on singles' job performance and well-being and the mediating role of recovery experiences and work-life balance. The next study also focuses on singles, but single mothers and fathers, and examines how single parents are perceived regarding job and parental competence (among others) depending on their working status and the reason for this status. In the following article, attention is given to working mothers in a special phase, namely when returning to work after the birth of their children. The authors investigate (missing) job flexibility and workload as predictors of mothers' intent to leave the organization or the workforce in the early family phase and the mediating role of job strain. In the final study, the focus remains on working parents, but on those who face the challenge of having children with disabilities. This study examines the predictive value of individual/family and work-organizational factors for work-family facilitation in this specific group of working parents.

Relevance to the Congress Theme: Employees with different and special life situations play an important role in the changing world of work, and as diversity increases, so does the diversity of employees' private situations. Accordingly, it is crucial to keep this in mind when investigating the interface of work and nonwork.

Research/Practical Implications: Understanding the dynamics between work and nonwork in employees' lives is important for scholars and practitioners. Promoting practices and work situations that help workers in their specific situations, contribute to their well-being, performance, and retention is a crucial endeavor. The studies presented in the symposium help to increase our knowledge of the organizational influences that are worth addressing in this regard.

Overall Conclusion: Being in a special situation or phase is sometimes voluntary, sometimes involuntary. Sometimes it is rather a phase that is undergone as a normative developmental task, such as the re-entry to the labor market of women after the birth of their children. Sometimes, however, employees have to deal with situations that are not normative and desired, like having a disabled child. Employees, including their specific private situations, are an essential part of our world of work. This should not be neglected and the studies of this symposium contribute to ensuring that it is not done. At the same time, the studies contribute to a more comprehensive understanding of the interface between work and nonwork.

Christian Dormann

*Keywords: work-nonwork interface*

## Paper 1

### **Single-friendly work cultures, job performance and well-being of single employees: The mediating role of recovery experiences and work-life balance**

Kathrine Marie Jørgensen, Aarhus University, Denmark; Maja Fartek, Spyrosoft Solutions, Croatia; Carolina Garraio, University of Porto, Portugal; Audrey Ansay Antonio, University of Bologna, Italy; Ana Šimunić, University of Zadar, Croatia

The impact of a singles-friendly work culture (SFWC) on organizational commitment and well-being may be explained by levels of work-life balance of single individuals, that implies a combination of work and life in a pursuable manner (Akanji et al., 2015). Employees with higher levels of work-life balance were shown to have better health indicators and higher levels of well-being (Zheng et al., 2015). Another intervening factor of the impact of SFWC on well-being may be recovery experiences (psychological detachment from work, relaxation, control, and mastery in free time), which have been linked to higher well-being and job performance (Sonnetag et al., 2017). The (in)voluntariness of singlehood needs to also be considered, since stereotypes may be founded according to more positive evaluations of marital status choices that reflect the ideology of marriage and family (Morris & Osburn, 2016).

The aim of this research was to investigate perceptions of a SFWC as a predictor of recovery experiences, work-life balance, well-being, job performance, and affective organizational commitment. Job performance and organizational commitment were assumed to be correlated. A SFWC was expected to be associated with higher recovery experiences, which would determine perceptions of higher work-life balance and well-being, and subsequently higher job performance and affective organizational commitment. Thus, recovery experience, work-life balance, and well-being are viewed as mediators in the relationship between SFWC and organizational outcomes. As for the relationships between the mediators, it was assumed that recovery experiences would predict the perceived level of work-life balance, and that both variables would predict one's well-being. The model of these relationships was tested both for a group of 513 involuntary and of 209 voluntary single individuals, expecting lower relationships between variables in voluntary singles. The study was conducted during the EFPSA 2020 Research programme by a team of researchers from Italy, Denmark, Portugal, and Croatia, during the COVID-19 pandemic. Thus, an online questionnaire was conducted on employed childless singles from these four countries.

Structural equation modelling was conducted, and the results showed a better fit of a partial mediation model in comparison to excluding direct links between a SFWC and the dependent variables. The model explained 47% of well-being in involuntary and 35% in voluntary singles, 15% of affective organizational commitment in both groups, and 47% of job performance in involuntary and 54% in voluntary singles. When considering predictors of well-being, in both groups it was directly positively predicted by recovery experiences and work-life balance and indirectly predicted by a SFWC through greater recovery experiences and work-life balance. In involuntary singles it was also predicted indirectly by a SFWC solely through greater recovery experiences and directly by a SFWC. Affective organizational commitment was directly positively predicted by a SFWC in both groups. In involuntary singles, it was positively indirectly predicted by a SFWC through all the examined mediators, that is, well-being, both recovery experiences and well-being, recovery experiences and work-life balance, and recovery experiences, work-life balance, and well-being. In voluntary singles, the same positive indirect prediction of affective organizational commitment including all examined mediators and recovery experiences (probably due to relaxation) and work-life balance was obtained. Well-being did not show a significant mediating role when its prediction by work-life

balance was not included, and the indirect relationship of affective organizational commitment and a SFWC was negative when mediated only by recovery experiences (likely due to psychological detachment and mastery experiences). Namely, perceptions of a SFWC were related to greater recovery experiences, recovery experiences were negatively related to affective organizational commitment in voluntary singles. Job performance was positively directly predicted by work-life balance and a SFWC in both groups, and by well-being and recovery experiences in involuntary singles. All the specified indirect relationships of job performance and a SFWC through recovery experiences, work-life balance, and well-being were significant. In voluntary singles, the only significant indirect prediction of job performance by a SFWC was through greater recovery experiences and work-life balance.

The limitations of the study are related to the subjectivity of self-assessments and impossibility of drawing conclusions about cause-and-effect relationships. The research results imply that the practices of promoting a SFWC and work-life balance in organizations (and the society) may increase workforce morale and well-being, which in turn, minimizes negative job-related outcomes such as turnover intentions and absenteeism. Considering the changing demographics of the future workforce and the increasing presence of single employees in the world of work, the results bring awareness to different reasons of singlehood and imply more sensitivity and respect towards employees' private life and activities in the workplace.

*Keywords: Singles friendly workplace, Work-life balance, Job performance*

## Paper 2

### **Leaving the organization or quitting the workforce? A longitudinal study on working mothers' turnover intentions in the early family phase**

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**Aim:** Most women become mothers during their careers. In industrialized countries, the transition to motherhood is usually accompanied by a transition out of and back into the labor market. After having returned to work, a major challenge for mothers is meeting the dual-demands of family and work. Although the interplay of work and family is firmly anchored in organizational research, the early family life phase has received little attention. And, most importantly, work-specific influences on mothers' turnover intentions have been mostly neglected so far (Paustian-Underdahl et al., 2019). We address these aspects in our study and focus on job characteristics that might contribute to mothers' sustainable transition back to work. In particular, we investigate (a) how job time flexibility and workload affect withdrawal intentions in mothers who have recently returned to work and (b) whether job strain explains these relationships.

**Theoretical Background:** Based on the integration of the unfolding model of voluntary employee turnover (Lee & Mitchell, 1994) and the job demands-resources model (Bakker & Demerouti, 2007), we investigate the influence of job characteristics and subjective strain experiences on postpartum mothers' turnover intentions. We selected two job characteristics that are applicable across different fields of occupations, namely, workload as a stressor and time flexibility as a resource. Building on the stressor-strain perspective, we propose that job stressors indirectly influence the development of turnover intentions via job strain (e.g., Podsakoff et al., 2007), while job resources prevent from enduring strain experiences, thereby decreasing the likelihood of turnover intentions to occur. Regarding turnover, we differentiate between intentions to leave the organization and the workforce, that is, two forms of turnover intentions with different consequences for working mothers, employers, and the labor market.

**Methodology:** We analyzed longitudinal data from N = 159 working mothers (Mean age: 32.5, SD = 3.8) surveyed 12 and 24 months after childbirth. Factor analyses demonstrated the intent to leave a) the employing organization and b) the workforce to be two distinct forms of turnover intentions.

We found a direct link between time flexibility and intentions to leave the workforce with a lack of time flexibility leading to higher intentions to leave the workforce. Job strain fully mediated the influence of workload and time flexibility on both the intent to change the employer and to leave the workforce. The effects of time flexibility via strain on both types of turnover intentions were positive, indicating a decrease in turnover intentions, whereas the effects of workload via strain on turnover intentions were negative, indicating an increase in turnover intentions.

**Limitations:** Most participating mothers worked part-time. Compared to full-time working counterparts, they might be less inclined to (further) reduce working hours to decrease their workload and instead consider leaving the workforce.

**Conclusions:** We encourage future research to distinguish more strongly between different forms of turnover intentions and to study their antecedents in more depth. According to our results, job characteristics that include both a high workload and limited time flexibility lead to job strain among working mothers during their return to work, which, in turn, causes intentions to leave the

organization or even the workforce. Moreover, it seems that high workload only strengthens mothers' turnover intentions in the case that this demand causes subjective strain. A lack of time flexibility, in contrast, also has an immediate impact on mothers' intentions to leave the workforce. Overall, the results suggest that time flexibility is an important resource for work-life balance in the early family phase and that there is no hope for more flexibility even with other employers, at least from the women's perspective. Instead, we assume that experiencing a strenuous lack of time flexibility fuels the impression that leaving the workforce is the best way to meet family demands in the future.

Relevance to the Congress Theme: In the changing world of work, successfully returning to work will continue to be a challenge for postpartum mothers, and is also important for organizations and the society. Our study offers explanations why mothers who initially chose to pursue their careers, upon their return, start to consider turnover. We offer advice how to prevent these withdrawal tendencies.

*Keywords: Turnover, Working mothers, Return to work*

### Paper 3

#### **Predictors of work-family facilitation in parents of children with disabilities living in Croatia**

Ana Šimunić, University of Zadar, Croatia; Lisa Stewart, California State University Monterey Bay, USA; Theresa Brown, Georgian Court University, USA; Marija Ljubičić, Andrea Tokić, Jelena Ombla, Matilda Nikolić Ivanišević & Ana Slišković | University of Zadar, Croatia

The topic of integrating work and family roles has been researched to a lesser extent on the population of parents of children with disabilities, although it was shown that this group of employees experiences higher levels of conflict between work and family roles in both directions (negative spillover of work demands into the family domain and family demands into the work domain) compared to employees who have typical family obligations (e.g. Stewart, 2013). Brown and Clark (2017) reviewed 54 scientific papers that dealt with the balance of work and family roles of working parents of children with disabilities up to 18 years of age and pointed out numerous individual/family and work-organizational factors that can explain the (im)balance. However, the authors themselves warn about the lack of serious quantitative research in the area. Also, there is a lack of research on the positive aspects of work-family integration, that is, how being employed facilitates family life and vice versa. Additionally, the original papers in this review come from countries with very heterogeneous organizational policies aimed at balancing work and family roles, so national research on this topic is necessary. Thus, the aim of this research was to examine the predictive value of several individual/family and work-organizational factors in explaining work-to-family (WFF) and family-to-work facilitation (FWF) in working parents of children with disabilities up to 18 years of age in the Croatian context.

A total of 572 working parents (90.4% female and 9.6% male between 23 and 66 years of age) filled out an online set of self-assessment questionnaires. The set of predictors considered for each dependent variable were: 1) gender, age, level of education, size of place of residence; 2) personal protective factors (optimism, self-efficacy, posttraumatic growth - personal strength and appreciation for life); 3) emotional regulation strategies; 4) family and personal life characteristics (satisfaction with family financial status, number of children, age of oldest child, number of children with disabilities, level of disability, parental stress, social support in the family, and managing leisure time - enjoying and relaxing during free time); 5) work-organizational characteristics (satisfaction with personal income, working full time or not, in shifts or not, private or public sector, management position, work-time flexibility and predictability, work control, psychological work demands, and social support at work); 6) the importance of self-realization through professional life. The examined predictors were selected based on a previous qualitative study on parents of children with developmental disabilities in the Republic of Croatia.

Two hierarchical regression analyses were conducted. All the sets of predictors significantly explained the variance of the dependent variables, except work characteristics and importance of professional life realization for FWF. In the final step, WFF (37.4% of variance) was predicted by greater self-efficacy, a higher tendency towards positive reassessment, managing leisure time, working in shifts, having higher control and social support at work, and greater professional life importance. FWF (48.7% of variance) was predicted by a greater tendency towards planning, greater personal strength and life appreciation, greater number of children, lower parental stress, and more social support in the family domain. Additional analyses showed that WFF and FWF were positively correlated with assessments of mental health and satisfaction with life.

The main limitations of the study include assessment subjectivity and impossibility of making causal inferences. Also, we were not able to collect a representative sample of the given population of parents and to include enough varieties (e.g., men). The research results imply that there are certain specificities in the integration of work and family roles in employees with children with disabilities that should be considered and further studied. Accordingly, findings of such studies should be integrated into practices of promoting these employees' work-life balance and well-being, which is beneficial for the organization, family, and society in a whole.

*Keywords: Children with disabilities, Work-family facilitation, Importance of professional life*

## Symposium S105

### **Faking in assessments of personality and competencies: Current advances in prevention and correction methods**

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science\_practice

Test users in organizations have long been concerned by the use of self-reported measures for assessing personality, competencies and similar constructs because these measures are open to response distortions. Of a particular concern are motivated distortions occurring whenever the assessments have important consequences for the test takers. In organisational selection contexts, candidates may be motivated to manipulate responses to create the best impression (aka 'fake good'). Such impression management behaviours (IMBs) can range from exaggeration of positive characteristics and downplaying the negative ones to outright faking (Robie et al, 2007). Considerable evidence has accumulated that IMBs are widespread (König et al, 2011) and cause sizeable distortions to test score distributions (Birkeland et al, 2006), construct validity (Schmit & Ryan, 1993), and validity of selection decisions (Rosse et al, 1998).

To overcome IMB-related distortions, we can either prevent such distortions from occurring in the first place or correct them (statistically) after they have occurred.

To prevent respondents from endorsing all desirable traits or behaviours, comparative response formats have been proposed. These include the popular 'forced choice', where two or more items are presented simultaneously, and the respondent must rank the items with respect to how well they describe them. The extent to which items are preferred to each other can also be collected, for example by asking respondents to distribute a fixed number of points between items ('proportion-of-total' format). Preferences collected with such formats are relative within the person, leading to major psychometric challenges – interpersonally incomparable ( ipsative ) data. Thurstonian IRT models (Brown, 2016; Brown & Maydeu-Olivares, 2011, 2018) have been developed to enable proper ( normative ) scaling of data collected with comparative response formats. Ipsative data can also be derived from normative ratings, by subtracting the person's average from each rating (process called 'ipsatization') thus eliminating the effects of uniform over-reporting on desirable items.

In terms of statistical correction , many interesting methods have been proposed recently ranging from overclaiming techniques (Bensch et al, 2019) to more sophisticated latent variable models (Brown & Böckenholt, 2022; e.g. Falk & Cai, 2016). One interesting approach is trifactor-mixture modelling that captures the latent score shift due to the change of assessment stakes, while accounting for response biases and effects of repeated item exposure (Guenole et al, 2022).

This symposium will provide an overview of current research on the faking prevention and correction methods, all applied to assessments in organisational contexts.

Fuechtenhans will present an experimental study investigating the influence of forced-choice block designs on the nature of response behaviour, focusing on deliberate manipulations of responses leading to increased response times and increased number of response changes.

Guenole and Brown will present a novel trifactor-mixture modelling approach to analysis of normative data collected repeatedly in low and high stakes, applied to assessment of maladaptive traits in the workplace.

Chandrasekaran, Brown & De Klerk - van Someren will present a project developing a leadership assessment tool that aimed to capture a leader's strengths and development areas using a novel graded preference response format to prevent impression management.

Kurz will report the results of a project developing a set of matched constructs from the predictor and criterion domains and comparing criterion-related validities of these constructs measured using normative and ipsatized scores.

#### Relevance to the Congress Theme

With the advent of technology, assessments in the workplace become cheaper and easier to conduct in practice, leading to the ever-increasing exposure of job applicants and incumbents to such assessments. As the test takers become savvier, the potential for motivated response distortions increases and it becomes more important to monitor and counteract such distortions.

#### Research/Practical Implications

Research presented in this symposium aims to identify questionnaire designs that elicit the least response manipulation and propose measurement models to quantify the extent of faking and its effect on the true scores.

#### Overall conclusions

It is possible to reduce the effects of faking on assessments of personality, competencies, and similar constructs by either using prevention or statistical correction methods. In terms of prevention, comparative response formats can be used successfully. In terms of statistical correction, score ipsatization or the use of latent trait models capturing the true score shift in a controlled fashion can also be applied. In these pursuits, it remains essential to retain focus on demonstrating the validity of tools and their underpinning frameworks.

*Keywords: Faking, response behaviour, personality*

## Paper 1

### **An experimental study investigating the influence of forced-choice block designs on the nature of response behaviour**

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Background. Faking on personality assessments remains an unsolved issue, raising major concerns regarding their validity and fairness (Kuncel, Goldberg, & Kiger, 2011). To date, scholars have developed numerous faking models focused primarily on either the antecedents of faking or its consequences (Ziegler, MacCann, & Roberts, 2011). Although this research has provided insightful results, it reveals little about the actual faking behavior. Yet, it could be argued that only when we understand the cognitive processes and subsequent response decisions, can we begin to extract valid and useful information from assessments.

In this pursuit, Holtgraves (2004) investigated response mechanism in which social desirability responding might operate. He argued that social desirability responding and instructed faking might follow different cognitive processes because under faking good instruction test takers respond much faster than participants instructed to respond honestly. Subsequently, he hypothesised that if social desirability responding operates as an editing process that occurs after recalling the true response, then it should result in slower response times; and if it prevents people from retrieving their true response then it should result in faster response times. Across three experiments, Holtgraves instructed participants to respond to a set of items (either traits or behaviours) under instructions that either decreased or increased the concern with social desirability, whilst measuring response latencies. The results across all three studies suggested that social desirability operates as a response editing mechanism, increasing response latency every time the participants were concerned whether they appeared desirable.

However, the research by Holtgraves (2004) investigated the rating scale (RS) format, which is particularly susceptible to faking because respondents can easily endorse categories that they perceive to be most desirable (Wetzel, Böhnke, & Brown, 2016). To prevent respondents from endorsing all desirable options, the forced-choice (FC) format has been introduced (e.g., Dilchert & Ones, 2011). In the forced-choice format test takers are presented with two or more items simultaneously and are asked to rank order them. Research has indicated that the MFC format can reduce faking substantially (Salgado, Anderson, Neil, & Tauriz, 2015); however, its effectiveness depends on how well the items within blocks are matched on their desirability (Wetzel, Frick, & Brown, 2021; Cao & Drasgow, 2019).

Objectives. The aim of this study was to investigate how social desirability responding operates in forced-choice questionnaires. To this end, we are set to replicate Holtgraves' study but utilising behavioural items presented in FC pairs rather than individually. We are interested to see whether social desirability operates as a response editing mechanism (or alternatively, prevents retrieval of true answer) when participants are presented with FC pairs that differ in terms of their desirability matching. Uncovering this mechanism would inform development of FC questionnaires that are robust to social desirability responding.

Method. This study will employ a mixed design in which we manipulate desirability concern between participants, forming the conditions of high and low desirability concern. Furthermore, we will manipulate block type within participants, forming 3 levels of mixed versus matched desirable and matched undesirable pairs of everyday behaviours. Under laboratory conditions N=150 participants will be randomly assigned to one of the two conditions and instructed to choose the behaviour that describes them best. On a computer screen, all participants will be presented with all block types in a randomised order. We will record participants choices as well as response times for each pair.

Expected Findings. We expect responses to be slower in the high social desirability concern condition, as test-takers are motivated to edit their true answers that appear undesirable. Additionally, we expect participants to be faster when answering blocks with items of mixed desirability compared to blocks with items that are matched on their desirability. This is because identifying the desirable option should be easier on mixed blocks. On matched blocks, it might be faster to make a choice when all alternatives are desirable rather than undesirable because in the latter case, all choices are incongruent with the goal of presenting self in a positive light, thus eliciting higher concern with social desirability and engaging more editing of one's true responses.

Implications for Practice. This research will provide the evidence base needed for creating FC personality questionnaires that are robust to social desirability responding, through utilizing FC blocks that elicit the least social desirability concern. This is particularly important for high-stakes assessments in organisations, where the motivation and the potential for impression management and faking behaviour are high.

## Paper 2

### The Trifactor Change Model: Instructed Faking on a Maladaptive Trait Measure

Nigel Guenole & Anna Brown

Theoretical background. Work-related personality traits are commonly assessed with standardized self-report questionnaires using rating scales. Many concerns have been raised about invariant functioning of such questionnaires in different assessment contexts, necessitating the development of methods to evaluate change in the level and structure of measured traits. However, the assessment of change is complicated by several factors. First is whether the participants interpret questions similarly across contexts. Researchers have identified different forms of change such as alpha, beta, and gamma change (Golembiewski, Billingsley, and Yeager 1976), which may violate measurement invariance. A second challenge in assessing change is response biases. Biases might operate uniformly across items, such as acquiescence, or non-uniformly, such as socially desirable responding. Measurement biases detrimentally affect conclusions of measurement invariance tests (Liu et al. 2017).

To address these issues, Guenole, Brown and Lim (2022) introduced a trifactor change model to measure change on a trait assessment in an instructed faking design. The model simultaneously assesses change over time on substantive constructs, ensures items measure equivalently across occasions, accounts for dependencies due to repeated exposure, and accounts for common method biases. The model extends the work of Bauer et al. (2013), which integrates the ratings of multiple raters by modelling a common factor, rater perspective factors, and item specific factors. Guenole et al.'s model takes advantage of repeated-measures experimental designs to enable separate identification of substantive factors modelled across occasions (with a mean structure to capture level of change), condition specific common method factors, and item-specific unique factors that are stable across occasions. A mixture component accommodates subpopulations with different response processes – for example, those who did not follow experimental instructions.

Research objectives. Guenole et al. applied this model to data from 516 participants taking part in an instructed faking design to examine the functioning of dedicated social desirability scales in such conditions. The participants answered the Balanced Inventory of Desirable Responding (Paulhus 1984) measuring self-deceptive enhancement and impression management. Model fit was acceptable and model parameters were readily interpretable, suggesting the model is effective at separating sources of variance. However, this study was specific to dedicated social desirability scales, and more work, both empirical and simulation based, is needed to see whether the model can be used to understand the functioning of trait assessments when social desirability concerns are high, for example in high-stakes selection situations. We will present the analysis of an inventory assessing work related maladaptive traits using the trifactor change approach.

Methodology. We analysed responses of 516 participants to the Goldsmiths-60 (G-60-SS) questionnaire (Guenole, Brown, & Cooper, 2016), a six dimension, 60 item inventory assessing work related maladaptive traits based on the DSM-5 Section III trait model. The G-60-SS uses a 5-point Likert-type scale ranging from “strongly disagree” to “strongly agree” to measure six scales - antagonism, compulsivity, detachment, disinhibition, negative affect, and psychoticism. The respondents took the G-60-ss twice, under “honest” instruction, and under instruction to respond as though they were applying for a job they really wanted (“instructed faking”).

Results. The trifactor model has many constraints to implement, so we fitted the model iteratively, building up to six factors, with all but one of the 60 items successfully included in the model. The fit for the model with invariance constraints imposed was as follows:  $\chi^2 = 12304.25$ ,  $df = 6541$ ,  $RMSEA = .04$ ,  $CFI = .81$ ,  $TLI = .80$ ,  $SRMR = .07$ . The RMSEA and SRMR meet common thresholds for adequate fit, while CFI and TLI reflect what is well known about these indices, i.e., higher values are rarely

observed with so many factors and items. While more analysis is needed to investigate any areas of non-invariance, we can use these preliminary results to interpret the change on the maladaptive scales. The analysis revealed changes on all scales in socially desirable directions under the “instructed faking” condition, meaning substantial decreases in neuroticism, disinhibition, antagonism, detachment, eccentricity, and an increase in compulsivity.

**Preliminary Conclusions and Further Research.** Based on these preliminary results, the trifactor model appears to capture the change due to instructed faking, while accounting for response biases and effects of repeated item exposure. The data analysis is ongoing, and we will shortly implement detailed measurement invariance checks as well as the mixture component to fully account for all sources of variance in the data. In the talk, we will report results of these full analyses, and provide conclusions on viability of the trifactor approach to make sense of assessment data collected in high stakes, with implications for assessment of maladaptive traits in the workplace.

## Paper 3

### The development of a comprehensive leadership assessment using a novel response format to reduce faking

Lakshmi Chandrasekaran; Anna Brown & Gerianne De Klerk

#### Introduction

After decades of research into leadership and personality, organizations today are moving away from generic models of personality when it comes to assessing leadership-related traits, and developing assessments that are directly applicable to leaders. This often leads to adopting a criterion-centric approach (Bartram, 2005). This first specifies leadership performance criteria and then develops tools to predict them. The criterion-centric approach is better suited to leadership assessment in practice, where it is important to inform practical decisions about leadership development, assessing potential, and evaluation of performance (Baker, Scott, Nye, & Chernyshenko, 2022). However, any self-report questionnaires are susceptible to impression management by respondents, which is particularly relevant to leadership selection contexts. Therefore, a leadership assessment needs to be robust to reduce impression management by candidates (aka 'faking'). In response to this need, the Leadership Styles Questionnaire (LSQ) assessment was developed.

#### Research Objectives

The aim of the project was three-fold. Firstly, to develop a comprehensive leadership model that is originated in the criterion domain but formulated using the language of personality. Secondly, to develop an assessment that is able to reliably capture and describe a leader's strengths and development areas. Thirdly, to reduce the extent of impression management and faking of responses by introducing a novel response format using comparative judgements instead of normative ratings.

#### Methodology

Text mining software was used to identify consequential leadership attributes during the developmental stage. Firstly, qualitative data from over 1000 client developmental reports from the sponsoring organization were used as a foundation for identifying distinct behaviours such as "seeks to build relationships" or "wants to change things". A range of the most frequently quoted phrases were collated for item development. Subsequently, the universal Competency Framework (Bartram, 2005), and personality measures such as OPQ32 (SHL, [2006](#)), and HEXACO (Ashton & Lee, 2009) were used to inspect conceptual mapping and coverage.

Using the conceptual mapping, an initial 27 scales of the leadership assessment were created. Over 500 items were developed and trialled through two field trials. Two trials were conducted to estimate the item parameters, this included trialling items on full-time employees with leadership responsibilities. 277 participants were initially tested with 358 items in total, using a 7-point Likert scale ('Rating scale trial'). This was followed by testing 422 participants using the 7-point-total format, with 264 items in total ('Graded preference trial').

The final questionnaire utilized the graded preference format, it consisted of 88 blocks with 264 items and 24 scales. Each block comprised of 3 items that were matched based on their means and factor loadings. The best combination included having all 3 items with similar means and different factor loadings (i.e., two items with high positive factor loadings and 1 item with either a weaker loading or negative loading).

To overcome distortions due to impression management, we utilized a novel response format whereby respondents have to distribute a fixed number of points (7 in total) between three items. Respondents have to indicate how each of the three items compare in how they describe their behavioural preferences. This format is comparative in nature, but unlike the popular "forced choice" where respondents make binary choices between statements (for example, choose A over B, or choose B over C), here they can quantify their preferences by assigning more or less points to particular statements. Response process research showed that the 7-point-total format elicits

“graded preferences” in respondents; thus, when deciding how many points to assign, respondents compare alternatives in terms like “A is a little more like me than B”, or “B is much more like me than C” and assign points accordingly. This type of data can be analysed and scored with the Thurstonian IRT model for graded comparisons, which enables proper scaling of psychological attributes to allow inter-individual comparisons (Brown & Maydeu-Olivares, 2018).

## Results

The graded preference model fitted to the 7-point-total data provided item factor loadings, residual variances, and correlations in the expected range and consistent with the Rating scale trial. However, the graded preferences yielded close-to-normal score distributions and a well-defined factor structure, unlike the rating scale responses, which showed highly skewed distribution and excessively high scale intercorrelations evident of impression management distortions. An estimate of internal consistency was derived by applying the empirical reliability index approach. Reliabilities of the scales ranged from 0.71 to 0.89. Additional analysis was conducted to determine external validity by testing for convergent and discriminant validity against HEXACO (Ashton & Lee, 2009). Correlational analysis demonstrated promising evidence for both convergent and discriminant validity.

## Conclusions

To make leadership assessments more accessible, interpretable, and relevant to decision-makers, the Leadership Styles Questionnaire (LSQ) was developed that measures 24 scales. The novel response format captured more nuanced information than forced-choice formats. Unlike the normative rating scales, graded preferences do not allow indiscriminately giving high ratings to all desirable statements, thus reducing the effects of impression management.

## Limitations

More data is needed to collect insights on performance and other criterion-related outcomes i.e., motivation, ability, inclusive leadership, and team potential. This will provide the ability to extend research into the measurement model, its functions, and psychometric properties.

## Paper 4

### Normative and Ipsatised Measurement of the Great Eight Factors

Rainer Kurz, Chief Psychologist, HUCAMA Analytics Ltd

#### Research goals and why the work was worth doing

The Great Eight factors were developed by Kurz & Bartram (2002) to account for historical personality and ability assessment validation result patterns with competency criterion areas.

Bartram (2005) presented a meta-analysis where the average observed validity of Great 8 personality predictors with reviewer ratings across Great 8 factors was .17. Bartram (2007) on a sub-set of studies with normative and ipsative line manager criterion data found that correlations averaged .146 and .219 respectively.

Bartram (1996) investigated the properties of ipsatised scales where response style (the mean across all normative ratings) is removed from scale scores.

The present study compares the validities of newly developed normative and ipsatised predictor as well as criterion measures of the Great 8 factors.

The following research goals were set to explore the nature of the new measures of the Great Eight:

1. Understand how normative and ipsatised measures interrelate within a predictor instrument.
2. Understand how normative and ipsatised measures interrelate within a criterion instrument.
3. Investigate the validities of normative and ipsatised predictor as well as criterion measures of the Great 8 factors.

#### Theoretical background

While the Great Eight Competencies were developed to link established personality and criterion variables in the present study predictor and criterion measures are developed from scratch.

The value of normative and ipsative assessments has been widely debated in the literature but largely excluded the notion of ipsatisation as outlined by Bartram (1996) which is applied in the present study at item rather than scale-level.

#### Methodology

Great Eight criterion measures with three items were created by splitting each factor into two aspects.

One item was composed of the shortened factor title in bold followed by the two aspects e.g.:

**Effective at Analysing - Solving Problems**; **Evaluating Information**.

Each Aspect item featured the title in bold followed by three sub-ordinated competencies e.g.:

**Effective at Solving Problems - Investigating Problems**; **Resolving Complexities**; **Applying Specialist Expertise**

Items were rated on a 9-point accuracy scale adapted from Goldberg's (1992) Trait Descriptive Adjectives (TDA) measure

On the predictor side 48 facets were developed grouped into 8 factors. For each Aspect the facet most closely associated with Great 8 and Big 5 personality constructs was used to create a predictor measure for each factor.

#### Results obtained

##### Construct Validity

An average correlation of .80 (N=466) was observed between the normative and ipsatised Great 8 scores on the predictor measure and an average of .75 for the criterion measure.

##### Criterion-related Validity

The mean observed validity between the matched predictors and criteria was .55 when both measures were normative and .44 when both measures were ipsative. Correlations dropped considerably to around .35 for mixtures of normative and ipsatised measures.

The correlation of the sum of normative predictor and criterion measures was .72. The sum of ipsatised measures is a constant precluding the calculation of correlations.

The results are in line with Bartram (2007) where all results were based on an ipsative predictor measure and validity was higher for ipsative criterion ratings. However, the validities of the normative

predictor-criterion pairs in this study exceed those of the other matched pair as they benefit from shared method variance on both sides.

#### Limitations

This research used a preliminary criterion model so that further research is needed with the final version. The study relies on self-report data so that future research should replicate this with external ratings.

#### Conclusions – research and or practical implications

The results support the construct validity of the new Great 8 factors.

The results confirm the superiority of normative scales in assessment. Ipsatised scales show a considerable level of validity that could be harnessed as supplementary scores, especially as 'Fit' scores based on job information.

#### Relevance to the Congress Theme

As the world of assessment evolves and technology-based assessments become ever more widely available it is important to clarify the constructs underpinning potential and performance, and the effects of response format on measurement. It remains essential to retain focus on demonstrating the validity of tools and their underpinning frameworks.

#### Relevant UN SDGs

This paper is relevant to 'decent work and economic growth', with a focus on developing valid assessment tools that match the right people into the right roles.

## Symposium S106

### **Silence and Voice in Context(s) - Understanding when and why people express and withhold critical issues at work**

Michael Knoll, University of Leipzig, Germany; Sarah Brooks, Sheffield University Management School, UK

science\_practice

The symposium provides a forum for international researchers and practitioners to exchange and advance knowledge and experiences aiming at a contextualized understanding of employee silence and voice. Whether employees express (i.e., voice) or withhold (i.e., silence) their ideas, questions, opinions, and concerns at work affects individual and collective learning and well-being (Bashshur & Oc, 2010; Morrison & Milliken, 2000). Employee voice is a precondition for employees to realize their full potential, and it is essential for the functioning of current management strategies (e.g., total quality management, agile teams) that draw upon proactive and empowered workers. If, in turn, employees do not want to or feel that they cannot address critical issue or make suggestions for change, unhealthy, inefficient, and toxic work environments endure. Moreover, as media reports show time and again, silence enables unethical practices including fraud, abuse, and discrimination to persist over time, harming cohorts of people repeatedly and at times over many years. Notably, cases of silence and its detrimental effects are not only observed in the corporate world or in singular countries, they also happen in sports teams, educational establishments, religious institutions, law enforcement agencies, and the military all over the world.

Given that silence has been identified as hampering the sustainable development of organizations and societies in a broad variety of countries and contexts, surprisingly little systematic knowledge is available on the role of context as an antecedent of silence, and as a factor that influences the effects of more proximal antecedents of silence. Meta-analyses and reviews (Morrison, 2014; Sherf et al., 2021) show that research on voice and silence focused on the proximal context emphasizing the role of team climate (e.g., psychological safety), leadership (e.g., managerial responsiveness), and organizational voice opportunities (e.g., grievance and suggestion schemes). The more distal context(s) in which employees, teams, managers, and organizations are embedded, however, has been neglected. This is problematic as factors that are situated at the distal context including societal and professional norms and values, legal systems, and industry specifics influence individuals via primary and secondary socialization, and they provide the ground on which teams and organizations operate (Johns, 2006). Moreover, a lack of systematic consideration of the distal context prevents understanding the similarities and differences of silence in contexts such as professions (e.g., police, health care, manufacturing), societal domains (e.g., sports, pedagogical and religious institutions, politics), and cultures (e.g., societies).

We think that a symposium at EAWOP is a great opportunity to invite scholars and practitioners from a broad range of domains and countries to elaborate on a contextualized understanding of voice and silence. A better contextualization may help not only create better theories but also tailored interventions. Moreover, our symposium can inspire policy-making attempts which are tightly embedded in their respective professional and national contexts (e.g., health care, education, sports, business, law enforcement), but lack the perspective and tools necessary to learn from similar attempts in other contexts. To provide such perspective, we will invite collaborators from the largest international study on silence at work (Knoll et al., 2021) to share their insights, and the symposium provides an opportunity to follow-up on our EAWOP Small Group Meeting on “Voice and silence in the caring professions”, and our EAWOP impact incubator “Silence is golden?”.

The symposium is proposed to comprise four talks and an extended discussion. Martin Götz and Michael Knoll start with an overview of silence research in diverse domains and elaborate on what the achieved insights contribute to a “silence-theory-of-context” and “silence-theory-in-context” (Whetten, 2006). For selected contexts (e.g., industry, culture), the authors use data from a large international study (Knoll et al., 2021) to illustrate their elaborations. In the second talk, Pawel Jurek and Sylwiusz Retowski present findings from their research on silence in Poland and elaborate on the specifics of the Eastern European context. Roberta Fida et al. focus on societal tendencies to work incessantly and climates of self-interest as they are common in selected industries. The authors show findings from UK on how a bottom-line mentality affects silence and voice. Anindo Bhattacharjee and colleagues present findings from an interview study on employee silence in India, and they use these findings to elaborate on silence in the context of dynamically-developing countries and emergent markets. Finally, Rosalind Searle leads the discussion and builds bridges to policy-making based on her experiences as the leader of EAWOP impact incubator.

discussant: Rosalind Searle, Adam Smith Business School, UK

*Keywords: Silence, context, voice*

## Paper 1

### **Moving towards a contextualized theory of silence and voice - A review and agenda**

Michael Knoll, University of Leipzig, Germany; Martin Götz, University of Zurich, Switzerland

Our talk aims at providing an overview of current research on voice and silence in organizations and exploring ways to overcome a deadlock in research and policy-making concerned with encouraging and enabling organizational stakeholders to express (i.e., voice) rather than withhold (i.e., silence) their ideas, questions, opinions, and concerns. We aim to advocate for the idea that research that aims at producing generalizable knowledge on voice and silence neglects the conditions and requirements that are specific to the contexts in which employees face situations that may require voice. Thus, while a flourishing interdisciplinary and increasingly international domain (see Knoll et al., 2016; Morrison, 2022; Sherf et al., 2021), research on voice and silence struggles with providing knowledge for application. Policy-making attempts (e.g., duty of candor), in turn, are tightly embedded in their respective professional and national contexts (e.g., health care, education, sports, business, law enforcement), but lack the perspective and tools necessary to learn from similar attempts in other contexts. In the talk, we aim to contextualize established knowledge and elaborate on how the many facets of context (e.g., professional, geographical, temporal, cultural, content, organizational and individual history) provide insights on voice and silence that may advance policy-making and contextualized theory-building.

We will start with giving a brief review on current state-of-the-art in voice and silence research, particularly focusing on their antecedents and effects. The review will include examples from publicly visible cases as well as developments in research on everyday-decision making of employees who face situations that may require voice (e.g., observations of inefficient practices, poor or destructive leadership and coworker behavior, ethical and security threats). As will become visible, silence within organizations enables unethical practices including fraud, abuse, and discrimination to persist over time, harming cohorts of people repeatedly and at times over many years. Moreover, these cases were observed in many contexts including corporate organizations, sports teams, educational establishments, religious institutions, law enforcement agencies, and the military. Other cases in which employees withhold their ideas, questions, opinions, and concerns receive less public attention but – when considering the working population – have even more detrimental effects (Bashshur & Oc, 2015; Morrison, 2014). With respect to the negative effects, we apply a multi-level approach (see Knoll et al., 2016). We show that at the individual level, silence negatively affects employees' health and well-being and prevents them from realizing their full potential at work (e.g., Knoll et al., 2019). At the collective level, silence hampers individual and collective learning and the detection of errors, safety issues, and unethical and illegal behavior (Edmondson, 2019; Morrison & Milliken, 2000). Finally, at the societal level, people who do not have a say at work show less civic engagement, whilst health care and pension systems have to compensate higher sickness rates, turnover, and early retirement as a result (e.g., Weber, Unterrainer, Schmid, 2009; Wilkinson et al., 2021).

With respect to antecedents of silence, we will elaborate on the various reasons' employees have for withholding their views as identified in prior research. Based on our review of a broad range of literature (e.g., organization behavior, human resource management, communication and political science, ethnography, social and developmental psychology) that might contribute to this understanding, it will become evident that unhealthy, inefficient, and toxic work environments endure, because employees do not want to or feel that they cannot address critical issue or make

suggestions for change, but also that employees remain silent to protect others and their own knowledge advantage, do not feel they have the competence or legitimacy to speak up. We will show that during the last years, scholars and practitioners from many disciplines, countries, and professional domains were concerned with the negative effects of silence and the need to encourage and enable voice among organizational members and stakeholders. Their studies and consulting revealed long lists of antecedents of voice and silence at the individual, team, organizational, and even societal level; and they identified many contingencies that strengthened, weakened, substituted, and neutralized of these antecedents' effects (Bashshur & Oc, 2015; Morrison, 2022). While the growing body of knowledge and its publication in top-tier journals reflects the importance of the issue, it remains scattered and thus hampering cumulative theory building. Moreover, the scope of potential influences on voice and silence behaviors leaves practitioners and policy-makers with little solid ground for developing and implementing mechanisms and recommendations to break the silence in their respective organizations or domains.

That is why, in the second part of our talk, we elaborate on the possibility to develop a contextualized theory of voice and silence. We first introduce conceptual ideas on the role of context in understanding and explaining organizational phenomena (e.g., Johns, 2011; Whetten, 2009). Based on these conceptual contributions, we elaborate on the question whether and how does considering context advance or organize our established knowledge on voice and silence. Furthermore, we aim at identifying context characteristics that relate to silence or voice across domains similar to personality characteristics that are influential across domains. These domains may include industry and societal context such as branches, professional and industry cultures, national cultures and laws, organizational context such as company age or size, but also facets of individual context such as gender and age). We will use data from our own cross-cultural research project (Knoll et al., 2021) to provide first evidence for our suggestions. We will furthermore explore which specific dimensions of context are most relevant. Following Johns' (2006) dimensions of context, these could include aspects of the omnibus context which raises questions such as: Are voice or silence more prevalent among representatives of specific occupations (e.g., finance sector, military, health care) or employment relationships (e.g., freelancers), members of marginalized groups (e.g., women in male dominated workplaces, people with disabilities, members of minority groups), core vs. peripheral employees (Bolinger et al., 2018), and managerial or non-managerial employees. Are there international or regional differences? Does it make a difference whether employees work in the (single or open-plan) office, the factory, mobile or at home? Are there events that make voice or silence likely? Which influence do prior voice/silence episodes and anticipated future events have? Do employees withheld or expressed their views might also be important. Furthermore, dimensions of the discrete context (Johns, 2006) could be relevant as reflected in questions such as: Are voice or silence more prevalent among workers with high autonomy, job insecurity, who have complex or rather simple tasks? Do climates within organizations substitute or neutralize higher- or lower-level influences? Does it make a difference whether employees are co-present or work from home and thus communicate via technology? How does physical distance affect motivation and ability to speak up?

We hope that our talk opens the symposium and provides a basis for the following talks that focus on specific facets of context. The discussant Rosalind Searle will pick up some of our suggestions and provide insights from her work on policy development and implementation.

Sustainability goals: Decent work & economic growth, Good health& wellbeing

*Keywords: context, silence, voice*

## Paper 2

### **Communal versus agentic workplace climate and organizational silence: The role of negative job attitudes and the Eastern European context**

Pawel Jurek, University of Gdansk, Poland; Sylwiusz Retowski, SWPS University, Poland

#### Research goals and why the work was worth doing

In general, our study aims to expand existing research exploring the relationship between workplace climate, attitudes toward organization, and employee silence by investigating whether communal and agentic work environments through positive and negative attitudes accounted for quiescent and acquiescent silence. We expected that communal, as well as the agentic workplace environment, are negatively related to employee silence and that these relationships are mediated by emotional attitudes towards the organization.

#### Theoretical background

The concept of communality and agency in the context of work climate was introduced to define a facet-specific workplace climate that involved people-oriented and results-oriented values. Communal Climate (CC) highlights managerial priorities for employees' wellbeing, while Agentic Climate (AC) highlights managerial priorities for employees' productivity. Workplace climate is consequently related to how jobs are designed, what kind of people are promoted, and what is the most important while decision making. Whether employees withhold (i.e., silence) their ideas, questions, opinions, and concerns at work could be affected by work environment perceived by employees.

#### Design/Methodology/Approach/Intervention

In order to test the hypotheses, we designed a cross-sectional study with the participation of N = 566 employees from various organizations. Participants completed a set of scales that measured the variables examined in the study: The Communal and Agentic Workplace Climate Scale, the Positive and Negative Attitude towards Organization Scale, and the Four Forms of Employee Silence Scale. We used Path Analysis in testing models describing hypothetical relationships between the workplace climate, attitudes towards the organization and employee silence. To test the mediation effects, we calculated average causal mediation effects (ACME), average direct effects (ADE) and average proportion mediated. We used the lavaan and mediation packages in the R environment for all analyses.

#### Results obtained or expected (if not available, it must be made clear when they will be)

The mediation analysis showed that the effect of communal workplace climate on employee quiescent silence was fully mediated by negative emotional attitude towards the organization. This effect was significant when employees' gender, seniority and job position were controlled. These findings were also observed in testing the model predicting acquiescent silence. However, the relationship between communal workplace climate and employee acquiescent silence was mediated not only by a negative attitude towards the organization, but also by a positive attitude. Moreover, contrary to expectations, in both tested models, there was a small, but statistically significant, positive, and direct effect of agentic workplace climate on employee silence.

#### Limitations

Our study has some limitations. The cross-sectional design does not allow causal inference. The data collected was based solely on self-reports. So, we have the common method problem unsolved. In future research, it would be necessary to use longitudinal designs to draw conclusions about cause-and-effect relationships. We also acknowledge that the multilevel approach would provide additional data about the specific role of the team. Another aspect concerns cross-cultural differences. Research was carried out only in Poland. A cross-cultural comparison would be desired extension of the study.

#### Conclusions – research and or practical implications

Communal and agentic workplace climate turned out to be significant direct or indirect predictors of organizational silence. Attitudes toward the organization mediated the relationship between workplace climate and organizational silence. Contrary to expectations, we detected statistically significant, positive, and direct effects of agentic workplace climate on employee silence. The open question is whether it is a specific Eastern European phenomenon or a global pattern. The question of which type of organizational climate is more closely associated with a better level of performance also remains an open question. The positive relationship of the agentic workplace climate with organizational silence may indicate an important conclusion for innovative organizations. It can be assumed that the communal workplace climate seems necessary to stimulate organizational voice, which is then a positive predictor of innovative activities.

#### Relevance to the Congress Theme

The results of our research can inspire organizations to introduce changes that will help reduce employee silence. We have indicated that the communal environment at work is a priority in building an inclusive work environment.

#### Relevant UN SDGs

Our research is in line with the 8<sup>th</sup> goal of the Sustainable Development Goals of the UN related to promoting productive employment and decent work for all.

*Keywords: Silence, work climate, Eastern Europe*

### Paper 3

#### **Does being drawn to work make us quiet? The influence of working too hard and self-interest climate on silence**

Roberta Fida, Norwich Business School at University of East Anglia, UK; Michael Knoll, University of Leipzig, Germany; Catherine E. Connelly, McMaster University, Ontario, Canada; Rosalind Searle, Adam Smith Business School, University of Glasgow, UK; Ivan Marzocchi, University of Rome La Sapienza, Italy

#### Research goals and why the work was worth doing

Despite technological advancements and innovations, work broadens its grip on people's lives due to increased work demands for some and infinite opportunities for others. In their attempt to catch up with the growing demands and opportunities, some people already predisposed may develop an inner pressure to work, have incessant and uncontrollable thoughts about work, feel negative emotions when not working (or when prevented from working), and work far beyond what is required and expected (Clark et al., 2020). This phenomenon, called workaholism (Oates, 1971), has well-established implications for employee health and performance (Clark et al., 2016). In the current study, we contribute to extend existing literature on workaholism by examining the hitherto omitted issue of the ethical implications of working too hard, and exploring the mechanisms that drive and strengthen these effects. Building on previous research which mainly focused on "acts of commission" (i.e., workplace deviance), we focus on "acts of omission", i.e. employee silence, which are still harmful for employees and organisations. We hypothesise that working too hard due to external (workload) and internal pressures (workaholism) may lead to more employee silence and less voice. We expect these relationships to be mediated by moral disengagement, namely the set of social-cognitive strategies which alleviate employees' moral pressure to address critical issues (Bandura, 2002). Additionally, because negative behaviours do not occur in a vacuum, we suggest that self-interest climate could act as an important moderator which can amplify the negative effect of workload and workaholism on moral disengagement.

#### Theoretical background

We rely on Conservation of Resources Theory (COR; (Hobfoll, 1989) and Social Cognitive Theory (SCT; Bandura, 1986) to investigate our research questions. In line with COR, we expect that working hard may exhaust workers' energy so that they refrain from behaviour that goes beyond their immediate work task (Ng et al., 2016), such as voicing concerns or opinions for overall organisational improvements. Moreover, because engaging in employee silence when voice is needed makes employees feel uneasy and guilty (Kirrane et al., 2017), consistent with SCT we expect that the psychological process of moral disengagement may allow people to engage in acts of omission without experiencing these tensions.

#### Methodology

We performed a three-wave study on a sample of UK employees. Time 1 (T1) comprised 1046 employees. At T2 participants were recontacted one month later (N = 594). After five months, the final sample at T3 included 292 employees. Workaholism (Clark et al., 2020), workload (Siegrist et al., 2014) and self-interest climate (Elçi & Alpan, 2009) were measured at T1; moral disengagement (Fida et al., 2015) at T2; silence (Knoll & van Dick, 2013) and voice (Liang et al., 2012) at T3. We

employed Structural Equation Modelling and Latent Moderated Structural Equation model (LMS; Klein & Moosbrugger, 2000) to investigate our hypotheses.

### Results

Our results showed that the cognitive and emotional facets of workaholism were significantly related to (more) silence and (less) voice through the mediating effect of moral disengagement. Workload was not associated with moral disengagement but had a positive impact on silence. Our moderated-mediation model showed that the conditional indirect effects of emotional workaholism on (more) silence and (less) voice via moral disengagement were intensified as levels of self-interest climate increased.

### Limitations

The constructs were measured with self-report scales. Moreover, the study was conducted in a specific country (UK), thus we cannot provide insights into how workaholism would affect silence and voice in other countries or cultures.

### Conclusions and research/practical implications

Our research contributes to the understanding of how workaholism affects not only employee well-being, but also voice and silence; behaviours that have far-reaching ethical consequences. To our knowledge, this is the first study which empirically tests these associations; moreover, the use of a three-wave study is an additional strength. Practically speaking, our results suggest that human resource practitioners and managers should be particularly attentive to employees displaying high levels of workaholism, i.e. by creating "healthier" work environments to avoid triggering workaholism tendencies.

### Relevance to the congress theme

Organisations are increasingly pushing their employees to work harder and longer to remain competitive in a rapidly changing labour market. Thus, we believe it is important to fully understand the implications of working hard in organisations not only to protect well-being, but also to prevent unethical behaviours in terms of acts of commission and omission.

Relevant UN SDGs: Good health and wellbeing, Decent work and economic growth

*Keywords: workaholism, silence, ethics*

## Symposium S107

### Predicting trajectories of adaptation at work

Cornelia Niessen, Friedrich-Alexander-Universitaet, Erlangen-Nuernberg; Sandra Ohly, University of Kassel

science

Due to economic and technological changes, many organizations are challenged to initiate change, for example by implementing new forms of work and technologies. It is expected that employees adapt to these changes as quickly and efficiently as possible (Baard et al., 2014; Jundt et al., 2015). Adaptation to change is defined as “individual’s response to new demands or ill-defined problems created by uncertainty, complexity, mergers, and any rapid change in the work situation” (Chan, 2014) or “cognitive, affective, motivational, and behavioral modifications made in response to the demands of a new or changing environment, or situational demands”.

Adaptation is a process that unfolds over time. This symposium focuses on the trajectories of adaptation to new tasks and technologies. Specifically, the four presentations in this symposium examine how various person-related and context-related predictors shape these trajectories. The presentations contribute to the literature on adaptation by giving insight into the dynamics of adaptation, and its prediction, a so far under-researched area.

In the first presentation, Lang and colleagues investigated whether self-efficacy predicts performance after a sudden emergence of a more difficult task situation. Self-efficacy has been shown to be an important predictor of performance at a between level, but its role in adaptive transfer is still unclear. Lang and colleagues investigated this question with two simulation experiments (flying a helicopter) including 30 trials (15 before and after task change). Discontinuous growth models revealed, that the relationship between self-efficacy and performance was positive before, but altered after task change. The relationship was weaker and became even negative for one performance outcome.

Trust has been shown to be crucial for the successful implementation and use of new technologies. In the second presentation, Müller and Hertel have examined changes in trust after implementing a new information system (IS). They theorize that trust in IS should increase over time and that the relevance of different predictors of trust should vary with time. Müller and Hertel conducted a field study over a period of 11 month with four measurement points (before and after the implementation of the IS system). Latent growth curve modeling revealed an upward non-linear trajectory of trust which was shaped by different factors at different time points during adaptation to the IS system.

The third presentation investigates if and how employees adapt to a potentially aversive technology, such as electronic performance monitoring. Based on the communication privacy management theory and self-determination theory, Niessen and Wolff propose that the trajectories of privacy concerns and wellbeing are moderated by the invasiveness of the electronic performance monitoring technology, the quality of the social relationships with the leader and colleagues and, and the acquisition of competencies. They conducted a longitudinal field study (4 measurement points, 12 month) with newcomers who were monitored in their new organization.

The fourth presentation of Oreg and colleagues examined situational characteristics in the relationship of routine tasks and subsequent task performance. Using data from daily diary study and laboratory study, they link the situational characteristics of familiarity and straightforwardness to

subsequent task performance. The results suggest that routine tasks can facilitate behavior relevant for adaptivity in daily work.

The symposium includes Maria Vakola as a discussant. Maria is an internationally known expert for organizational change. She has published several studies on change and adaptation in high ranked international journals.

Relevance to the congress theme. Understanding and predicting adaptation to new demands is crucial in a changing world of work, for employers and employees.

Research / Practical implications. Predicting the dynamics of adaptation contributes to theory development on the adaptation process and expands the literature on predicting different phases of adaptation. From a practical perspective, the study results can contribute to the design of interventions which aim to empower people to deal with change.

Overall conclusion . This symposium presents research which show that different predictors predict of trajectories at different points of time.

discussant: Maria Vakola, Athens University of Economics

*Keywords: Adaptation, time, work demands*

## Paper 1

### Self-efficacy, task performance, and adaptive transfer

Jonas W. B. Lang, Business School University of Exeter; Paul Bliese, Moore School of Business University of South Carolina; Sascha Herr, University of Bamberg; Zen Goh, Monash University; Jon Hendricks, University of Nebraska Lincoln; Alex de Voogt, Drew University

**Research goals.** Most organizational training is designed to both help employees improve their performance and make performance robust to task changes by facilitating adaptive transfer (Aguinis & Kraiger, 2009; Keith & Frese, 2005; Niessen & Lang, 2020). At a practical level, self-efficacy has been assumed to be important within training contexts and for expediting adaptive transfer (Davis et al., 2000) because self-efficacy appears to be at least partially malleable through training (Gist, Schwoerer, & Rosen, 1989). This article integrates research on self-efficacy's relationship with performance with research on adaptive transfer in complex task environments, and investigates how self-efficacy's association with performance is altered when people encounter a change in a task that requires adaptive transfer.

**Theoretical background.** Adaptive transfer studies generally require participants to learn a complex task (in this research a helicopter simulator) until they reach a performance plateau. In the next step, the participants are confronted with an altered task situation (a high-altitude airfield) to study the degree to which performance is robust to change. Empirical studies have documented that self-efficacy is often positively related to performance at a between-person level, such that individuals with high efficacy tend to have high overall performance and either positively or negatively at the within-person or trial-by-trial level. A positive relationship is well in line with the tenets of social cognitive theory (Bandura, 1986; Bandura & Locke, 2003). Powers (1991) suggested that a model based on perceptual control theory (e.g., Powers, 1973) would predict a negative relationship on the within-person level and research has also supported this idea (Ballard et al., 2016; Sitzmann & Yeo, 2013). Recent research has focused on empirical evidence suggesting that within-person relationships between self-efficacy and performance can be context-dependent—positive when feedback ambiguity is low but negative when feedback ambiguity is high (Bandura, 2012; Schmidt & DeShon, 2010; Vancouver & Purl, 2017). Researchers have also argued that self-efficacy/performance relationships may be partly or even fully driven by past performance (Heggestad & Kanfer, 2005; Sitzmann & Yeo, 2013). The role of self-efficacy in adaptive transfer—especially immediately after the change has occurred—is not well understood so far. We build on engagement-disengagement theories (Carver & Scheier, 1998, 2020; Gendolla et al., 2012; Kukla, 1972; Wortman & Brehm, 1975; Wright, 1996) to develop theoretical predictions on what should happen in this situation. Engagement-disengagement theories suggest that the sudden emergence of a much more difficult task situation can lead to a sudden breakdown in performance because people shift from a situation of engagement to a sudden situation of disengagement. Engagement-disengagement theories have been considered in the self-efficacy/performance literature before (Beattie & Davies, 2010; Lang & Lang, 2010; Vancouver et al., 2008) but are typically thought to be relevant to only a limited number of participants or to extreme conditions in typical studies on self-efficacy. The role of self-efficacy in disengagement situations in complex work tasks has thus rarely been studied.

**Methodology.** Our two studies (N = 120 with k = 3,578; N = 60 with k = 1,800) used a discontinuous change design that can provide some insights into causality because it utilizes an exogenous event (Bliese et al., 2020; Bliese & Lang, 2016; Hausman & Rapson, 2018). First, participants practiced 30 take-offs in a helicopter simulator. Then, they were asked to execute another 30 take-offs under

performance conditions and indicate their level of self-efficacy prior to each take-off. After 15 of these 30 trials under performance conditions were completed, the task changed to a high-altitude airfield, which required participants to adapt to the new behavior of helicopter, the steering devices, and the instruments.

**Results.** Discontinuous growth models revealed that within-person self-efficacy and average self-efficacy across the 15 trials prior to the task-change were positively related to performance even after controlling for past performance. Importantly, however, the task-change substantively reduced performance and all self-efficacy/performance relationships. For one of the two performance criteria, the reduction in the within-person self-efficacy/performance relationship was so strong that the relationship became significantly negative.

**Limitations.** Our studies were conducted in a laboratory context with non-expert pilots.

**Conclusions.** Our findings suggest that typical adaptive transfer requirements that introduce a significant obstacle into a task can substantially alter self-efficacy/performance relationships, and that performance advantages associated with higher self-efficacy are not robust to such changes.

**Relevance to the congress theme.** Adaptive transfer is likely particularly relevant in a future world of work with frequent changes in work environments.

**Relevance to UN SDGs.** This research is directly relevant for designing future training and for understanding challenges at complex workplaces and thus contributes to the goals “Decent work and economic growth” and “Quality education”.

*Keywords: Self-efficacy, performance, discountious growth model*

## Paper 2

### **Adopting Information Systems at Work: A Longitudinal Examination of Trust Dynamics and Outcomes**

Lea S. Mueller & Guido Hertel | University of Muenster

**Research goals:** Advanced information systems (IS) provide multiple benefits for organizations, however, their introduction requires users' adoption to new work processes. During these processes, trust in IS has been initially suggested as central precondition of successful adoption of IS (Lippert & Swiercz, 2005; Turel & Gefen, 2013), but we still lack insights into its development over time. The current research examines trust in IS during the introduction process within a larger public administration in Germany, investigating (1) trust development over time, (2) trust relations with multiple predictors at different time points, and (3) trust relations with different outcomes across time. Thus, this research contributes to theory development on trust dynamics with respect to technology use, and provides specific suggestions for more efficient introductions of IS in organizations.

**Theoretical background:** Established models on trust usually include dynamic components, predicting experiences with a trustee to influence trustors' further evaluations of the trustee (Mayer et al., 1996; Hoff & Bashir, 2015). In a similar way, trust in technology is defined as a "dynamic construct that is prone to changes" (Glikson & Woolley, 2020; p.10). Oppositely, empirical research rarely examined longitudinal dynamics of trust (Hoehle et al., 2012; Zheng et al., 2014), and theoretical models remain rather general on the specifics of such developments. Applying a longitudinal approach, our study started with the following assumptions: First, trust in IS should generally develop in upward trajectories. Second, the relevance of different predictors of trust should vary with time. In line with extant theoretical work (Meeßen et al., 2020), we assumed users' trust disposition to be a stronger predictor of trust at initial time points, while IS trustworthiness assessments increase as predictor over time. Finally, we assumed that trust in IS is positively related to users' reliance on the IS and job performance, and negatively with users' strain (Hertel et al., 2019; Petter et al., 2008).

**Methodology:** We evaluated the introduction of a new IS within a larger public administration in Germany across 11 months. Specifically, we conducted online surveys with N = 313 users of the IS at four time points: (1) before launch, (2) after initial usage, (3) five months, and (4) ten months after launch. Users were asked to rate their trust disposition, the IS perceived trustworthiness (reliability, credibility, usability, design aesthetics), organizational context (support, participation, abilities of persons involved), their current trust in as well as their current reliance on the IS, job performance and experienced strain. We applied latent growth curve modeling using AMOS to model trust dynamics and its association with predictors and outcomes at different time points.

**Results:** Results support our assumption that trust in the IS develops in an upward, although non-linear trajectory. Further, results confirm that the relevance of trust predictors varies systematically across time. While person factors were stronger predictors of trust in early phases, perceived IS characteristics were stronger predictors at later times. Finally, the results also confirmed that trust in the IS correlates positively with users' reliance on the IS, their performance, and their well-being.

**Limitations:** First, we investigated a specific IS in a specific organization. In order to generalize our findings, replications in other contexts (e.g., different IS, organizations, business sector and cultural

settings) is required. Further, missing data in our study were compensated by estimation methods, replication studies with complete data would be more reliable. Finally, our results are based on self-reports only, so that the inclusion of objective data (e.g., user behavior, performance) would be fruitful in future research.

**Conclusions/Implications:** Our findings underline the relevance of trust for the efficient adoption of novel IS at the workplace over time. We provide one of the first longitudinal investigations of trust dynamics, taking both predictors and outcomes into account. The findings contribute to our theoretical understanding of trust dynamics within the field of technology at work. Moreover, our findings underline the significance of organizations' efficient trust management, also after IS launch. Organizations should therefore involve end-users and establish regular checkups that reveal malfunctions and ensure high data quality.

**Relevance to Congress Theme:** Technology is a major driver of change in the world of work. While employees need to adapt to the usage of the technology itself, the introduction of IS to the workplace is further accompanied by the adaption of complete work processes in most cases. Understanding and monitoring trust in an IS over time contributes to the success of such changes.

**Relevant UN SDGs:** 3) Good health and well-being; 8) Decent work and economic growth; 9) Industry, innovation and infrastructure

*Keywords: Adaptation, trust development, information systems*

### Paper 3

#### Can you get used to electronic performance monitoring at work? A longitudinal study

Cornelia Niessen & Mauren Wolff | Friedrich-Alexander University Erlangen-Nürnberg

**Research goals** . As new technology, and, recently, Covid19, have brought profound changes to the ways people work, electronic performance monitoring (EPM) is becoming increasingly attractive for employers to manage their employees. EPM refers to the use of technology to observe, record, and analyze information directly or indirectly related to work behaviors (Alge & Hansen, 2014; Ravid et al., 2020). Research on EPM has revealed some benefits (e.g., increasing performance of simple tasks), but mainly negative affective (e.g., strain), cognitive (e.g., privacy concerns), and behavioral (deviant behavior) reactions of employees (Ravid et al., 2022; Siegel et al., 2021). The majority of research on employee responses on EPM was conducted with experiments in the laboratory, online experiments (vignette studies) or with cross-sectional surveys, covering only a short period of time in which individuals had to deal with EPM. Thus, we do not know whether employee reactions are stable over a longer period of time. It might be possible that employees become used to EPM over time. In contrast, employees can also become increasingly aware of the fact that they are constantly monitored, resulting in stronger negative reactions over time (Ravid et al. 2020). In the present study, we ask if and when employees become desensitized to the effects of EPM or even more sensitized with stronger reactions (privacy concerns, wellbeing) over time. We examine personal (e.g., competence) and situational characteristics (invasiveness of technology, social integration) as moderators of these relationships.

**Theoretical background** . Our reasoning is based on communication privacy theory (Petronio, 2002) and self-determination theory (Deci et al., 2017). We propose that the trajectories of privacy concerns and wellbeing are moderated by the invasiveness of the EPM technology, the quality of the social relationships with the leader and colleagues and, and the acquisition of competencies. Invasiveness of EPM (e.g., taking screen shots, face reading) might threaten the privacy boundary between the self and other and evoke that employees fear losing control over the access of information, which they consider private and do not want to share with others because they might draw the wrong conclusions or do not trust the other people. Therefore, the more invasive EPM is the stronger privacy concerns should increase over time. Moreover, invasive EPM evoke evaluation anxiety and threaten basic needs for autonomy and competence by controlling employees' behavior, which might result in a decrease of wellbeing over time. In contrast, increasing social integration during socialization (development of good relationships with leader and colleagues) should buffer the negative trajectories as social integration provides psychological safety. Furthermore, when employees acquire competencies over time they might experience less evaluation anxiety, and therefore less privacy concerns and higher wellbeing over time.

**Design/Methodology** . We have conducted a four-wave longitudinal field study (time lag three month) with 828 newcomers (45.7% identified as female, 54.1% identified as male) at Time 1 who in the last three months have taken up jobs where new EPM technologies are implemented. Mean age was 37.89 years ( SD =10.17); 31% of the participants reported time tracking, the other monitoring of screen activity (33,5%), social interactions (30,8%), location (22.5 %), environment (12.3%), emotions (9.5%), concentration (10%), and face (6.9%). Furthermore, 42.4% of participants indicated to already have experience with EPM at work. At Time 2, 300 employees, at Time 3 266 employees, and at Time 4 258 employees participated in the study.

Results . The data are currently being analyzed with growth curve models in R, and will be presented at the conference.

Limitations . We assessed our data with self-report.

Conclusion . Our study will give insight into the dynamics of employee adaptation to a potentially aversive technology at work, namely EPM. It is important to know how employees react to EPM at their workplaces and if and how the effects of digital control on employee reactions change over time.

Relevance for the congress theme . How employees adapt to the increasing digitalization at work is an important topic and fits to the congress theme.

Relevant UN SDGs . We contribute to the goal of good health and well-being and decent work with our study on EPM and adaptation.

*Keywords: Adaptation, electronic performance monitoring, growth modelling*

## Paper 4

### Adaptivity and situational characteristics

Sandra Ohly, University of Kassel; Marcel Kern, Ruhr University of Bochum; Laura Klein, University of Kassel; Shaul Oreg, Hebrew University of Jerusalem

Research goal. „The importance of workers’ ability to adapt to novel situations in the workplace and perform at an elevated level may currently be more crucial than ever.“ (Huang et al 2014.) Although research points out that individual characteristics are related to higher adaptivity, for a sound understanding of the phenomenon, the process by which individuals realize the need for change, and their ensuing behaviors needs to be studied. By examining situational characteristics, this study addresses this gap in the literature.

Theoretical background. Task routinization (i.e. the automatic execution of task-relevant behavior) may improve adaptivity by saving time and energy (Ohly et al. 2006) and fostering a sense of familiarity and security (Avni-Babad, 2011). By saving crucial resources which might be invested later on, and by providing a safe working context, the performance on a subsequent task including creative performance can be enhanced.

Methodology. In a daily diary study (N = 73, k = 265), participants provided ratings of task routinization three times a day, and worked on a creativity task in the evening. In a lab study, task routinization was first established using practice trials, and participants completed an anagram task as secondary task later on. In both studies, task perceptions were assessed using the Situation Six (Oreg).

Results. For the diary study, multilevel analyses simultaneously modeling within- and between-subjects relationships suggest that routinized tasks are perceived as high on familiarity and low on demandingness across all time points. In turn, familiarity predicts subsequent originality on the creativity task. No relationship with negativity were found. Results of the lab study replicated the relationships of routinization with familiarity (positive) and demanding (negative), and in addition yielded positive relationships with positivity, and (marginally) with straightforwardness. In turn, straightforwardness was positively associated with performance on a secondary task.

Limitations. Alongside the consistent findings, several of them, including those for straightforwardness, which was not assessed in the diary study, were not obtained in both studies.

Conclusions/Implications. The results suggest that situational characteristics can be linked to task performance on subsequent tasks. By incorporating the Situation Six taxonomy we uncover the basic situational characteristics that underlie the effects of task routinization and shed light on a specific form of adaptivity.

Relevance to the congress theme. Adapting to changing tasks and situations is a requirement in the changing world of work. This paper sheds light on the mechanisms how this can be achieved.

Relevance to SDG. Good health and wellbeing; Decent work and economic growth

*Keywords: Adaptation, routines, situational characteristics*

## **Symposium S108**

### **Post-Covid Adaptation in Work and Organizations**

Filipa Castanheira, Nova School of Business and Economics, UNL; Portugal; Marisa Salanova, Department of Social Psychology, WANT Research Team, Universitat Jaume I, Spain

science

The Covid-19 pandemic caused by a virus imposed rapidly measures and actions on companies and their workers without time to plan and to implement. Thus, this situation may be considered a crisis that is perceived and felt as a threat, given the associated difficulties that exceed one's usual resources and coping mechanisms. In the wake of the pandemic crisis, it is of utmost relevance to analyze its consequences for workers and their well-being.

This symposium includes five empirical oral presentations from three different countries: Portugal, Spain, and Italy, and through different methodologies, samples and contexts, provide an integrative and comprehensive picture including the management side, the workers' perceptions and multilevel combinations on workers and units. The studies were developed in different phases of the pandemic crisis, including the lockdown periods and the post-pandemic period as workers and organizations are bouncing back to the "new working reality", reflecting on what has changed and how to move on. Two studies included management teams (HR Directors from several private organizations and the Executive Management Committee of a Public University) and analyzed how teleworking was experienced and what are the learnings, the challenges, and the constraints as the world moves to the post-pandemic phase. Another study introduced and validated a scale of technostress, a psychosocial risk associated with the use of Information and Communication Technologies (ICTs) to work. This study is timely as the work is currently discussing hybrid formats of working and, therefore, ICTs to work are expected to be more common and broadly implemented. Another study validated the Emotional Styles Questionnaire (ESQ) (Kesebir et al., 2019) and developed an intervention protocol oriented towards improving the different components of healthy emotionality and tested its preliminary efficacy in a group of workers. Finally, the fifth study sampled two groups of hospital workers to test the cross-level hypothesis that proposes that personal social resources, age, and team's age diversity interact and influence job performance.

Theoretically, this symposium offers contributions to analyze a context as specific as that of the wake of the pandemic crisis, how the lockdowns have shaped the workers' experience, and how different theories (e.g. work-family border theory (Clark, 2000), Socioemotional Selectivity Theory (SST; Carstensen et al., 1999), stress theory (Lazarus & Folkman, 1984)) can be applied to understand the repercussions of this context for well-being. Moreover, a noteworthy contribution of this symposium is the alignment of its aims with some of the sustainable development goals (SDG) advocated by the United Nations (2020) which, as already highlighted, are more important than ever for the recovery of the impact of COVID-19. Firstly, this symposium will contribute to the specific socio-occupational health aim - „health and well-being” (SDG 3). Secondly, the United Nations (2020) also highlights the “employment, decent work for all and social protection” aim (SDG 8). Understanding the changes imposed by the Covid-19 pandemic and its consequences for workers and their working conditions will help define the limits to be set in these working conditions, thus contributing to the promotion of decent work. Overall, it is the aim of this symposium to provide evidence to support the promotion of inclusive and sustainable working conditions that ensure the well-being of workers.

This symposium is directed to academic and practitioners and shows that to ensure workers well-being in the awake of a crisis it will be important to develop their healthy emotionality, the trust building mechanisms in teams, to understand how workers are using ICTs to work to avoid technostress and, particularly in the telework situation, to be aware of the factors that may hinder a successful adoption of this work arrangement.

*Keywords: Post Covid-19, workers' well-being, working conditions*

## Paper 1

### **Rethinking Telework of Administrative Staff after COVID-19: Lessons learnt in a Spanish Public University**

Esther García - Buades, Consuelo Hernández-Guerra, Silvia Ortiz - Bonnin & Elena Sureda - Demeulemeester | University of the Balearic Islands (Palma de Mallorca, Spain)

#### Research goals

The research goal is to assess the positive and negative aspects of telework during COVID-19 in a Spanish Public University both for the institution and for the wellbeing and productivity of administrative employees. The second goal is to provide recommendations on how to improve the effectiveness and sustainability of telework in the future.

#### Theoretical background

Research on pandemic-induced telework has highlighted advantages and disadvantages of telework for workers, organizations, and society (Belzunegui-Eraso & Erro-Garcés, 2020; Blahopoulou et al., 2022). The success or failure of telework implementation has been associated to factors such as previous organizational experience on teleworking, organization of work, availability of technical resources, leadership skills, employees' characteristics, and digital competencies. Post-COVID-19 telework needs to be revised after reflecting on the achievements and mistakes experienced through pandemic-induced implementation, in order to make it the most beneficial for all (Chambel et al., 2022).

#### Design/ Methodology

This qualitative study relied on individual reports (N= 8) and a focus group conducted among the members of an Executive Management Committee at a Spanish Public University (5 men and 3 women). This Committee is responsible for the management of administrative staff, services, and facilities. The topics explored were: (1) positive and negative aspects of telework during lockdown, (2) telework evolution after COVID-19, (3) how to review current telework regulations and conditions to maximise its benefits.

#### Results

Pandemic-induced telework had an abrupt and improvised start, for which university was caught unprepared. Regarding the positive and negative aspects of the telework experience during lockdown, the senior management committee described it as both a challenge and an opportunity. Besides keeping staff COVID-safe at home, the positive aspects highlighted were related to the fast institutional reaction, i.e. in a matter of days the institution managed to provide education and administrative services online. Negative aspects were reduced productivity for some workers, the level of digitalization was limited, and having to deal with technological and work organization issues.

Regarding the evolution of telework after lockdown, the committee praises achievements already in place such as the existence of new telework regulation at national and institutional level; the re-thinking of work organization towards work objectives rather than presence; technology equipment is updated; the progress made towards virtual organization of work (virtual desktops, procedures, and processes).

Regarding how to review current telework to maximise its benefits, the committee identified future trends and challenges. One challenge for the institution is to create an appropriate “telework culture” (differentiating proper telework vs. a pseudo-day off ; deciding when and for whom telework is an option); keep progress towards re-designing work and jobs (by goal accomplishment, adequate performance measurement, staff availability online, training, safety issues), keep refining existing regulation, dealing with leaders’ resistance.

#### Limitations

This research is at a preliminary stage and based on a case-study therefore generalization is limited. Further, the view of administrative departmental supervisors (middle-management) and administrative employees should be incorporated in future steps of the project.

#### Research/Practical implications

Future research should explore how different Public administrations have implemented telework and which strategies and actions they have put in place to be more efficient and beneficial for institutions, employees, and users. Although qualitative analysis is very rich, quantitative data should complement the assessment of the success and failures of telework implementation and adaptation.

Practical implications rely on recommendations to maintain the advantages gained through pandemic-induced telework, and review weaknesses identified by management.

#### Relevance to the Congress Theme.

This study is very much on the “changing world of work” in a public administration setting. After analysing how top management assesses the telework experience during and post-COVID19, we aim to set the next steps in (re)designing work in a more efficient and sustainable way.

#### Relevant UN Sustainable Development Goals (SDGs).

SDG number 8 seeks to promote decent work for all.

*Keywords: Telework, organizational change, HR management*

## Paper 2

### Facilitators and constraints of adoption of teleworking in Pos-Covid time

Filipa Castanheira, Nova School of Business and Economics, Universidade Nova de Lisboa; Alda Santos, Vânia Carvalho & Maria José Chambel | Faculdade de Psicologia Universidade de Lisboa

#### Research goals

After the 2-year adaptation to telework, this study aims at understanding how teleworking was implemented and identifying company's characteristics and its human resources management practices that can be considered facilitating or constraining factors in the adoption of telework.

#### Theoretical background

Many companies around the world were forced to adopt full-time telework during COVID-19. For many workers this was a positive experience, and there is the expectation of maintaining this type of work arrangement in the post-pandemic period. However, its adoption in the post-pandemic period implies an organizational change that may encounter many difficulties and resistances, and it can be expected that in a post-pandemic period, many companies may abandon it. For many companies and workers, this period represented the first experience teleworking and the success or failure of telework further adoption will largely depend on the capacity to identify factors that facilitate and eliminate or minimize those constraints that were present during the pandemic period. Indeed, post-COVID-19 telework needs to be revised after reflecting on the achievements and mistakes experienced through pandemic-induced implementation, in order to make it the most beneficial for all (Chambel et al., 2022).

#### Design/ Methodology

We carried out a qualitative longitudinal study in 40 companies from different sectors in Portugal. We interviewed the respective human resources directors at two different times: October-November 2021; October-November 2022.

#### Results

At first, we observed that in sectors where it was possible to have the majority of workers with this modality (e.g. IT, consulting), there was a greater investment to support the adoption (e.g. training of managers and teams, equipment adaptation), and there is also a greater intention to adopt this modality in a more comprehensive way in the future. However, we observed that in these sectors, as in those where teleworking could only be adopted in some functional areas (e.g. hotels, banks), only a few intended to continue adopting telework in the future. With the data collected in this second moment, we intend to verify the paths of companies, analyzing to what extent they followed or changed their planning, to identify trajectories related to the adoption of teleworking in this post-COVID period.

#### Limitations

This research is at a preliminary stage, and we still have to collect 2<sup>nd</sup> moment interviews. Nevertheless, the contacts are made, and most interviews are already scheduled.

#### Research/Practical implications

Future research should explore the different experiences that crafted the trajectories related to the adoption of teleworking in this post-COVID period. This study provides the management view on the implementation of these processes and therefore, employees' responses to these events should complement the assessment of the facilitators and constraints of telework.

Practical implications rely on recommendations to maintain the advantages gained through pandemic-induced telework, and review weaknesses identified by management.

Relevance to the Congress Theme.

This study covers the process of adaptation of several organizations as they implemented (and one year after the implementation) of teleworking due to Covid-19 pandemic. It taps on the "changing world of work" with a diverse sample of companies and sectors. After analysing how HR managers reflect on the telework experience during and post-COVID19, we aim to identify the main facilitators and constraints to (re)designing telework in a more efficient and sustainable way.

Relevant UN Sustainable Development Goals (SDGs).

SDG number 8 seeks to promote decent work for all.

*Keywords: Teleworking, HR management, Longitudinal*

### **Paper 3**

#### **Spanish Validation of the Technostress Creators Scale**

Arenas Alicia, Donatella Di Marco, Valeria Terán & Francisco J. Sanclemente | Universidad de Sevilla, Spain

**Research goals:** This study aims to provide validity evidence of the Technostress Creators Scale in Spain, and to test the measurement invariance in terms of gender.

**Theoretical Background:** The COVID-19 pandemic has changed the way organizations operate, forcing many of them to opt for telework as an alternative to face-to-face mode. This global phenomenon has increased the importance of studying the psychosocial risks linked to the use of Information and Communication Technologies (ICTs), such as technostress.

**Design/ Methodology:** We analyzed the psychometric properties of the scale, its factor solution, and gender invariance in a sample of 931 employees from Spain.

**Results:** The Exploratory Factor Analysis (EFA) showed that the Spanish version maintained the five factors of the original version: techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty. Likewise, the instrument showed adequate reliability. The results of the Confirmatory Factor Analysis (CFA) also replicated the five-factor structure of the English version. Additionally, measurement invariance tests indicate differences between genders.

**Research/Practical implications:** The resulting Spanish scale has 18 items, shorter than the original version. The implications and limitations of the Spanish version of the instrument are detailed in the discussion.

Relevance to the Congress Theme.

This study validates an instrument to measure technostress that arises with the maladaptive usage of ICTs to work. This is related to the “changing world of work” as the implementation of ICTs is spread across sectors and industries and is transforming the way individuals work and interact with each other in organizations.

Relevant UN Sustainable Development Goals (SDGs).

SDG number 8 seeks to promote decent work for all.

*Keywords: Technostress, management of ICTs; confirmatory factor analysis*

## Paper 4

### Emotional Styles Questionnaire Validation in Spain and an Intervention Protocol Pilot

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**Research goals:** The goal of the present research project is twofold: First, to validate the Emotional Styles Questionnaire (ESQ) (Kesebir et al., 2019) for Spanish working population as a novel measure of healthy emotionality, a highly relevant construct related to psychological well-being and mental health. Secondly to develop an intervention protocol oriented towards improving the different components of healthy emotionality and test its preliminary efficacy in a group of Spanish workers during the COVID lockdown.

This study is highly relevant due the heavy burden on psychological well-being and mental health COVID measures have imposed on society as a whole, and particularly on the active working population. Our overarching goal is to develop validated measurement and intervention tools to support an active working population in the face of changing working conditions, high levels of uncertainty and increasing stress.

**Theoretical background:** The construct of healthy emotionality is based on neuroscientific studies of emotion developed throughout the last three decades (Davidson & Begley, 2012). The model establishes six key dimensions of emotional life, all of them highly relevant for psychological well-being and mental health. Namely, Attention, Self-Awareness, Outlook, Resilience, Social Intuition and Sensibility to Context. Each one of these dimensions is described as a continuum between two extremes that mirror different levels of activity in underlying brain circuits. More specifically, each dimension is related to a particular behavior linked to the emotional states we experience, their duration, intensity, and how we manage them. And where we fall in the different points of the continuum on each dimension is our unique individual signature, a combination of heritable genetic influences and also everyday experiences. This construct is trainable but no psychological intervention in the working population has been performed as far as we know.

**Design/Methodology:** For the scale validation study, we gathered a sample of (N =1,200) active workers during the COVID lockdown in Spain distributed in various medium and large organizations, 52% of the workers were female, 37% were between 18 and 35 years old, 34% between 36 and 45, 19% between 46 and 55, and 10% 56 or more. Statistical analyses were conducted using JASP (JASP Team, 2020) and included CFA, correlations, reliability indexes and descriptive statistics. Secondly, we develop an intervention protocol based on the guidelines suggested by Davidson & Begley, (2012). The intervention protocol had three 150-minute sessions and was delivered online in synchronic sessions. A small group (N = 42) participants from a large Spanish organization took part in the intervention and answered pre-post measures of emotional styles and other relevant well-being measures. 66% of the participants were female, and their average age was 36 (SD = 8.22).

**Results:** For the validation study, we could not replicate the original psychometric properties of the ESQ and the original 24-item six-factor and a single second order factor yielded inadequate fit indexes ( $\chi^2 = 1348.804$ ,  $df = 246$ ,  $CFI = 0.78$ ,  $TLI = 0.75$ ,  $RMSEA [.06; .07]$ ), and a second solution of

24-items and six factors improved the fit indexes but still remained unsatisfactory ( $\chi^2 = 1159.987$ ,  $df = 237$ , CFI=0.81, TLI =0.78, RMSEA [.06; .07]). In light of these results, we tested a briefer 18-item six factor solution that significantly improved the fit indexes to an acceptable condition ( $\chi^2 = 988.356$ ,  $df = 129$ , CFI=0.87, TLI =0.85, GFI = 0.93, RMSEA [.061; .06]).

For the intervention study we conducted paired sample t-tests using the pre-post measurement points and found significant positive differences for Emotional Styles (as a global construct) and particularly on Positivity, as well as diminished levels of Perceived Stress and Burnout at a descriptive level.

Limitations. The main limitation of the present project is the lack of a control group from the evaluation of the intervention protocol as well as the less-than-optimal on-line delivery method.

Research/Practical Implications. The main practical implications revolve around the development of novel measures and intervention protocols to help active workers cope with stress and burnout and improve their psychological well-being during times of uncertainty and suffering.

Relevance to the Congress Theme: The exploration and validation of measures and intervention strategies developed from sound neuroscientific studies focusing on the constituents of psychological well-being and mental health is a novel contribution to the field of work and organizational psychology.

Relevant UN Sustainable Development Goals (SDGs).

SDG number 8 seeks to promote decent work for all and number 3 (health and well-being).

*Keywords: Emotional Styles, Validation, Intervention*

## Paper 5

### **Age and performance in dancing: the three-way effect of age, age-diversity and job social resources on performance**

Juan J. Reyes, Department of Social Psychology, WANT Research Team, Universitat Jaume I, Spain; Mirko Antino, Department of Behaviour Science Methodology, Universidad Complutense de Madrid, Spain; Valeria Cruz-Ortiz, Department of Social Psychology, WANT Research Team, Universitat Jaume I, Spain; Marisa Salanova

#### Research goal and why the work was worth doing:

This research aims to 1) test a cross-level hypothesis that proposes that personal social resources, age and team's age diversity interact and influence individuals' job performance and 2) scale the proposed model to team's performance. This approach extends the sight of the research on aging at work by considering age in relation with team's age diversity. It also serves as initial standpoint for studying the COVID impact among hospital workers and teams considering their age.

#### Theoretical background:

According to Socioemotional Selectivity Theory (SST; Carstensen et al., 1999), motivations evolve throughout life due to remaining time perception. Elder workers have a more limited time perception that leads to prioritizing having satisfactory experiences rather than long term job-related goals' pursuit. The search for positive socio-emotional experiences has been related to increases in job performance attending underlying mechanisms such as trust building (Lau & Cobb, 2010, NG & Feldman, 2013). However, people usually work in teams, and individual age processes interact with other age-related factors at group level, such as team's age diversity, which may risk the involvement in socio-emotional experiences. Age diversity has been studied as a complex phenomenon that potentially generates unpleasant social experiences such as conflicts between group members (Wegge & Schmidt, 2009). This study aims to fill the existent gap in the literature on the study of the relationship between age, team age diversity, job social resources and performance. It also to contributes to the neglected team level of analysis (Rudolph & Zacher, 2022) by extending the proposed hypotheses.

#### Design/Methodology:

Two hospital workers databases with multilevel data structure (i.e.: professionals, units, hospitals) were used for testing the hypothesis. For the first study, performance, social resources, and age were collected online through HERO-Check questionnaire (short version of HERO questionnaire; Salanova et al., 2012). Multilevel models were tested to appraise the cross-level hypothesis (n level 1 = 1297, n level 2 = 70). For the second study, the hypothesis was tested at the unit level. Participants data (n level 1=875) was collected with HERO questionnaire (Salanova et al., 2012) and aggregated at the unit-level (n level 2=50).

#### Results Obtained:

Results of the first study fully support the cross-level interaction ( $t(1221)=2.38$ ,  $p = .02$ ). Elder workers' social resources interact with team diversity enhancing performance when both are high. Meanwhile, younger workers take more advantage of social resources in low age-diverse teams. Second study results show the same effect at the team level ( $t(42)=2.17$ ,  $p = .04$ ).

#### Conclusions:

Results support our hypothesis, showing that team age-diversity, individuals age and social resources significantly influence performance in individuals, and tends to influence this relation in teams. Changes in motivation across lifespan make social resources significantly more relevant for older

employees' performance, particularly when they are involved in age-diverse contexts, where positive social experiences could be undermined by conflict dynamics. This result tends to be the same when considering the team performance, so that older teams take more advantage of social resources in presence of age diversity.

**Limitations:**

This research is not free from limitations; however, some means were adopted to mitigate their impact and considerations for future research were made. First, performance in both studies was measured as a self-reported assessment which might be considered a non-objective measure. Yet, study 1 pointed to team performance and its measure as unit consensus leads to a more objective measure. Also, HERO-Check questionnaire assesses each variable from a unique item. To extend the validity of these preliminary results, we conceive future research contemplating longitudinal designs and alternative measures of the constructs.

**Relevance to the Congress Theme:**

For scholars, this study extends the prior research in ageing literature, opening new research questions that point to the effect of social context variables and team age composition in performance across lifespan. For HR practitioners in the healthcare sector, it highlights the importance of considering age composition of teams and social resources when implementing HR programs and policies oriented to improve performance.

**Relevant UN SDGs:**

This research might be framed in the 8th objective of the 2030 agenda (decent work and economic growth) as it generates knowledge about individuals and teams' performance considering lifespan related needs and age diversity within teams.

*Keywords: Job social resources, team diversity, performance*

## **Symposium S110**

### **Motivation to Lead Across Honor and Dignity Cultures**

Nevra Cem Ersoy, İzmir University of Economics

science\_practice

Motivation to lead (MTL; Chan & Drasgow, 2001) is an individual difference variable that signifies the energizing factors behind becoming a leader. Three papers in this symposium focus on the antecedents and outcomes of MTL among employees across different cultures such as Netherlands, Turkey, Germany and Venezuela. Janssen and Born examined the link between dark personality traits and motivation to lead in Dutch leaders. This study contributes to the distal proximal model of leadership by suggesting that MTL mediates the relationship between dark personality traits and leadership effectiveness. Second paper in the symposium examines the antecedents and outcomes of motivation to lead. Cem Ersoy and Peker examined the interaction of implicit self-theories and culture of honor, which was conceptualized as an individual differences variable, as an antecedent of MTL. They also showed the mediating effect of MTL on the relationship between implicit self-theories and leader emergence. The last paper empirically integrates data on the motivation to lead in employee samples from Germany, Turkey, Venezuela, and the Netherlands to test the moderating effect of culture on the relationship between personality and motivation to lead, and in its turn, the relationship with leader emergence. The discussant Birgit Schnys is a distinguished professor at NEOMA Business School, Paris. Her research focuses on leadership specifically the link between leadership and dark personality traits and implicit personality theory. Because her research field has a lot in common with the congress theme, we believe she will have a great of contribution.

Relevance. The congress theme is “The Future is Now: the changing world of work”. Our symposium is very relevant to the congress theme because leaders have important roles in solving urgent issues such as economic crisis, pandemics, migration, violence against women. Leaders not only should promote organizations, but they also have social responsibilities towards our changing world. It is therefore important to investigate the factors that motivate people to lead. The symposium highlights the importance of the motivation to take up leadership roles despite personal costs or from a sense of responsibility for selecting and training effective leaders.

Research and Practical Implications. The symposium has important research and practical implications. Presentations in the symposium not only focuses on personality traits but also culture of honor endorsement in predicting who becomes a leader and who functions as leaders effectively. These results have important implications because in order to meet the challenges of our world, organizations require people who will become effective leaders. It is also important to understand who is motivated to emerge as a leader in honor and dignity cultures, which have not been investigated before.

Conclusion. The future is now! Leaders in organizations should be eager to deal with issues of sustainability, economic crisis, social change, and pandemics. This is only possible by leaders who are eager to exceed requirements. To this end, what drives people to want to become a leader across cultures and how personality relates to employees’ motivations are important aspects that the symposium will deal with.

discussant: Birgit Schyns, NEOMA Business School

*Keywords: motivation to lead, dark personality traits, implicit leadership theory*

## Paper 1

### The Relationship Between Dark Personality Traits and Motivation To Lead In Dutch Leaders

Diddo Van Zand; Marise Ph Born, Erasmus University Rotterdam; Nadine Janssen, Department of Psychology, Education, and Child Studies, Erasmus University Rotterdam

Theoretical background. Meta-analyses have shown that extraversion, emotional stability and openness to experience predict leadership emergence (Ensari et al., 2011). What, however, remained uncertain is the role of personality in becoming an effective leader. In the distal-proximal model of motivation and leadership (Badura et al., 2020), Motivation to Lead (MTL) is proposed as the mechanism through which personality traits affect leadership effectiveness. MTL forms the drive to fulfill the requirements of the leader role effectively (Chan & Drasgow, 2001). Chan and Drasgow (2001) recognized three types of motivation to lead: affective-identity (being enthusiastic about the role of leader), social-normative (having a sense of duty) and non-calculative MTL (willing to lead despite personal costs). Earlier meta-analytic findings, using primarily studies which focused on big five traits as antecedents of leadership effectiveness, indeed supported that MTL mediates the relationship between personality traits, leadership behaviors and leadership effectiveness. The question remains how dark triad personality traits fit in the distal-proximal model of motivation and leadership.

Individuals with dark personalities are naturally drawn to positions of power and social dominance, that is leadership positions (Furtner et al., 2017). Although dark leadership is related to maladaptive work behavior and negative organizational outcomes, not all studies found negative effects of narcissistic and machiavellianistic traits in leaders (cf Furtner et al., 2017). Psychopathy in leaders, has the strongest association with negative organizational outcomes (Boddy, 2015; Mathieu et al., 2014). Considering that dark personality traits of leaders may harm employees and organizations, we need to better understand how dark personality traits affect leadership by examining mediators of this relationship. In the current study we aim to contribute to the distal-proximal modeling of the personality traits-leadership effectiveness relationship and the nomological network of MTL by examining 1) MTL as a mediator and 2) dark personality traits as antecedents of MTL, leadership behavior and leadership effectiveness in a sample of Dutch leaders.

Methodology. Members of the Dutch Association of Supervisory directors and Directors were asked to complete the adaptive Work-related Personality Inventory (Pelt et al., 2018), the Short Dark triad (Jones & Paulhus, 2014), the MTL questionnaire (Chan & Drasgow, 2001) and the leadership styles and effectiveness scales of the Multifactor Leadership Questionnaire (Bass & Avolio, 1990).

Results. Data collection (estimated n =400) will continue until February 2023 . Preliminary regression analyses ( n =138) showed that narcissism positively predicted affective-identity MTL, while machiavellianism and psychopathy were negative predictors of non-calculative MTL. All three MTL types positively predicted transformational leadership behaviors. Only non-calculative MTL had a (negative) association with transactional leadership. The laissez-faire style was negatively predicted by non-calculative and affective-identity motivation and positively predicted by social-normative motivation. Leadership effectiveness was strongly related to a transformational leadership style.

Limitations. The sample size excluded the possibility to test the full proposed mediation model by means of structural equation modeling. Additional data collection should be able to address this

limitation. Leadership effectiveness was measured using a self-report questionnaire. In a follow-up study we address this by including a peer-rating of leadership effectiveness.

Conclusions. These preliminary results contribute to the distal proximal model of leadership by suggesting that MTL mediates the relationship between dark personality traits and leadership effectiveness. As proposed by Judge and colleagues (2009) narcissism is positively related to intrinsic motivation. Machiavellianism and psychopathy are associated with an extrinsic motivation to attain leadership roles. MTL is related to transformational and transactional leadership behaviors and subsequently to leadership effectiveness.

Relevance. This study is relevant for the congress theme since the focus on leaders' dark traits, motivation and effective leadership in a real-world sample of leaders expands the distal proximal model of leadership effectiveness. The results suggest that dark personality traits are related to a self-serving interest in leadership roles. To meet the challenges of our time, organizations require talented people who will become effective leaders that 'go the extra mile' to promote employee welfare while improving sustainability and maintaining economic growth. These findings highlight the importance of the motivation to take up leadership roles despite personal costs or from a sense of responsibility for recruitment and development of effective leaders.

*Keywords: Motivation to lead, Dark triad, Leadership effectiveness*

## Paper 2

### **Implicit Leadership Theory and Motivation to Lead as Predictors of Leader Emergence: The Role of Culture of Honor**

Nevra Cem Ersoy, Izmir University of Economics; Mehmet Peker, Ege University

#### Research goals

This study aimed to examine the mediating role of motivation to lead in the relationship between implicit self-theories and leader emergence among Turkish employees. The study focuses on the culture of honor as some dimensions of implicit leadership theories are highly relevant to the culture of honor. Therefore, the moderating role of honor culture on the relationship between implicit leadership theories and leader emergence was investigated.

#### Theoretical Background

Leaders are crucial for organizations. Leaders vary from each other in terms of their motivation to attain and expend effort to accomplish leader role requirements. Motivation to lead (MTL; Chan & Drasgow, 2001) is an individual difference variable that signifies the energizing factors behind becoming a leader. It has three dimensions: affective MTL is the degree to which one enjoys leadership roles, social-normative MTL describes whether one perceives leadership role as a duty, and non-calculative MTL which one sees leadership opportunities positively. Although MTL is important, there is a scarcity of research that aims to identify the antecedents and outcomes of MTL (Badura et al., 2020). This research aims to fill this gap. Badura et al. (2019) proposed leader emergence as one of the outcomes of MTL. Leader emergence refers to being viewed as a leader by in leaderless groups (Judge et al., 2002). In a meta-analytic review, affective motivation to lead was shown to be the strongest predictor of leader emergence (Badura et al., 2019). Being perceived as leaderlike is highly related to behaving in line with the leader prototypes in society (Leaper & Ayres, 2007). These cognitive representations of leaders are conceptualized in implicit leadership theory (ILT). According to ILT, leaders are characterized by dimensions such as masculinity, strength, tyranny, creativity, dedication, intelligence, charisma, and sensitivity (Offerman et al., 1994). Emerging research has started to investigate people's cognitive representations about self concerning leadership qualities. Perceptions of a leader, as well as perceptions about the self (called implicit self-theories; IST), are deemed important for important leadership attitudes such as leader self-efficacy and motivation to lead (Guillén et al., 2015; Scyhns et al., 2020). In line with this research stream, this study focused on the role of ISTs and hypothesized that they are related to leader emergence, particularly through affective MTL (cf. Badura et al.). As earlier research has showed that ILTs are influenced by culture (Lord et al., 2020), we argue that ILTs interact with cultural factors. Turkey is a culture of honor (Uskul et al., 2010), in which social reputation is very important (Pitt-Rivers, 1966). Characteristics associated with manhood namely braveness and toughness are salient in the honor cultures (Nisbett & Cohen, 1996). Some dimensions of ISTs, namely strength, tyranny, masculinity, sensitivity, and creativity are particularly relevant for the culture of honor. Therefore, we expected honor norm endorsement to moderate the relationship between implicit self-theories and affective motivation to lead, such that this relationship is stronger when the norm is endorsed more strongly

#### Design/Methodology

A cross-sectional study was conducted with 210 white-collar employees from Turkey (  $M$  age = 35.07,  $SD$  = 10.09) via survey software Qualtrics. Participant filled out a questionnaire form containing scales of implicit self-theory adapted from Offerman and Coats, (2018) as in Schyns et al. (2020; i.e., sensitivity,  $\alpha$  = .89, tyranny,  $\alpha$  = .87, strength  $\alpha$  = .84, creativity  $\alpha$  = .86, masculinity,  $\alpha$  = .86), honor norm endorsement (Ijzerman & Cohen, 2011;  $\alpha$  = .86), affective motivation to lead (Chan & Drasgow, 2001;  $\alpha$  = .93), and leader emergence ( $\alpha$  = .74).

## Results

The analyses tested the moderating effect of honor norm endorsement on the mediated relationship between five IST dimensions and leader emergence through affective MTL. The results revealed honor norm endorsement moderates the relationship between three IST dimensions (i.e., strength, creativity, and masculinity) and leader emergence, as mediated through affective MTL.

Limitations and Future Research: Turkey representing honor culture was investigated in this research. Future studies can include countries that represent the cultures of face and dignity. This study has a cross-sectional design; future studies can measure the culture of honor with vignettes. Leader effectiveness can be predicted as the dependent variable in future studies because it may be expected that the predictors of leader emergence and leader effectiveness will differ.

Relevance. This research highlights the importance of salient cultural characteristics in honor cultures that makes people want to be a leader and emerge as a leader. Having implicit self-views that are in line with the culture one endorses increases the likelihood of affective motivation to lead. Affective motivation to lead in turn leads to leader emergence. A research implications is that it can be predicted who becomes leader in an honor culture. Organizations may use this information in promoting employees to leadership positions.

Originality/Value: This research investigates predictors of leader emergence in an honor culture such as Turkey. It is the first research that integrates implicit self-theories with affective motivation to lead in predicting who emerges as leader. It is also the first study that investigates norm endorsement of honor as moderator in the relationship between employees' leadership perceptions about the self and leadership motivation.

Intended audience

Both academics and practitioners

*Keywords: Motivation to lead, implicit leadership theory, implicit self theory*

### Paper 3

#### **Motivation to lead, its antecedents and its relationship to leadership emergence: A comparison across honor and dignity cultures**

Marise Ph Born, Erasmus University Rotterdam, The Netherlands; Mehmet Peker, Ege University; Nevra Cem Ersoy, Izmir University of Economics

##### Theoretical background and research goals

This study empirically integrates data on the motivation to lead in employee samples from Germany, Turkey, Venezuela, and the Netherlands to test the moderating effect of culture on the relationship between personality and motivation to lead, and in its turn, the relationship with leader emergence.

Starting from earlier work by Chan and Drasgow (2001), who demonstrated that personality characteristics relate to leadership outcomes via motivation to lead, this study answers the call by Badura et al. (2020) to investigate whether such relations are moderated by national culture and whether apart from the traditional Big Five, other antecedents of motivation to lead can be identified. To this end, we used the framework of Leung and Cohen (2011), who proposed a cultural framework distinguishing between dignity, face, and honor cultures. Leung and Cohen state that cultures differ from each other in terms of which of these three is the most important source of self-worth. In honor cultures, such as Turkey and Venezuela, self-worth is driven by peoples' reputations and what others think of them (Aslani et al., 2016). Western societies, such as the UK and Germany, can be described as dignity cultures, in which one's self-worth tends to be dependent on intrinsic assessments of oneself in terms of, for instance, one's achievements. Face cultures' focus, such as in China, is on the respectability of persons by virtue of their position in a social hierarchy. In the present study, we included Turkey and Venezuela as representatives of high honor cultures, and Germany and the Netherlands as representative of high dignity culture (note that the present study will not include face cultures). Furthermore, we included the Dark Triad traits next to the Big Five traits as potentially relevant antecedents of motivation to lead.

In general, we expect that culture will moderate the relationship between personality traits and motivation to lead. Our expectations, more specifically, relate to one or more of the three components of motivation to lead, namely affective identity, social-normative, and non-calculative motivation to lead (Chan & Drasgow, 2001). Based on the logics of a dignity culture, we expect that the relationship between extraversion, narcissism, and psychopathy on the one hand, and affective-identity motivation to lead on the other hand, is stronger for individuals from a high dignity culture. Grounded in the logics of honor culture, we expect that the relationship between conscientiousness and narcissism on the one hand, and socio-normative motivation to lead on the other hand, is stronger for individuals from a high honor culture. Other expectations include that honor versus dignity culture will not affect relationships with non-calculative motivation to lead, which component we believe is more relevant to high face cultures.

In all samples, we also assessed individual level measures of honor and dignity culture, leader emergence as an outcome variable, and several demographics.

##### Methodology

This study integrates the samples from the study reported by Ersoy et al., with employee sample from Germany, the Netherlands and Venezuela. Scales included in these samples underwent a

translation-backtranslation procedures according to the International Test Commission guidelines. Qualtrics-based survey results from all four countries are analyzed, after matching samples in terms of demographics and checking for scale reliabilities and for invariance. Comparing score means across countries is avoided unless scale invariance allows for this. The aimed sample size (  $N > 150$  per country) has been reached for Turkey and is almost attained in the other countries.

#### Expected Results

We expect confirmation of our hypotheses by means of hierarchical regression analyses. Presently, however, data collection has not as yet been fully completed in Germany and the Netherlands.

#### Limitations

Sample sizes will not be large enough for structural equation modeling. For the present study a face culture could not yet be included (cf. Leung and Cohen, 2011).

#### Expected conclusions

Cross-cultural research traditionally uses Hofstede's (2001) culture dimensions to compare findings on psychological phenomena across countries. We believe that Leung and Cohen's framework of honor, dignity and face cultures, instead, conceptually is a better fit with the motivation to lead theme, expecting that our results will confirm this belief. We foresee that by including dark triad traits, our results will confirm Badura et al.'s (2020) call to focus on more than the traditional antecedents of motivation to lead.

#### Relevance

This paper ties into the issue what drives people to want to become a leader across cultures and how this is affected by the way personality relates to employees' motivations to lead. Leadership potential is urgent in the immensely changing world we are living in among employees coming from many different cultural backgrounds.

*Keywords: motivation to lead, honor and dignity cultures, dark triad*

## **Symposium S111**

### **Psychosocial work demands, salutogenic resources and interventions, and their effects on employee health and well-being**

Conny Herbert Antoni, Trier University

science\_practice

What will be covered and why. In recent years mental illness has caused increasing numbers of sick leave and forced early retirement. Research shows clear evidence that psychosocial work demands, such as increasing work intensity, excessive time pressure, long and irregular working hours, conflicting demands, and lack of job resources such as appreciation from supervisors or colleagues or job control, impair employee well-being and contribute over time to the development physical and mental illness. Therefore, employers have to systematically assess and reduce psychosocial risks and any other kind of risks for health and safety in the workplace as far as possible. Although there has been much research in recent years, there is still few knowledge about how to assess the risk probability of psychosocial hazards, how companies actually deal with and manage risks, and the relevance of salutogenic concepts and intervention approaches. This symposium will contribute to bridge this gap.

Study 1 compares the validity of different risk estimators as metrics for psychosocial hazards regarding their power in predicting recorded sick leave on an organizational level. For this purpose, the data of a psychosocial risk analysis and recorded sick leave of more than N=7.000 workers within 75-95 working areas of the German Steel Industry are analyzed. Suggestions are derived which risk metrics can be best applied in organizational settings.

Study 2 provides evidence for the buffering effects of the work-related sense of coherence (Work SoC), in the relationship of effort reward imbalance (ERI,) overcommitment and emotional exhaustion. Based on the analysis of an online survey of 1096 employees of a state agency in Germany the study shows that Work SoC is an influential construct for health promotion in the working context and discusses interaction effects between ERI, overcommitment, WorkSoc, and emotional exhaustion.

Study 3 is a case study and analyzes based on a salutogenic process model the quantitative and qualitative results of a survey and 98 workshops the psychosocial risk assessment and management in a large organization. It shows how salutogenic actions can be meaningfully derived and how this can be done with the participation of the entire workforce and respective supervisors.

The discussant will discuss the concepts and approaches to psychosocial risk assessment and the use of different risk estimators as base for risk management and intervention. In particular the discussant will reflect on how artificial intelligence might be used in perspective to assess work load and psychosocial risks.

Relevance to the Congress Theme. In line with the congress theme "The Future is Now: the changing world of work" our symposium focuses on the challenging psychosocial job demands today's employees, management and organizations face in volatile, uncertain, complex and ambiguous markets and environments.

Research/Practical Implications. With respect to research we will contribute to the development of risk estimators predicting employee health and salutogenic models for risk assessment and intervention. From a practical perspective, we highlight how organizations and team leaders can

assess psychosocial risks, derive and implement interventions for improving both employee well-being and health.

Overall conclusions. Psychosocial risks need to be assessed with valid risk estimators in order to develop participatory effective autogenetic preventive interventions and to improve employee well-being and health.

discussant: Vera Hagemann , University of Bremen

*Keywords: psychosocial risk assessment, sense of work coherence, effort-reward imbalance*

## Paper 1

### **An Organizational Level Approach for Evaluating Risk Metrics of Psychosocial Hazards by Recorded Sick Leave**

Yannick Metzler, Leibniz Research Centre for Working Environment and Human Factors, Department of Ergonomics; Andreas Mueller & Yacine Taibi | University of Duisburg-Essen, Psychology, Work & Organizational Psychology

#### Research goals and why the work was worth doing

Organizations are obliged to integrate psychosocial stressors as hazards into general risk assessment by various statutory amendments throughout the European Union. Numerous theoretical models, associated instruments, as well as methods and procedures, are available to both assess and evaluate psychosocial hazards. Such variety inevitably impacts subsequent risk mitigation, the crucial step in which the transition from analysis to action is performed, to an unknown extent. Hence, precisely estimating the risk probability of psychosocial hazards remains poorly understood and is often linked to the instrument applied for identification: Measures of location or frequency, traffic-light systems, multivariate procedures, exposure matrices, or risk equations are usually cited in this respect. To support researchers and practitioners with this issue, we aim to compare the validity of different risk estimators as metrics for psychosocial hazards regarding their power in predicting recorded sick leave on an organizational level.

#### Theoretical background

Generally, combating hazards at work comprises the three steps of risk identification, evaluation, and mitigation, altogether known as the process of risk assessment. Psychosocial hazards are factors that potentially affect psychological and physical well-being of the workforce, arising predominantly out of poor work design, organization, or management. The adverse impact of such factors has already been evidenced in numerous studies concerning numerous outcomes. The multitude of different instruments available for both psychosocial hazard evaluation has already been shown to result in differing evaluations of risk. Understanding how especially risk evaluation can be conducted in a more standardized way is thereby crucial to improve the process of risk assessment and to, consequently, comply as best as possible to the overall goal of protecting and promoting health and well-being of the workforce.

#### Design & Methodology

The sample consists of more than  $N = 7.000$  workers of the German Steel Industry, nested within 75-95 working areas. Grounded on the multifactorial hazard model of the German version of the Copenhagen Psychosocial Questionnaire, additional covariates assessed are gender, age, fixed-term work, level of seniority, and experience on the job. Outcomes are recorded sick leave by organizational unit at the time of editing the questionnaire and on several following time points: +1, +3, +6 and +12 months afterwards. The metrics conceived as predictors are (1) a standard linear regression model, (2) a threshold approach based on available references of a job-exposure matrix, and (3) an approach based on standard risk formula conceiving risk as a product of frequency of a hazard and its level of severity. Including available self-reported data on sick leave and presenteeism is pending and needs to be checked. Statistical preconditions were checked by interrater agreement statistics for most of the organizational units. Both figures of rWG (within group agreement coefficient) range from .5 - .9 and ICC2 (reliability of group means) for each scale range between .91 -

.98, thus showing satisfying result. The metrics are compared regarding their potential in explaining variance in recorded sick leave by organizational unit.

#### Results obtained & expected

Initial findings indicate an overall low to moderate relation of all metrics with recorded sick leave. Stronger associations are consistently found at T0 and T12. In addition, the approach referring to the standard risk formula seems to demonstrate a more robust and greater predictive power compared to the other metrics. Final results will be obtained at the time of the conference.

#### Limitations

Albeit the data being nested, conducting classical multilevel analysis was not possible because the outcome data is only available at the group level. In addition, no job specific approach was possible because the group level consists of broader clusters of working areas. Besides the three metrics we apply in our study, there are more potential risk metrics that could be of interest for comparison. The inherent linear approach furthermore might disregard often cited U-shaped or other non-linear relationships. Finally, the outcome recorded sick leave could not be further distinguished to attain information on possible causes, also outside work.

#### Conclusions

Our findings suggest that more attention should be paid to evaluating risks more precisely. Furthermore, a stronger focus is indicated on how working conditions can be conceived as an outcome in work re-design compared to traditional interventions research. Regarding the practical scope, the results can indicate which risk metrics can be best applied in organizational settings. In addition, we enable future work design research to better understand the mechanisms that result in better risk evaluation and improved approaches to workplace interventions.

Relevance to the Congress Theme. Elements of psychological work analysis and work design have found their way into practice in the scope of occupational health & safety. Shifts in occupational risks always correspond to the constant changing nature of work. Therefore, this research provides an approach on how risk evaluation of psychosocial hazards as a rising risk factor of future work can be best performed.

Relevant UN SDGs. Our research addresses both the goals of promoting health and well-being, and decent work, by providing a view on the crucial phase of risk evaluation of psychosocial hazards. This step is where the transition from analysis to action is performed, aiming to best comply with the overall goal of promoting health and safety of the workforce.

*Keywords: Psychosocial Hazards, risk evaluation, sick leave*

## Paper 2

### Interaction Effects between Effort-Reward-Imbalance and Sense of Work Coherence on Emotional Exhaustion

Conny Herbert Antoni & Mona Rynnek | Trier University

Research goals and why the work was worth doing. An imbalance between efforts and rewards (ERI) is stressful and has far-reaching negative consequences for employees' health and well-being (e.g. emotional exhaustion, distress, fatigue), which is increased by overcommitment. During the last years, the sense of work coherence (Work SoC), with the aspects understandability, manageability and meaningfulness of work, has been derived from the psychological health construct sense of coherence of the salutogenic model. Studies have shown that it offers high potential to explain why people remain healthy despite adverse conditions at work beyond the general sense of coherence. In this study, we aim to provide evidence of the promising buffering effects of Work SoC in the relationship of ERI and emotional exhaustion and to highlight that Work SoC is an influential construct for health promotion in the working context.

Theoretical Background. Research on the ERI model has addressed a diverse range of negative health-related consequences of ERI. However, the investigation of possible moderators of this relationship has been primarily limited to overcommitment as a person characteristic. Studies have shown that overcommitment can potentiate the negative effects of ERI. In contrast, only few studies have examined possible resources that buffer the negative effects of ERI on health-related outcomes, such as resilience or emotional intelligence.

Research has shown that Work SoC is a crucial resource for promoting health and well-being, which can be influenced also by work design, and used for buffering the negative effects of stressors in the working context. we assume it as a resources that can buffer the negative effects of ERI on health-related outcomes. So far neither the general sense of coherence nor WorkSoc has yet been considered as a possible moderator of the relation between ERI and health outcomes, although there are a few studies indicating positive effects of a general sense of coherence and negative effects of ERI on health-related outcomes.

In an online survey study, we investigate Work SoC as a possible moderator of the relationship between ERI and emotional exhaustion, in addition to overcommitment. Effort, reward, emotional exhaustion, overcommitment, and Work SoC were assessed by an online questionnaire. 1096 employees of a state agency in Germany participated in the survey.

Results. The results of the multiple hierarchical moderated regression analyses indicate that ERI and overcommitment were positively associated with high levels of employees' emotional exhaustion. Work SoC was negatively related emotional exhaustion. We also found significant positive two-way interaction effect of ERI x overcommitment and a three-way interaction effect ERI x overcommitment x Work SoC (on emotional exhaustion. All results are statistically significant at  $p < .05$ , and within 95% bootstrapping confidence interval not including zero. Results of the three-way interaction indicate that if overcommitment is low the association between ERI and emotional exhaustion is stronger if Work SoC is low compared to average or high Work SoC, supporting the assumed buffering effect. If overcommitment is high and WorkSoc is low there appears to be no association between ERI and emotional exhaustion due to ceiling effects, while for average and high WorkSoc there is a strong

association between ERI and emotional exhaustion with higher levels of exhaustion for lower levels WorkSoC.

Limitations. One limitation of this study is the cross-sectional design. We cannot conclude the causality of relations. However, ERI and its associations with mental health are well-proven and have already been analyzed longitudinally. Hence, we are confident about having tested the relevant relationships.

Conclusion. We did find some evidence for the expected buffering effect of Work SoC on the relationship between ERI and emotional exhaustion, particularly when overcommitment is low. When overcommitment is high Work SoC has only a limited buffering effect. Nevertheless, compared to the personal risk factor overcommitment, Work SoC appears to be a resource which can be strengthened also by work design and used to prevent emotional exhaustion even in situations of effort reward imbalance. Therefore, this study provides evidence that Work SoC is a promising construct for health promotion.

Relevance to the Congress Theme. Artificial intelligence, automation, crisis like COVID-19 change our working world. To make employees able to cope with these new challenges in a resilient manner and to develop new solutions to the problems, today and in the future, it is important to maintain and promote health of employees. Our study contributes to this topic by examining Work SoC as a promising construct for health promotion in the workplace.

Relevant UN SDGs . This study contributes to the Un SDGs No 3 and addresses Work SoC as a possible starting point for promoting employee health.

*Keywords: sense of work coherence, effort-reward imbalance, overcommitment*

### Paper 3

#### **From risk, to solution, to action – Best practice results of an analysis of workshops to develop salutogenic actions against psychological risks**

Benedikt Graf, Trier University; Jonas Gerstmann, Blue Walnut GmbH, Berlin

**Research goals.** Too often, organizations fail to derive and implement meaningful, salutogenic actions (measures to maintain and increase the health of employees) from survey results of psychological risk assessments. This research addresses participatory, salutogenic employee workshops that create a collaborative understanding of problems, generate solutions to counteract risks, and ultimately create a sense of responsibility for change among employees, based on a quantitative and qualitative study design including the results of 98 workshops.

**Theoretical background.** Recent literature underpins the importance to include employees in the process of psychological risk assessments not only by survey them, but also to let them participate in finding solutions to identified risks. We use a salutogenic process model that identifies the need to include all employees in finding salutogenic solutions to psychological risks at the workplace. Moreover, literature from the last decades confirms the high relevance of employee participation for enabling change processes.

**Method .** Psychological risks at the workplace were estimated according to relative measures (questionnaire) and a participatory evaluation in the workshop. We assessed quantitative data from a large organization in Germany ( N O = 1150) from the production sector covering many different departments and task profiles (production, logistics, development, etc.), using a systemic salutogene organization analysis tool for psychosocial risk assement . Thereafter, we conducted salutogenic workshops (90 min) in all surveyed departments to reflect the results, and to identify and record joint solution ideas for existing risks. After the salutogenic workshops with employees, the joint solution ideas were then taken to the respective supervisors to derive salutogenic actions from those ideas.

**Results.** Overall, 326 risk mentions were discussed in N W = 98 workshops based on 56 departments and associated supervisors, and most risk types were discussed around quantitative overload (42), development opportunities (36) appreciation (30), and time pressure (29). This matches the overall results of the psychological risk assessment in the organization, where quantitative overload (3.44), appreciation (3.60), development opportunities (3.46), and time pressure (3.35) were rated as among the most stressful risk types, all assessed on a scale ranging from 1 (high risk) to 6 (low risk). Qualitative results show that the overall level of satisfaction with the workshops was very high and that across all departments the results were rated as fitting.

199 salutogenic actions were formulated, of which 48.99 % have an estimated short implementation period of only 0-3 months. Only 9.81 % of the actions have an estimated implementation period of longer than nine months. 21.74 % are localized at a merely organizational level, 13.83 % at a mere staff level, and only 3.39 % at a merely technical level, the rest related to more than one area.

**Limitations.** No follow-up survey is planned, so no effectiveness can be determined regarding the implementation of the salutogenic actions. However, implementation is likely, as specific goal setting is more likely to be realized, and in general, effectiveness of implemented actions need to be assessed in the psychological risk assessment. In contact with the organization, the first actions have already been implemented.

Conclusions – research and or practical implications. This approach proved highly effective and helpful in assessing and evaluating psychological risks at the workplace. Moreover, this research shows a best practice example of how salutogenic actions can be meaningfully derived from a survey in a large organization, and how this can be done with the participation of the entire workforce. Thus, every employee is involved in the salutogenic goal process, and a responsibility of health-promoting actions is borne by the entire organization.

Relevance to the Congress Theme. The future of the working world will be characterized by increasing complexity and high absenteeism due to mental illness predicted by the WHO. This study shows practical solutions that result from research and can counteract exactly these developments.

Relevant UN SDGs. This research addresses health and well-being by providing useful and practical guidance for the successful implementation of psychological risk assessment processes that promote employee mental health. Furthermore, a successful counteraction against psychological risks leads to strong institutions as well as decent work and economic growth.

Disclosure. The data of the workshops and psychological risk assessment were generated via a commercial assignment by Blue Walnut GmbH and Benedikt Graf.

*Keywords: Salutogenic workshops, action derivation, psychological risk assessment*

## Symposium S109

### Safety culture and safety performance (I)

Mario Martínez-Córcoles & Francisco J. Gracia | IDOCAL-University of Valencia (Spain)

science\_practice

What will be covered and why (including the contribution of any discussant)

There are some industries where process or operational safety is critical. Nuclear power, air traffic management, healthcare or the chemical industry are some examples. Since the late 80s, all hazard industries have adopted safety culture as their banner in the efforts to promote safety in their installations and operations. Safety culture and safety performance have been considerably studied over the last two decades, as they are main triggers of safety outcomes. However, despite the existing numerous studies, safety culture and safety performance are still somewhat controversial, complex, and ambiguous concepts that need further theoretical and empirical elaboration. The present symposium aims to provide new findings in that direction.

More specifically, Gracia et al.'s contribution proposes a new model of safety performance and develops and validates an instrument for its operationalization, the five-safety performance questionnaire (5-SPQ) that is empirically tested in a sample of 555 employees from a nuclear power plant.

Mezentseva et al.'s contribution explores a moderated-mediation model of antecedents of mindful organising in an Air Traffic Management company. Mindful organizing is the collective ability of a team or organization to anticipate unexpected events and contain them and be resilient once triggered. In their model, they proposed that safety climate mediates the relationship between empowering leadership and mindful organizing and that safety culture moderates the effect of empowering leadership on safety climate.

Two other contributions are qualitative studies in hospitals. Since 2000, there has been a call to understand the many interacting factors across entire healthcare systems which can affect healthcare safety performance, to improve patient outcomes. In this sense, Poots et al. investigate the role of telephone triage technology on safety performance. Despite widespread adoption and use, telephone triage services have been implicated in patient death and malpractice claims, and research investigating their safety is lacking. During the COVID-19 pandemic, telephone triage was adopted rapidly to help curb its spread, by offering an alternative to face-to-face healthcare and the use of these services is set to remain at a high level post-pandemic. Corrigan et al.'s contribution aim to analyse and understand the problem of retained foreign object (RFOs) in surgical and maternity settings and develop hospital-specific interventions. Widely recognized as a preventable event, RFOs continue to remain a current patient safety concern.

Finally, Teperi and Juveni use Systemic Human Factors (HF) and Systems Intelligence (SI) to evaluate the current state and areas in need of development through human factor implementation in the chemical industry. In previous studies, the HF Tool has efficiently improved safety thinking and procedures by considering human contribution in a holistic, participative, positive, and solution-based manner. However, the use of the HF Tool has not yet been researched in the chemical industry nor combined with other lines of research.

Relevance to the Congress Theme

A constantly changing work environment poses a great threat and challenge for all those organizations that cannot afford to fail and where safety is critical. In our symposium we have a wide representation of these kind of organizations (nuclear power plants, air traffic management centers, hospitals, and chemical plants).

#### Research/Practical Implications

This symposium provides novel contributions to the field of safety culture and safety performance in organizations. Particularly, it will contribute to existing research in several ways: 1) new conceptualization and operationalization of safety performance, 2) widening the nomological network of predictors of mindful organizing (an indicator of team safety performance), by clarifying the role of empowering leadership, safety culture and safety climate, 3) developing preventive intervention strategies to improve patient safety culture and patient safety outcomes, and 4) widening the knowledge and understanding of human factor in the chemical industry, and helping supervisors and managers to lead safety culture.

#### Overall conclusions

This symposium advances scientific knowledge on safety culture and safety performance in high-risk industries. These contributions can be used by managers to improve safety management in their organizations with a higher understanding of the human factor and the set of individual, team and organizational variables that contributes to the development of a strong safety culture and enhances employees' safety performance.

*Keywords: Safety culture, safety performance, safety management*

## Paper 1

### Testing the validity of the IAEA's Harmonized Model of Safety Culture

Mario Martínez-Córcoles, Diana Seitkanova, Inmaculada Silla & Francisco J. Gracia | IDOCAL.  
University of Valencia

#### Research goals and why the work was worth doing

The Harmonized Model of Safety Culture created by the International Atomic Energy Agency (2020) is a new guideline made so that nuclear organizations all over the world can understand, assess and enhance their safety culture. To ensure a rigorous and correct application of this model in nuclear organizations, it is necessary to test its validity. Unfortunately, as far as we know, the Harmonized Model of Safety Culture has not been validated yet. In this study we aim to test its validity.

#### Theoretical background

Over the last years, nuclear organizations had been experiencing challenges in meeting the requirements of different safety culture models which were different in structure (e.g., WANO, IAEA, or INPO). This can create unnecessary confusion and uncertainty in nuclear organizations to meet agencies and regulators' expectations. Specifically, professionals may have doubts about what aspects they should include to assess safety culture, or they should consider to enhance safety culture. The Harmonized Safety Culture Model IAEA aims to harmonize those different models, and focus on the gaps between existing frameworks. The model provides a description of 43 exemplary behaviors (indicators of a healthy safety culture), which are encompassed in 10 attributes.

#### Methodology

Our sample was composed of 555 employees from two Spanish nuclear facilities and their headquarters. Data was collected in 2022.

#### Results obtained

Reliability values were satisfactory for the ten subscales. A Confirmatory Factor Analyses (CFA) was performed to test the ten-factor model proposed by the IAEA This model provided an excellent fit ( $\chi^2 = 1483.41$ ,  $df = 815$ ,  $p < .01$ ;  $RMSEA = .039$ ;  $CFI = .997$ ;  $NNFI = .997$ ), and all the estimated parameters were statistically significant ( $p < .05$ ). Results indicated that each item saturated in its corresponding scale. However, results on the discriminant validity of the ten dimensions were not satisfactory. The correlation coefficients among the ten dimensions of the IAEA model were extremely high, ranging most of them between .90 and 1. According to Kline (2005) discriminant validity can be established when inter-factor correlations are below .85.

The large correlations among the ten dimensions of the IAEA's model suggested that a one-factor model could be more suitable to represent the IAEA's attributes. To evaluate this possibility, we fit a one-factor model and compared the results to the ten-factor model. The single-factor model provided an excellent fit as well ( $\chi^2 = 3082,17$ ,  $df= 860$ ,  $p < .01$ ;  $RMSEA = .070$ ;  $CFI = .990$ ;  $NNFI = .989$ ). As CFAs results showed negligible differences between both factorial structures, we decided to explore the internal structure of the IAEA model without the restrictions imposed by a confirmatory analysis. Therefore, we run a PCA for the 43-item safety culture model, which produced three factors with eigenvalues greater than 1 (Kaiser Criterion) that accounted for 66,13% of the total variance. The way the attributes were grouped by the PCA was very different from the IAEA's proposal. First,

59,80% of the total variance explained was accounted for by the first factor, and the scree plot clearly suggested retaining only one factor. Second, when trying to label the three factors that met the Kaiser rule, researchers found difficulties in conceptually interpreting each of these factors. Third, some of the items cross-loaded on more than one factor (i.e. crossloadings  $\geq .30$ ). Later analyses could not support any alternative multidimensional structure either.

#### Limitations

According to the specifications of the Harmonized Model of Safety Culture “the model is not a behavioral code or checklist but represents overarching principles that provide traits and attributes that are present in organizations with a healthy culture for safety” (IAEA, 2020). A number of these attributes are double and triple barreled, and as such, respondents can agree with one part of the item but perhaps not with the other.

#### Conclusions

Our results failed to clearly support the ten-factor dimensionality of the IAEA’s model. Results from our analyses could not support any alternative multidimensional structure either, and indicate that the IAEA’s model may have a one-dimensional structure instead of the ten dimensions proposed by the IAEA.

This novel safety culture model will be a reference in the global nuclear industry on the next years. As far as we know, this is the first study checking the validity of the IAEA’s model. Our results invite to reflect on this model and open the door for its improvement.

#### Relevance to the Congress Theme

Reliable performance in high hazard organizations is critical for avoiding devastating consequences in the future.

#### Relevant UN SDGs

Our study contributes to the following UN SDGs: 3, 7, 11 and 13.

*Keywords: Safety culture; Safety management; Nuclear industry*

## Paper 2

### A Safety Culture Model and Measure for the UK Nuclear Industry

David Holman, University of Manchester; Nick Shaw, Office for Nuclear Regulation, UK; Lina Siegl, David J. Hugues & Sharon Clarke | University of Manchester

Research goals : Organisational safety culture is critical to support the nuclear industry in maintaining nuclear safety, and for regulators to achieve their regulatory mission. Failings in nuclear safety culture have been highlighted as contributing to a number of high-profile nuclear accidents, such as Three Mile Island, Chernobyl, Davis Besse and Fukushima. The IAEA defines safety culture as that “assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, nuclear plant safety issues receive the attention warranted by their significance” (IAEA, 1991). But, despite considerable research and attention within the industry, the construct remains largely intangible and difficult to quantify. This makes it challenging for nuclear dutyholders to develop and maintain their safety culture. Existing guidance for nuclear dutyholders provides a framework for understanding culture for safety (e.g., Harmonised Safety Culture Model published by the IAEA, 2020), but critiques of existing safety culture models point to the lack of conceptual basis, and difficulty in operationalisation (e.g., De Castro et al., 2013). Building on existing work, we aim to develop a novel conceptual model of safety culture for the UK nuclear industry, and operationalise the model to create a quantitative measure of safety culture. Nuclear energy is of increasing importance in a world with greater needs for the production of clean, affordable energy (UN SDG 7), but maintaining the safety of nuclear power remains critical, as well as providing a safe and healthy work environment (UN SDG 3). Our work contributes to theory, research, and practice through the conceptualisation of nuclear safety culture in a UK context, and the development of a quantitative measure for use within the industry.

Theoretical background : Our theorising is based on the Schein (1985) model of organisational culture, with safety as a content-specific aspect of culture, integrated with Reason’s (1997) model of ‘informed’ culture. We conceptualised culture as driven by underlying basic assumptions, but manifest in visible artefacts, behaviours, norms, and attitudes. We focus on the enacted values (as opposed to the espoused values) which actually drive behaviours in practice, and are most strongly predictive of safety performance (e.g., Grote & Kunzler, 2000; De Castro et al., 2017). Existing literature emphasizes the ‘conflicts’ or ‘paradoxes’ in efforts to ensure safety in high hazard environments (e.g., Reiman & Rollenhagen, 2012; Casey et al., 2017), for example, the paradox of stability versus flexibility (Grote, 2015). This emphasizes the importance of balancing flexibility (which enables learning and adaptation as the work environment changes) alongside stability and control, and leans into Reason’s idea of the ‘flexible’ culture. Our model draws on these ideas in the conceptualisation of safety culture in nuclear context, which requires both flexibility and stability.

Design / Methodology : We used a mixed-methods approach to the development of the safety culture model, combining a targeted literature review, and semi-structured interviews with 10 subject-matter experts. Reading and re-reading the interview transcriptions led to the identification of themes and subthemes within the data. These were cross-checked with the themes emerging from the literature review. The safety culture model, which emerged through the analysis, has six dimensions, and 16 subdimensions. To develop a questionnaire, based on the conceptual model of safety culture, we conducted 15 interviews with participants from the UK nuclear industry, and undertook a review of previous safety culture surveys to develop an initial pool of items. We used 14 cognitive interviews to refine the items, including think-aloud protocols, to produce a final pool of

items for a questionnaire. The survey will be launched across 7 UK nuclear dutyholders (N = 1000) in November 2022, which will allow us to report our initial findings in May 2023.

**Findings :** based on the SME interviews and literature review, we developed a model of nuclear safety culture. The model differentiates between the underlying foundations of culture, in terms of policies, processes, training, and communications, which organisations have in place to support the safety culture, and the elements of the culture which reflect the underlying values, beliefs, and attitudes towards safety. The latter comprise dimensions of leadership, immersion, accountability, challenge, reporting, and compliance, where each element lays the foundation of the next. In addition to the model, we will present the findings on the initial validation of the survey to the conference in May 2023.

**Limitations :** the safety culture model and measure are developed specifically for the UK nuclear industry, and would require further testing to ensure their wider applicability.

**Conclusions :** We have developed a conceptual model of safety culture for the UK nuclear industry, which is theoretically sound, and has significant practical use. This forms the basis of a quantitative measure to identify elements of safety culture, and support efforts to monitor and improve safety culture.

*Keywords: Safety culture; Safety management; Nuclear industry*

### Paper 3

#### **Leading Mindful Organizing for Safety: A moderated serial mediation model in Air Traffic Control**

Diana Seitkanova, Mario Martínez-Córcoles, Francisco J. Gracia & Inmaculada Silla | IDOCAL.  
University of Valencia

#### Research goals and why the work was worth doing

This paper examines the moderating effect of promotion of participation and mediating effects of trust in leadership and critical upward communication in a relationship between empowering leadership (EL) and mindful organizing (MO). MO refers to the joint capability to bring rich awareness of discriminatory detail and a capacity for action in teams (Weick et al., 1999).

We hypothesized that promotion of employee participation will moderate the relationship between EL and trust in leadership, whilst trust in leadership and critical upward communication will sequentially mediate the link between EL and MO. We also hypothesized a direct effect of EL on MO, as well as serial mediation of the latter link through trust in leadership and critical upward communication.

The findings of this paper are crucial to the safety research as they contribute to the formation of the theoretical framework of MO, a key predictor of safety operation in HROs including air-traffic control. We've identified a lack of research on the underlying mechanisms of influence between EL and MO, and with this study, we bridge the existing gap in the literature.

#### Theoretical background

MO has been studied actively in the recent years (Knight, 2004; Vogus & Sutcliffe, 2007; Rerup, 2009; Sutcliffe et al., 2016) and was found to be one of the main predictors of high reliable performance in HROs (Roberts, 1990; Schulman, 1993; Weick et al., 1999; Weick & Sutcliffe, 2007; Sutcliffe et al., 2016). Respectively, empowering leadership behaviors have proven to predict safety-related outcomes in employees, especially in the nuclear field (Martínez-Córcoles et al., 2011; Martínez-Córcoles et al., 2012).

Some studies have shown the predictive power of EL over MO in HROs (Hoy et al., 2006; Sutcliffe et al., 2016; Gracia et al., 2020). In this paper we aim to explore the underlying mechanisms of influence of this relationship.

Our choice of serial mediators is backed by previous research on upward voice and trust in leadership in nuclear power plants (Silla et al., 2020), and our choice of the moderator is based on Renele et al.'s (2020) study on developing MO in teams through participation climate and perceived feeling of safety in nuclear power plants.

#### Methodology

73 air-traffic controllers working in six different ATC towers and its headquarters around Spain filled the questionnaires. Moderation, mediation and moderated mediation analyses were performed via PROCESS Macro (Hayes, 2013) to test the three outlined hypotheses.

All questionnaires were used and validated in previous research on safety culture in HROs.

Why this sample? Studying the ATC industry is especially important in the current economic and social context as the need for uncertainty management and higher flexibility has increased. There is a

heightened need to understand the specifics of operation of air-traffic controllers to keep enhancing reliability.

## Results

All variables show acceptable to excellent reliability, ranging from Cronbach alphas of 0.71 to 0.97. Main variables have significant and positive relationships ( $p < 0.01$ ).

A confirmatory factor analysis has shown a poor fit of the model ( $\chi^2 = 2661$ ,  $df = 1165$ ,  $p < .001$ ; RMSEA = .13; CFI = .67; TLI = .65). A possible explanation for the bad fit of the model might be a small sample size. Despite the obtained results, we run the analyses as all scales used were validated in previous studies and proven useful in predicting relevant safety outcomes in HRO context.

For serial mediation analysis a significant direct effect of EL on MO was found ( $b = .37$ ,  $p = .025$ ), but no significant indirect effect of empowering leadership on mindful organizing through trust in leadership and critical upward communication was revealed. For the whole path of moderated serial mediation, no significant results were found. However, apart from the hypotheses posed, significant correlations between EL and trust in leadership ( $b = .77$ ,  $p < .001$ ), trust in leadership and critical upward communication ( $b = .38$ ,  $p < .001$ ), as well as EL and upward communication ( $b = .61$ ,  $p < .001$ ) were revealed.

## Limitations

A small sample size characteristic to the ATC sector, which might decrease statistical power for the analyses.

## Conclusions – research and/or practical implications

Empowering Leadership predicts Mindful Organizing in air-traffic controllers, which confirms previous similar findings in HROs. This study has also revealed significant relationships that were not part of the hypotheses. For instance, empowering leadership turned to be a relevant predictor for trust in leadership and critical upward communication, some of the critical variables in the safe operation of HROs. These findings add to similar results from previous studies.

Practically, these results can be used by management boards in HROs looking to foster and increase mindful organizing in order to prevent accidents that might have disastrous human, environmental and economic implications.

## Relevance to the Congress Theme

The theme of safety climate and culture is crucial within the context of high-reliability organizations simply because of the high stakes an error might cost. Hence, predictors of safe performance such as Mindful Organizing and Empowering Leadership behaviors are vital to achieve impeccable safety outcomes.

## Relevant UN SDGs

This study contributes to the following SDGs:

Good Health and Well-Being = number 3

Sustainable Cities and Communities = number 11

Climate Action = number 13

*Keywords: Mindful organizing; Empowering leadership; Upward communication*

## Paper 4

### **A multilevel investigation of the antecedents of safety performance in a sample of UK heavy mobile plant drivers**

Laura Jackson, Matteo Curcuruto & Jim Morgan | Leeds Beckett University

#### Research Goals and Why the Work Was Worth Doing

The aim of this research is to investigate the multilevel antecedents of heavy mobile plant drivers' safety performance within the UK mineral products industry. A large proportion of safety incidents in this industry are related to heavy mobile equipment (e.g., excavators, loading shovels and dump trucks). Due to their size, these machines have the potential to cause serious harm to individuals and severe damage to company assets. This is a salient issue for many organisations involved in the extraction and manufacture of construction materials, and the construction industry more generally, which is considered a high-risk industry for injury and death (Pinto, Nunes and Ribeiro, 2011; Lingard, Cooke and Gharaie, 2013; Amiri et al, 2016). Despite advancements in safety management systems, many organisations that operate heavy mobile plant in high-risk environments still have relatively high incident rates (Renecle et al, 2021). There is a pressing need to reduce mobile plant incidents rates, but there is currently a dearth of research in this area. Therefore, the present research aims to add to the limited knowledge-base by investigating the multilevel influences on the safety behaviour and performance of these drivers.

#### Theoretical Background

The start of the construction process involves the extraction of minerals (quarrying) and the manufacture of construction materials. Safety incidents related to heavy mobile plant operations have been an ongoing issue for the organisations that conduct this safety-critical work. Disruptions to the operation of mobile plant caused by such incidents is both costly for organisations, but also for the employees involved. Given these occupational health and safety implications, it is surprising that there is very little research involving heavy mobile plant drivers, although the studies concerning work-related driving more generally have been steadily increasing (Wills, Watson & Biggs, 2006).

Because of the lack of research in this specific setting, the present study draws on the wider safety science literature to explore the potential role of multilevel influences. The role of safety climate is investigated both at the organisational level and group level, and is a valuable construct to explore as it conceptualises the way in which an entire organisation perceives safety values, priorities and procedures (Curcuruto, Griffin, Kandola and Morgan, 2018). Safety climate can shape the motivation to work safely (Griffin and Curcuruto, 2016) and has also been shown to predict safety behaviours (Clarke, 2006; 2010). While organisational and managerial influences are important in shaping safety-related outcomes, it is important to recognise that the operation of mobile plant is, for the most part, considered a lone-working task. As a result, it is important to also explore the role of individual level safety antecedents (e.g., safety motivation, job-related well-being, safety self-efficacy etc), context-specific safety behaviours, and the relationships between them, as well as their influence on incident occurrence. Although much of the literature assumes that the relationship between safety climate and safety outcomes is at least partially mediated by individual behaviours, little is known about the mechanisms by which safety climate impacts individual behaviours within organisations. (Griffin and Curcuruto, 2016).

#### Methodology

A questionnaire study will be conducted in the winter of 2022/2023. Participants will be employees of a mineral products extraction and construction company, who operate heavy mobile plant within the aggregates or asphalt divisions. Mobile plant includes machines such as excavators, loading shovels and dump trucks. The potential research population is composed of 483 truck drivers employed in the company on a permanent contract. The questionnaire will be available for participants to complete both online and on paper. The scales included were decided upon after a scoping exercise conducted at the company by the lead author. This involved the analysis of company incident data, onsite observations, and discussions with mobile plant drivers and subject-matter experts, as well as a review of the current academic literature. The scales include; safety climate, safety motivation, attention failure, job-related well-being, risk propensity, reporting attitudes, safety self-efficacy, tendency towards driving violations, safety envisioning, and safety citizenship behaviour. There will also be a measure of context-specific target safety behaviours; acknowledgement, checking mirrors, requesting assistance, and being patient. Finally, as an outcome measure, participants will be asked to rate the frequency of their incident experiences, describe what happened and any consequences that occurred as a result. The data collected will be analysed through statistical analysis including factor analysis (to test the dimensionality of safety climate in this particular research sample characterized by lone workers) and path analyses (to test causal effects among the variables included in the survey, in accordance with hypotheses derived from the relevant literature).

#### Results

The study will be completed in early 2023 and detailed results will be available at the Congress. We aim to present the findings emerging from at least half of the workforce population of the company (approximately a sample of 250 workers).

#### Limitations

To narrow the scope of the project and ensure it is logistically manageable, data will only be collected from employees working within the aggregates and asphalt divisions of the host organisation. This may make it more difficult to generalise to other areas of the business, (e.g., cement, ready-mix concrete, surfacing or concrete products), although many facets of driving operations are similar.

#### Implications

This study will advance the current knowledge on multilevel influences on heavy plant safety within a material extraction and construction industry context. Better knowledge and understanding about these influences and interactions may help inform safety interventions which aim to reduce risk, incident rates, and injuries and fatalities within safety-critical environments.

#### Originality/Value

We aim to extend the limited safety research knowledge concerning a specific work-related driving context common to the material extraction and construction industry: the operation of mobile plant. This is considered a high-risk activity that accounts for a large proportion of industry incidents, hazards and near-misses.

*Keywords: Safety performance; Multilevel; Mineral products industry*

## **Symposium S113**

### **(Chronic) illness at work: Insights into organizational health-diversity**

Alexandra Cook, University of Amsterdam; Alexander Zill, University of Applied Sciences - Hochschule Mittweida

science

What will be covered and why?

The Covid-19 pandemic has put a new focus on people working with pre-existing conditions. One-third of the European population has at least one chronic health impairment, and the numbers are expected to rise due to the increased prevalence of autoimmune disorders and the aging workforce. Yet, in psychological research on work and health, chronic health conditions and their consequences are rarely attended to. As we know little about how to successfully manage a health-diverse workforce at this point, there is an urgency to place health diversity in the spotlight of organizational research and interventions.

This symposium investigates chronic health impairments and work: The first presentation focuses on the potential effects of a chronic health impairment on members of a specific organizational group: leaders. Although leaders are considered crucial for employee health, their health is often neglected in research and theory. This study investigates if and how an existing health impairment impacts one's leadership style. The second presentation provides a new perspective on an established construct in organization psychology, namely job crafting, by investigating how differences in perceived energy and the difficulty in managing one's energy while balancing work and illness management are related to different types of job crafting amongst people with chronic health conditions. Furthermore, it investigates whether the positive findings regarding the effects of job crafting on work and well-being outcomes can be replicated in a sample of people with health impairments. The third presentation focuses on the perceptions of employees with chronic illness towards organizational interventions and leadership behaviors focusing on improving health and the reduction of stigmatization. Furthermore, the presented study investigates the associations between organizational interventions, leadership and co-worker behaviors, and work-related burnout. Following the three presentations, we will have a summary and discussion with our discussant, an expert in the field of job insecurity and proactive career behaviors. Our discussant will aim to find common questions from all three presentations and link these questions to employability and career planning.

Relevance to the congress theme:

The increase in health diversity in the workforce is an important element in the changing world of work. Together with the shortage of skilled workers and the increase in economic burden due to early retirements, these changes create a strong need for organizations to create working conditions that allow good and healthy work, not just for people in good health but also for people with existing impairments. It is the task of work and organizational psychologists to identify factors that improve or exacerbate work-life employees with health impairments and to provide avenues to provide adequate support for organizations and leaders and, subsequently, create healthy and resilient organizations and societies.

Research and practical implications

All three presentations in this symposium will contribute to the inclusion of health status into theories and research on organizational behavior and, more specifically, occupational health and well-being to develop and conduct relevant research questions and adequate research designs that investigate how to create good and “healthy” working conditions for a health-diverse workforce. The three presentations will demonstrate the need to consider the perspectives of people with (chronic) health conditions, as this perspective change may result in the need to adapt established assumptions towards “healthy” and good work. Moreover, the second and third presentations contribute to developing or adjusting interventions. Whereas Presentation 2 provides insights into adding health status as an important factor in interventions based on the established concept of job crafting, Presentation 3 provides valuable insights for the development of specific organizational interventions to address the needs and difficulties of people living and working with chronic health conditions. Finally, we believe our symposium may contribute to the conference above and beyond theory and practice as we encourage congress participants with personal experiences with chronic health conditions to join our symposium and share insights and important questions.

#### Overall conclusions

A chronic health impairment can significantly affect work-life as it may impact one’s baseline well-being, individual resources and behavior at work in various ways. Furthermore, it can create the need for the adjustment or development of interventions to address specific difficulties and needs at work. Including health status in theory and research is, therefore, essential to provide evidence-based interventions and support for employees and organizations.

discussant: Maarten van Bezouw, Utrecht University

*Keywords: chronic illness, diversity, occupational health*

## Paper 1

### Healthy or ill? How a leader's health condition affects leadership behavior

Tobias Struck, Hannes Zacher & Michael Knoll | Universität Leipzig

**Goals:** This research aims to understand changes in the leadership process that may occur in the interplay of actual health conditions and defining oneself as a leader, specifically when a leader's health condition contradicts the image of a strong and dedicated leader. We investigate whether the presence of a health impairment or a chronic illness affects a leader's socio-cognitive processes and resource experience, which, in turn, may interfere with effective leadership behaviors. The topic's importance stems from the powerful and exposed position leaders hold, which qualifies them to potentially facilitate or hamper the well-being and performance of their followers and the organization. Understanding the effects of health on leaders' self-view and role implementation provides opportunities to support both the individual leader and the context in which leaders operate.

**Theory:** Drawing on a Conservation of Resources perspective, physical and mental health can function as an energetic resource. A resource shortage can impede meeting work-related goals and reduce the availability of increasing or obtaining individual resources. Threats (e.g., impairments and chronic burdens) reduce the amount of health as a personal resource, consequently changing leaders' motivation and stress experience. Transferred to leaders with health impairments, we conclude that health impairments represent a reduction in personal resources that, in turn, evokes both negative cognitive responses (reduced identification and motivation to be a leader) and a higher strain experience. We expect the maladaptive response to affect certain leadership styles that require high effort, such as transformational and transactional leadership. These leadership behaviors seem less promising for leaders experiencing deteriorating health, resulting in fewer of these beneficial behaviors.

**Methods:** We conducted a longitudinal online survey with four waves starting in August 2022. N = 1496 leaders from different occupations in Germany participated at the first time of measurement and were monthly re-invited to participate in the following waves. The data collection for the final wave will take place in November 2022.

**Results :** Data will be analyzed after data collection, with results available at the end of 2022. We expect that health impairments and chronic conditions reduce transformational and transactional leadership and increase passive-avoidant leadership over time. This effect is probably partly explained by resource experience (more strain) and social-cognitive processes (a diminished self-view and identification as a leader). Analyses based on the first round of data collection indicate effects in the expected direction.

**Limitations:** Although we surveyed a large and heterogeneous sample of leaders, leaders only self-reported their health, attitudes, and leadership behavior. Future research should consider ratings from a third-person perspective (e.g., employees or team members) to objectively estimate the effects of noticeable changes in leadership behavior. Second, by asking leaders monthly, we may miss out on some dynamics outside a section of mid-term changes in health and leadership, for example, daily fluctuations in symptoms or a long-term treatment outcome required to complement the picture.

Conclusions: Health impairments and chronic conditions influence leaders' perception and exertion of leadership. Thus, besides addressing how leaders affect follower health, researchers and practitioners concerned with occupational health and leadership need to consider the leader's own health conditions. Our research reveals processes that human resource departments and managers could use to help leaders fulfill their potential through suitable cognitive strategies.

Congress theme: This research reflects the changing world of work by directing attention to individual health conditions at every job level. Due to demographic changes, health is already an important factor for promoting sustained development and good working lives, and its importance will likely increase in the future. When governments raise the legal retirement age and/or more people extend their working life, the share of working people with health impairments and chronic illness may further increase. Although the changing world of work also implies that leaders change, research on leaders' health and illnesses is scarce. However, addressing individual health conditions at the leader level might be an effective way to shape the future of work. Beneficial or detrimental effects for the individual leader can crossover to work teams, whole organizations and perhaps society. Creating a deeper understanding for research on health and leadership may be one element towards a more inclusive and diverse workforce.

UN SDGs: Good health and well-being, Reduced inequalities, Decent work and economic growth

*Keywords: leadership, health, illness*

## Paper 2

### Enough energy to craft? Investigating job crafting amongst employees with chronic health conditions

Alexandra (Sasha) Cook, University of Amsterdam

**Goals:** Recent evidence emphasizes the benefits of job crafting for employee job satisfaction and well-being. However, there are many open questions regarding the applicability and feasibility of job crafting for people with impaired resources. This is especially crucial as surveys among the countries of the European Union indicate that about one-third of the working-age population has at least one longstanding health condition. First, insights on job crafting amongst people with disabilities show that, although they engage in crafting, they do so at a substantially lower level compared to non-disabled people. The goal of this research is to investigate the roles of energy and perceived conflicts between work life and illness management amongst employed people with chronic health conditions (CHC). Moreover, this research examines whether established associations between job crafting and well-being outcomes can be replicated among people with CHC.

**Theory:** In the Job Demands-Resources framework, job crafting is a way in which employees can redesign their work by increasing their job resources or lowering their job demands. However, as engaging in job crafting requires additional effort beyond regular job activities, employees first need to invest energy before they can benefit from job crafting. Employees with CHC often experience limitations caused by the condition itself or its treatment. According to the Conservation of Resources model, we can conceptualize limitations due to impacted health as a diminished energy resource. People with CHC experiencing a loss of energy will be more likely to protect their resources instead of investing them in acquiring new resources through job crafting. This study, therefore, investigates the association between perceived energy and the four job crafting types (increasing structural resources, increasing social resources, increasing challenging demands, and decreasing hindering job demands). As individual energy resources may also be depleted due to the additional demands of managing one's CHC while working, this study investigates the relationship between perceived energy-related work-health management interference (WHMI-E) and job crafting. Furthermore, I investigate whether established relations between the four job crafting types and health and well-being outcomes can be replicated amongst employees with CHC.

**Methods :** Data was collected amongst 178 people with chronic medical illnesses and mental disorders using the platform Prolific academic. I assessed energy, WHMI and job crafting at baseline and the potential outcomes of job crafting one month later. Gender, age, perceived illness symptom severity and the type of the primary health condition (mental versus physical) were assessed as covariates.

**Results:** Regression analyses show that perceived energy is positively and significantly associated with all four types of job crafting, indicating that employees with lower energy levels tend to engage in job crafting to a lesser degree. Perceived energy and perceived energy-related work-health management interference were negatively and significantly correlated ( $r = -.61$ ). However, WHMI-E was positively associated with increasing structural and social job resources and decreasing hindering job demands. An additional finding of the baseline analysis was that people with a mental primary health condition reported engaging less in the job crafting type focused on increasing structural job demands. Controlling for energy and WHMI, job crafting was not a significant predictor of job satisfaction. Whereas participants engaging in increasing challenging job demands reported less

exhaustion burnout, increasing job and social resources were negatively, and decreasing hindering job demands was positively associated with disengagement burnout. Controlling for energy and WMHI-E in the analysis of the effects of job crafting indicates potential partial mediation effects.

Limitations: Due to the nature of the dataset, claims of causality in the associations between energy and WHMI-E can't be made. Moreover, the current dataset allows only limited insights into the individual working conditions, which should be addressed in future studies.

Conclusions : This study indicates that the ability to engage in job crafting may depend on the individual employee's energy levels. As energy resources can be diminished due to a chronic health condition, this raises the question of how to design job crafting interventions for employees with CHC. Contrary to the expectations, people perceiving that their energy is insufficient to manage work and their illness also reported more job crafting. However, more longitudinal insights are necessary to determine the directional causality of this relation. Although the longitudinal analyses found negative effects of job crafting on burnout, job crafting did not explain variance in job satisfaction above and beyond the predictors.

Congress Theme : Health diversity in the workforce is changing due to the increase in chronic illnesses (e.g., autoimmune diseases) and demographic change, leading to an urgent need to include the perspective of people with health limitations in occupational health research.

UN SDGs: Good health and well-being, Reduced inequalities, Decent work and economic growth

*Keywords: job crafting, energy, burnout*

### Paper 3

#### **Organizational interventions for employees with chronic illnesses and their impact on work-related burnout**

Alexander Zill, University of Applied Sciences - Hochschule Mittweida

**Goals:** The recent study aims to get a deeper insight into the relevance and mechanism of organizational interventions for employees with chronic illnesses to improve their situation at work. The results of this study can make an important contribution to how organizations can support employees with a chronic illness or condition.

**Theory:** A quarter to a third of all working people have a chronic health condition. Skilled worker shortage and an aging workforce require organizations to look closely at this issue. Two major problems for the mental health of employees with a chronic illness condition are the compatibility of work and health management (e.g., doctor visits and adherence to treatment schedules) and the experiences of stigmatization at work. Previous research in organizational psychology has shown the positive impact of leaders, coworkers and organizational climate on employees' mental health. Organizations have to develop specific interventions to transfer and systematize these general positive effects to employees with a chronic illness condition and their problems. We assume that specific organizational interventions for employees with a chronic illness condition positively affect leadership behavior, coworker support and organizational care in general, reducing work health management interferences and experienced stigmatization and thus strengthening mental health.

**Methods:** 625 employees with at least one chronic health condition participated in an online study regarding chronic illness at work. They were recruited via self-help organizations in Germany. The sample includes employees with physical or mental illness conditions, with employees with major depression, migraine, or endometriosis representing the largest proportion of the sample. Participants answered questions about organizational interventions aimed at chronically ill employees (e.g., information, support offers, design of working conditions, anti-stigmatization campaigns), perceived leader illness orientation, coworker support, organizational care, work health management interferences, experienced stigmatization and work-related burnout.

**Results :** We found a negative relationship between the existence of an organizational intervention aimed at chronically ill employees in the workplace and work-related burnout, meaning that employees who perceive their organization to provide interventions reported lower burnout levels. This relationship is serially mediated in three ways: through perceived leader illness orientation and work health management interferences; perceived leader illness orientation and experienced stigmatization; organizational care and experienced stigmatization. First, organizational interventions are positively related to perceived leader illness orientation which is negatively related to work health management interference, which is positively related to work-related burnout. Second, organizational interventions are positively related to perceived leader illness orientation which is negatively related to experienced stigmatization that is positively related to work-related burnout. Third, organizational interventions are positively related to organizational care, which is negatively related to experienced stigmatization that is positively related to work-related burnout. Moreover, we found a small positive relationship between organizational interventions and coworker support, which disappeared in the path analysis. Nevertheless, coworker support is negatively related to experienced stigmatization.

Limitations: First, the current study investigated employees with different chronic health conditions. Unfortunately, the number of chronic diseases and comorbidities varied greatly, so no systematic comparisons between illnesses can be carried out. Second, this is a cross-sectional study, and all mediating processes should be interpreted cautiously. Third, to better understand which format of organizational interventions is best, future research should focus more in detail on the content of interventions, for example, using qualitative methods.

Conclusions : This study shows the positive impact of organizational interventions to strengthen the working conditions of chronically ill employees. Particularly perceived leader illness orientation and organizational care seem to be either influenced organizational measures or represent organizational interventions in the eyes of the employees. This, in turn, could reduce work health management interferences and the experience of stigmatization of employees with chronic conditions, thus reducing work-related burnout. In sum, organizations should invest in interventions for employees with chronic conditions due to the potential positive effect on mental health. Moreover, it contributes to reducing inequality and hence more integration of people with any impairment.

Congress Theme : Many sectors of the economy are currently confronted with a shortage of skilled workers. Supporting people with chronic conditions by providing appropriate working conditions improves this phenomenon. It can increase the recruitment of people with impairments and prevent early retirement and turnover among current employees.

UN SDGs: Good health and well-being, Reduced inequalities, Decent work and economic growth

*Keywords: interventions, chronic illness, burnout*

## **Symposium S114**

### **Decent Work and Well-Being in a Changing World of Work: Studies in four countries**

Leonor Pais, University of Coimbra, Portugal

science\_practice

In line with this year's conference theme, "The future is now: The changing world of work," this symposium focuses on studies or approaches that guide practitioners in their interventions to align them with decent work contexts. Ensuring decent work contexts is an essential prerequisite for respecting human rights and, therefore, a relevant contribution to ensuring that changes in the world of work do not adversely affect life at work and beyond.

The symposium focuses on the relationship between decent work and well-being in work contexts in four countries.

First, the results of the Decent Work Questionnaire (DWQ) adaptation and validation processes in those countries are presented. Subsequently, the relationships between the dimensions configuring decent work and those related to well-being, assessed through work engagement and burnout, are presented and discussed. In this context, in its positive (empowering) and negative (toxic) dimensions, leadership is still discussed and related to work motivation.

Papers presented in this symposium will focus on decent work, well-being (engagement and burnout), leadership, and work motivation and represent initiatives from 4 European countries: Portugal, Spain, the United Kingdom, and Russia. With the following presentations, we hope to inspire the debate on making organizations better places to work in a changing world of work.

In a post-modern and post-industrial world, Work and Organizational Psychology must attend to new trends and develop new assessment and intervention tools that allow psychologists to play a central role in promoting essential values in a work context. Identifying work factors influencing the well-being of workers, in both its positive and negative facets, is a significant step in this endeavour by allowing for the development of effective organizational intervention programs in this regard. These questions are central in the first paper, reporting results obtained in the United Kingdom.

The second paper describes the psychometric properties of the Russian version of the Decent Work Questionnaire and the relationships of decent work with well-being variables, such as burnout and work engagement.

Similarly, the third paper presents the adaptation and validation of the Spanish version of the Decent Work Questionnaire and the relationships between decent work and work engagement and decent work and burnout.

The fourth paper investigates to what extent toxic and empowering leadership dimensions influence the various work motivation types differently. Furthermore, taking the different dimensions of the two types of leadership, the goal was to create different leadership worker profiles and analyze the way they associate with the several motivation types.

#### **Research/Practical Implications**

Each of the papers in this symposium analyzes in detail the uniqueness of its contributions to a better/decent place to work in a changing world of work. At the end of the four presentations, we will present an integrative summary, highlighting the most relevant aspects from the point of view of

research and intervention. Its relevance is all the more remarkable as they emerge from studies carried out concerning the work contexts of four different countries.

#### Overall conclusions

Decent work is an essential feature of work contexts for promoting well-being, and interventions in organizations must have evidence-based guidelines to become better workplaces in a changing world of work.

#### Intended audience

Both academics and practitioners

*Keywords: Decent Work; Well-Being; Changing World*

## Paper 1

### Decent work: Studies in the United Kingdom

Leonor Pais, University of Coimbra, Portugal; João Moreira, University of Lisbon, Portugal ; Nuno Dos Santos, Universidade de Évora, Portugal; Tânia Ferraro, Universidade Portucalense, Portugal

**Research goals and why the work was worth doing:** In a post-modern and post-industrial world, the overwhelming focus on economic development and wealth has given place to reaffirming human values such as justice, inclusion, respect for the environment, health, well-being, etc. Work and Organizational Psychology must attend to these trends and develop new assessment and intervention tools that allow psychologists to play a central role in promoting these values in a work context in a changing world of work. Identifying work factors influencing the well-being of workers, in both its positive and negative facets, is a significant step in this endeavour by allowing for the development of effective organizational intervention programs in this regard.

**Theoretical background:** One of the most promising constructs for promoting quality of life and well-being at work in a changing world of work is that of Decent Work (DW). Developed under the aegis of the International Labour Organization (ILO) as a conceptual framework for the promotion of human rights and social justice at work, DW has the potential to be a highly heuristic concept in guiding the exploration of factors contributing to well-being at work, and the development of interventions that help work and organizational psychologists to pursue fundamental human values. The application of the DW framework in the current study used the Decent Work Questionnaire (DWQ), a multidimensional self-report instrument assessing workers' perceptions of the degree to which their current job fulfills the main aspirations instituted in the ILO framework. Developed in an international context and closely following the framework mentioned earlier, the DWQ has already shown solid psychometric qualities and predictive capabilities in several languages.

**Design/Method:** This study employed, for the first time, the newly developed English version of the DWQ. The sample was composed of 621 workers from all four countries of the United Kingdom (England, Scotland, Wales, and Northern Ireland), with an overrepresentation of highly qualified workers (e.g., professors, researchers, physicians, lawyers, etc.), due to the larger research project of which this study was a part. The DWQ is a 31-item self-report questionnaire comprising a global DW scale and 7-factor scales corresponding to facets of the ILO framework but established initially based on exploratory factor analyses. Well-being at work was measured in its negative (burnout) and positive (engagement) facets, employing the Utrecht Work Engagement Scale and the Personal Burnout subscale of the Copenhagen Burnout Inventory. First, a confirmatory factor analysis (CFA) was conducted to test the psychometric properties of the new English version of the DWQ. Subsequently, the value of DW facets in predicting well-being was explored using zero-order correlations and multiple regression analyses.

**Results obtained:** The CFA showed good adjustment to the theoretical model established with previous versions of the DWQ, especially after introducing some additional, theoretically sensible paths similar to those considered in other versions. Cronbach alphas were also adequate for the global score and factor scores. Multiple regression analyses identified the Fulfilling and Productive Work factor of the DWQ as the major contributor to Work Engagement and the Adequate Working Time and Workload factor as the best predictor of burnout.

Research/Practical Implications

In addition to demonstrating the psychometric qualities of the English version of the DWQ, opening the door to the development of research with this concept and instrument in the internationally preponderant community of English-speaking countries, this study has again supported the advantage of a multidimensional approach to the assessment of DW, by showing that specific facets of the construct may influence equally specific factors of workers' well-being. Therefore, these findings may help work and organizational psychologists hone their intervention strategies in situations where a particular aspect of well-being seems to be especially lacking.

#### Originality/Value

In addition to the availability of an English version of the DWQ, the demonstration that similar factors appear to influence different facets of well-being in different countries, together with the availability of instruments in an increasing number of languages, should encourage the development of further cross-cultural studies in this domain.

#### Limitations

The major limitation of this study is the focus on highly qualified workers, which may doubt the generalizability of the results. Future studies should include other types of workers' populations to establish the validity and usefulness of the DW concepts and the DWQ in other contexts. Examining different outcomes, for example, in health domains or the work-family interface, could also open new avenues for research and interventions.

#### Intended audience

Both Academics and Practitioners

*Keywords: Decent Work; Work Engagement; Personal Burnout*

## Paper 2

### Decent Work Questionnaire: Psychometric properties of the Russian version

Salvatore Zappalà, University of Bologna, Italy; Elena Kamneva & Svetlana Bockhareva | Financial University under the Government of Russian Federation, Russia; Tânia Ferraro | Universidade Portucalense, Portugal

#### Research goals

The present study describes the psychometric properties of the Russian version of the Decent Work Questionnaire (DWQ) and the relationships of decent work construct with well-being variables such as burnout and work engagement.

#### Theoretical background and why the work was worth doing

Decent work (DW) is a very comprehensive concept in work-related sciences and concerns people's aspirations for their working lives. DW's idea has been introduced as an aspirational statement about work conditions and context, as decent work conditions continue to be relatively infrequent in many countries and at-risk in developed ones. The DW concept defines a set of universally considered desirable work characteristics; however, it is not easy to measure. Ferraro et al. (2018) developed the Decent Work Questionnaire (DWQ); it measures seven dimensions that assess how employees perceive and evaluate their work content and context. The questionnaire was developed and validated in Portuguese (Ferraro et al., 2018) and Italian (Ferraro et al., 2021). The DWQ must be made available also in other languages, and the present study describes the preliminary results of the Russian version of the instrument. This step is essential for researchers and practitioners to use the DWQ in Russian workplaces and assess how much employees perceive their respective workplaces as decent. Previous studies with DWQ showed a relevant role in promoting work engagement and the prevention of burnout.

#### Method

A questionnaire in the Russian language was available online, from March 22 to May 10, 2021, on the Qualtrics platform. Information about the questionnaire was spread using social media, and Russian professional organizations were contacted to facilitate recruiting. Respondents had to be employed, have at least six months of professional experience, and get paid for their work. Answered the survey 222 respondents, but only 181 completed the survey in full.

In addition to the Russian version of the DWQ, the survey included the Russian-validated version of work engagement (Scahufeli & Bakker, 2004) and the Oldenburg burnout inventory (Demerouti et al., 2010; Russian version by Smirnova, 2017). When the Russian version was unavailable, scales were translated and back-translated by Russian and English native speakers.

#### Results

The results of this study are preliminary and still being processed. An Exploratory Factor Analysis shows six dimensions, with an eigenvalue greater than 1, explaining 65,8% of the variance. A confirmatory factor analysis on the seven dimensions proposed by Ferraro et al. (2018), conducted with Mplus, shows acceptable results with indicators that very slightly increase when correlating the errors of two items in the same dimension. Cronbach's alpha of the seven dimension range between .72 (Social protection) and .88 (Meaningful remuneration). A global DW scale was computed,

showing a positive and significant correlation with work engagement ( $r = .68$ ), and a negative correlation with burnout ( $r = -.58$ ).

The study also made it possible to empirically support the positive relationships between decent work and work engagement and the negative relationships between decent work and burnout.

#### Research/Practical Implications

From a theoretical perspective, this study shows that the DWQ is a valid and reliable instrument even when submitted to Russian workers. From a practical point of view, this study suggests continuing the validation process of the Russian version so that scholars and practitioners can measure employees' perception of the various aspects that constitute the decent work concept to introduce some improvements in work conditions.

#### Originality/Value/Limitations

This study, conducted on Russian employees, includes validating the Russian version of the Decent work questionnaire. The instrument validation in other languages will offer the basis for work and organizational perspective on decent work. Limitations concern the online data collection: respondents belong to different organizations, the number of respondents is not very high, and employees using social media had more opportunities to answer the questionnaire.

#### Intended audience

Both Academics and Practitioners

*Keywords: Decent work; Burnout; Work Engagement*

### Paper 3

#### Decent work and well-being in a Spanish work context

Leonor Pais, University of Coimbra, Portugal; Vicente Martinez-Tur, University of Valencia, Spain; Nuno Dos Santos, Universidade de Évora, Portugal; Tânia Ferraro, Universidade Portucalense, Portugal

#### Research goals and why the work was worth doing

The growing attention to business ethics and integrity and the concern for human rights at work has been an increasingly relevant issue in the changing world of work. Decent work is an essential work-related concept representing the defence and promotion of human rights at work and business and the fulfilling and productive work maintained with social dialogue. This is relevant in any setting and gains relevance in professional environments. The workplaces are fulcral to physical and mental health, personal and professional development, and organizational and societal innovation and advances. Promoting, ensuring, and protecting human rights means ensuring fundamental individual freedoms in different forms and levels. Having fundamental rights respected at work can be decisive for people to achieve their aspirations and well-being. The current study presents the adaptation and validation of the Spanish version of the Decent Work Questionnaire (DWQ) and the relationships between DW and work engagement and DW and burnout.

#### Theoretical background

Despite some progress in improving DW, deterioration has been observed in recent years. Precarious work is growing to create new forms of DW deficit. The study of DW has been undertaken to map its presence/absence in different countries and regions. Considering the scarcity of psychological instruments for measuring DW, previous studies developed and validated the Decent Work Questionnaire for Portuguese-speaking countries (Portugal and Brazil; Ferraro et al., 2018) and Italian workers (Ferraro et al., 2021). This instrument is based on International Labour Organization propositions and covers the full range of the decent work construct, measuring workers' perception of their work content and context.

#### Design/Method

The DWQ Spanish version was applied in a high-skilled workers sample ( N = 1528) in Spain. The inclusion criteria adopted for participants in this research were: (a) having at least six months of professional experience; (b) being currently employed; and (c) receiving payment for the work carried out. The research protocol includes a Spanish-validated version of Work engagement (Schaufeli et al., 2002) and Personal burnout, a subscale of the Copenhagen Burnout Inventory (Kristensen et al., 2005 Spanish version by Molinero-Ruiz, Quintero, & Moncada-Lluis, 2013). The data were submitted to exploratory factor analysis, followed by cross-validation in confirmatory factor analysis.

#### Results obtained

The Exploratory Factor Analysis shows seven dimensions accounting for 69% of the total variance. The Confirmatory factor analyses confirmed both the original high-order model with 7-factors of the DWQ, a very good model fit, and good internal consistency reliability ( $\alpha = .94$ ). Convergent and discriminant validity, tested using Work Engagement, and Personal Burnout scales were supported

by the data. Therefore, the DWQ Spanish version yielded a reliable and valid multidimensional measurement tool and strengthened it as a good cross-cultural measure of DW.

#### Research/Practical Implications

For future research, the evolution of the DW concept from a Work, Organizational, and Personnel Psychology (WOPP) perspective may bring new theories to this field. The DW concept and its application have been developed based on the contribution of different disciplines and areas of knowledge at different levels of analysis. Research in the WOPP field has advanced and shown that this is a relevant and up-to-date concept. Efforts for its practice in professional environments can be a pertinent factor for the health and well-being of people and organizations. At the same time, researching and promoting the application of DW in work settings and relationships at work is a way to rescue WOPP' humanist tradition (Grandey et al., 2015; Lefkowitz, 2008). The inclusion of a DW Agenda as a humanistic agenda for WOPP professionals represents, simultaneously, the valorization of human beings in their work and seeks to meet broader societal concerns. Applying a DW approach in conceiving strategic HR interventions can promote innovative work/job (re)design and improve workplace well-being.

#### Originality/Value

More than 480 million people worldwide have Spanish as their first language. The DWQ' Spanish version will be a helpful tool to explore aspects that influence DW for workers who speak this language. This psychometric instrument could bring a better understanding of DW to different cultures and businesses worldwide. The application of DWQ could open new avenues for theoretical and empirical development of the concept and practical HR interventions.

#### Limitations

Future research needs to continue to test the structure of these seven dimensions in other cultures. Future studies are relevant for enlarging the DW nomological network and deepening understanding of how the seven dimensions interact. These steps will enrich our knowledge of the social issues surrounding DW and add to DWQ's usefulness.

#### Intended audience

Both Academics and Practitioners

*Keywords: Decent Work Spanish Version; Burnout; Work Engagement*

## Paper 4

### Leadership as a contribution to high-quality work motivation

Carla Semedo, Universidade de Évora, Portugal; Leonor Pais, University of Coimbra, Portugal; Ana Salvador, Tyco Electronics, Évora, Portugal; Lisete Mónico, University of Coimbra, Portugal; Nuno Dos Santos, Universidade de Évora, Portugal

#### Research goals and why the work was worth doing

This study aims to verify to what extent toxic and empowering leadership dimensions influence the various work motivation types differently. Furthermore, taking the different dimensions of the two types of leadership, our goal was to create different leadership worker profiles and analyze the way they associate with the several motivation types. The importance of this research is due to the more accurate analysis of the influence of different leadership dimensions on different types of work motivation.

#### Theoretical background

Leadership is defined as a social influence process over others in pursuing goals. That process can be performed both by empowering and promoting others or undermining them. These two types of leadership are well-known as empowering and toxic leadership. Furthermore, those opposite types of leadership impact differently in several aspects of the quality of working life. The present study focuses on that influence of different types of work motivation. According to the self-determination theory, work motivation varies from more controlled to more autonomous regulation. The more autonomous regulation is considered a higher quality type of work motivation. In this case, they are mainly considered intrinsic and identified work motivation. These higher types of quality work motivation are close to two of the Decent Work dimensions, namely, fulfilling and productive work and Opportunities. On the other hand, more controlled regulation, such as extrinsic and introjected regulation, are closely related to different decent work dimensions, such as social protection, health and safety, and meaningful remuneration for exercising citizenship.

#### Design/Method

A convenience sample of 408 Portuguese workers participated in this study. Data was collected through the Toxic Leadership Scale (TLS), the Empowering Leadership Questionnaire (ELQ), and the Multidimensional Work Motivation Scale (MWMS).

#### Results

Among the ELQ factors, those that correlate most highly with the MWMS dimensions were Coaching, Information, and Show concern. We found that all dimensions of ELQ are related to motivation to work, and this relationship is more evident with Intrinsic Motivation. Regarding the TLS, we verified the greatest number of correlations not statistically significant, namely with the dimensions Social and Material External Regulation and Introjected motivation. TLS correlated weakly with Amotivation (positive correlation) and Identified Regulation and Intrinsic Motivation (negative correlations). The TLS factors with the highest negative correlations with the MWMS dimensions were Abusive Leadership, Self-promotion, and Unpredictability.

Concerning the created leadership profiles, the worker-empowering leadership profile is associated with the most intrinsic form of motivation. The worker narcissistic empowerment pattern is highly

associated with identified regulation and intrinsic motivation and lowest with amotivation. Leaders' narcissism appears to be well tolerated by subordinates if high scores on all dimensions of empowerment are associated.

#### Limitations

The effects of sociodemographic variables should also be appreciated in future studies. A longitudinal study about empowering and toxic leadership's effects on subordinates' work motivation would be recommended to capture the evolution in the associations between the variables. In the same way, the role of different subordinates' characteristics as moderators of leadership style will be a relevant research topic. Enlightening the effect of the leaders' characteristics (e.g., personality, positive and negative work experiences) in adopting empowerment or toxic style would be a matter of deep interest.

#### Research/Practical Implications

This investigation points out that how people perceive their leaders is related to their motivation for work. This reaffirms the importance of changes in the design of people management policies and practices, namely in the sub-processes of recruiting, selecting, integrating, and developing leaders and the metrics used to measure performance.

#### Originality/Value

The value of this investigation is based mainly on the consideration that it will bring an essential contribution to the design of strategies and practices of people management in organizations.

#### Intended audience

Both Academics and Practitioners

*Keywords: Empowering Leadership, Toxic Leadership, Work Motivation*

## Symposium S115

### The importance of interpersonal relations for proactive actions and their outcomes.

Anita Starzyk, NEOMA Business School, Rouen, France; Shereen Fatimah, Singapore Management University

science

**Introduction.** Managers and colleagues are critical factors for employee proactivity. Although proactive actions are self-initiated and discrete (Parker et al., 2010; Grant & Ashford, 2008), these actions depend on the interpersonal work environment. Employees take notice of managers and colleagues to sense whether and in which form proactive actions are wanted (Starzyk & Sonnentag, 2019; Vough et al., 2017). After employees decide to take charge, managers and colleagues remain crucial to successful initiatives (Farh et al., 2020; Satterstrom et al., 2021). This symposium acknowledges the core role of managers and colleagues and addresses two overlooked aspects. First, how do different contexts alter the relevance of interpersonal relations for employee proactivity? Second, why is attention to interpersonal relations beneficial for proactive performance?

**Research and Practical Implications.** This symposium answers how to capitalize on interpersonal relations to initiate change and perform better. It bridges research on various proactive behaviours (i.e., personal initiative, career consultation, job crafting, and voice), diverse methods (i.e., experiments, diary studies, multi-wave and network field surveys), and multiple levels (i.e., within-person, individual, dyads, and teams):

The first contribution, an experimental vignette study, explores the importance of proactive personality, experienced uncertainty, and LMX in situations of crisis. The preliminary results indicate that proactive personality and LMX predict personal initiative in such contexts.

The second contribution applies the sociometer theory of self-esteem to explain when proactive career consultation is more likely to translate into managerial mentoring. A four-wave study finds that highly power-distance-oriented managers respond with more mentoring when newcomers proactively consult them.

The third contribution proposes that the work context affects whether expanding or limiting work relations is more advantageous for employees' energy and performance. Their experience sampling study shows that promotion-focused (vs prevention-focused) job crafting benefits employees with high (vs low) task interdependence.

The fourth contribution takes a social network approach to study the benefits of cross-expertise voice on employees' relational energy and the performance of their teams. The field survey results indicate that employees who speak out across expertise areas feel more energized and perform better in certain but not uncertain contexts.

Our discussant will integrate all contributions into the broader literature. She will also highlight directions for future research on interpersonal relations to elevate the benefits of proactivity for employees and their organizations.

**Relevance to Congress.** Employees do not await how the world of work might evolve but take proactive actions to create desirable future work and career conditions. Insights from this symposium help support employees to become more accomplished change agents. Employees will better understand how to adapt to uncertain work contexts and align their interpersonal relations to lead their change initiatives successfully.

Overall Conclusions. Interpersonal relations remain critical even under crisis and uncertainty. However, the best amount and type of relations are context-dependent. Employees will only elevate performance when they consider the task, manager, and business context while initiating change. Finally, individual and relational energy explain why proactive actions may (not) contribute to better performance.

discussant: Shereen Fatimah, Singapore Management Universit

*Keywords: proactive behaviours, interpersonal context, performance*

## Paper 1

### **Working in times of crisis – does proactive personality, level of uncertainty and LMX make a difference?**

Sandra Ohly & Christina Veronica | University of Kassel, Germany

**Research Goals and Theoretical Background.** Crises are characterized by high levels of uncertainty which could stimulate proactive behaviors. Although uncertainty is thought to motivate proactive behaviors such as feedback seeking which can directly reduce the uncertainty (Grant & Ashforth, 2008), it is currently unclear how other proactive behaviors can be fostered, and which additional factors might play a role. Based on trait activation theory and situational strength theory, we expect an interaction between proactive personality as the stable tendency to exert proactive behaviors across time and contexts, and promoting factors such as LMX and uncertainty.

**Methodology.** Competing hypotheses about the nature of this interaction are tested using an experimental design referring to crisis scenario in a sample of N = 184 employees. In the scenarios, the level of uncertainty was manipulated. Proactive personality, proactive behaviors and LMX were assessed using established scales.

**Results.** First analyses show significant main effects of proactive personality and LMX on proactive behavior in crisis situation. The relationship of proactive personality and proactive behavior is independent of level of uncertainty and LMX. We also found no evidence of an effect of uncertainty level on proactive behaviour. Final results will be available by the end of 2022.

**Limitations.** Although participants will have natural experiences in crisis situations due to current world affairs, the use of vignettes limits the external validity of study findings. Moreover, the intention to show proactive behavior might be overstated in the self-reports and may not translate into actual behavior, and the relationships might be inflated by same-source bias.

**Conclusions.** Results of this study will enhance our understanding of proactive behavior in crisis situations, and enable the development of appropriate interventions. When dealing with crisis situation, it is recommendable to select employees high on proactive personality, and to foster relationships based on mutual trust, respect and commitment between leaders and employees.

**Relevance to the Congress Theme.** Proactive individuals create changes in the work setting, and they might be better able to deal with imposed changes.

**Relevant UN Sustainable Development Goals.** This study fits within the goals of (1) enabling decent work and organizational growth and (2) promoting the good health and well-being of employees.

*Keywords: personal initiative, LMX, uncertainty*

## Paper 2

### **Why and when newcomer career consultation elicits supervisor career mentoring: A sociometer explanation from supervisors' perspective**

Chia-Huei Wu, University of Leeds, UK, & China Medical University, Taichung, Taiwan; Yuhuan Xia, Beijing Jiaotong University, China; Wen Wu, Beijing Jiaotong University, China; Yuyan Zheng, University of Surrey, UK; Ying Wang, RMIT University, Australia

**Research Goals .** This study seeks to examine how supervisors respond to newcomers' career consultations behaviors. For newcomers' career consultation behaviors to materialize into concrete support from supervisors, it is important to understand how and when supervisors may be impacted by newcomers' career consultation. We provide a detailed examination of why newcomers' career consultation can elicit supervisors' career mentoring (i.e., the psychological mechanism), and under what conditions supervisors are more likely to offer mentoring to newcomers (i.e., the individual differences in supervisors).

**Theoretical Background .** The sociometer theory of self-esteem draws upon an evolutionary perspective and argues that being accepted by others is important for human survival and reproduction, and therefore individuals develop an internal regulatory system that monitors the success of their interpersonal acceptance, or their "relational value" to significant others (Leary, 2005). Accordingly, we expect that newcomers' proactive consultation could signal how they respect and value their supervisors and show their endorsement to the supervisors' status, thereby increasing supervisors' organization-based self-esteem. Also, supervisors are motivated to respond actively and positively to newcomers' requests for career help, by providing them more career mentoring. Further, sociometer research has noted that some people are particularly sensitive and reactive to acceptance cues (Downey & Feldman, 1996). We expect that supervisors with higher levels of power distance orientation who tend to believe that subordinates are supposed to respect and value them and who prefer being admired by subordinates (Farh et al., 2007), are likely to see newcomers' consultation behaviors as affirming their status as someone who is dominant and takes charge and gives strong directions towards employees (Hu et al., 2018). These supervisors view newcomers' career consultation behaviors as not only confirming their usefulness as a source of career advice but also reinforcing their power status.

**Methodology .** Our data were collected from a large electric appliance company located in the eastern region of China. We sent out the first round of surveys when the newcomers first joined the company (Time 1). We asked both newcomers and supervisors to report their demographics, and supervisors also reported their power distance orientation. One month later (Time 2), we asked newcomers to report their career consultation behaviors toward their supervisors during the past month. One month after Time 2 (Time 3), supervisors were asked to report their levels of OBSE. Finally, at Time 4 (another month after Time 3) newcomers were asked to rate career mentoring they had received from their supervisors. We received 238 dyadic pairs at Time 4 (response rate of 55.74%).

**Results .** Our results supported the moderated mediation effect. Newcomers' career consultation behaviors led to supervisors' OBSE ( $B = .44, p < .001$ ), which further led to more career mentoring being provided to newcomers ( $B = .18, p < .01$ ); supervisors' power distance moderated the relationship between newcomers' career consultation behaviors and supervisors' OBSE ( $B = .35, p$

<.01). The indirect effect of supervisors' OBSE was higher when supervisors' power distance is higher (effect size = .12, CIs [.02, .31]) than when it was lower (effect size = .02, CIs [-.06, .13]).

**Limitations .** Although we assessed the predictor, mediator, and outcome at different time points, we cannot make causal inferences with this design. Also, we only tested power distance orientation from supervisors and did not consider newcomers' power distance orientation, or the level of compatibility between the two parties. Finally, we collected our sample from China, where people have relatively high levels of power distance orientation compared to those in Western cultural contexts.

**Conclusions .** Newcomer career consultation behaviors contribute to enhanced supervisor OBSE, which subsequently motivates supervisors to provide more career mentoring to newcomers. We also reveal supervisors' power distance orientation as a critical personal attribute that influenced this relationship, such that supervisors with higher standing on power distance orientation were more sensitive to newcomer career consultation behaviors, hence their OBSE and career mentoring behaviors were more subject to the influence of these newcomer behaviors.

**Relevance to the Congress Theme and UN Sustainable Development Goals .** Our study highlights that newcomers can strategically utilize career consultation behaviors to exert an influence on supervisors, to benefit their career development in a new organization. We further highlight that newcomer career consultation behaviors are particularly important for supervisors with high standing on power distance orientation. Thus, newcomers need to pay attention to, and make sense of, their supervisors' personal tendencies and styles during their socialization process.

*Keywords: newcomer career consultation, mentoring, power-distance orientation*

### Paper 3

#### **Shaping the energy sweet spot: A contextualized perspective on how within-person relational job crafting influences task performance**

Wiebke Doden, King's College London, UK; Dana Unger, UiT The Arctic University of Norway; Uta K. Bindl, King's College London, UK

Research Goals and Why the Work Was Worth Doing. While social interactions and connections are often predetermined by formal top-down relational job design (Grant, 2007; Grant & Parker, 2009), more recent discussions on relational job crafting (e.g., Wrzesniewski & Dutton, 2001) indicate employees also engage in efforts to shape social interactions and connections at work bottom-up. Relational job crafting is defined as self-initiated, proactive behaviors through which employees make changes in how they interact and build relationships with others at work (Bindl et al., 2019; Rofcanin et al., 2019). Employees may engage in promotion-oriented relational job crafting, which is aimed at expanding the type or number of interactions or in prevention-oriented relational job crafting, which is aimed at limiting the number of interactions at work and focusing on relationships with trusted and familiar colleagues only (e.g., Bindl et al., 2019). Across studies promotion-oriented relational job crafting has been associated with positive work outcomes (i.e., task performance), whereas research has taken an overall negative stance on prevention-oriented forms of job crafting (Bruning & Campion, 2018; Lichtenthaler & Fischbach, 2019) and found that limiting interactions and relationships at work may rather deteriorate task performance (e.g., Rofcanin et al., 2019). In our research, we suggest both promotion- and prevention-oriented relational job crafting may represent purposeful work behaviors to achieve desirable goals (e.g., Bindl et al., 2019) and demonstrate how and when promotion- versus prevention-oriented relational job crafting are beneficial for task performance.

Theoretical Background. Conservation of resources (COR) theory (Hobfoll, 1989) provides the theoretical framework for our research. A central tenet of COR theory is that individuals are motivated to build and protect their resources for goal attainment (Halbesleben et al., 2014; Hobfoll, 1989). We propose that relational job crafting may help employees create social circumstances to build and protect their energetic resources with positive implications for task performance. Most importantly, we argue that these effects may depend on the top-down relational job design context, indicated by overall task interdependence (i.e., the degree to which group members rely on each other to perform their tasks; Pearce & Gregersen, 1991). We propose that in work contexts with low task interdependence—where employees may feel more disconnected or socially isolated from others—promotion-oriented relational job crafting may be particularly beneficial for employees' energy and subsequent task performance. Interpersonal interactions and connections generally enhance positive feelings and, thus, are experienced as energizing (Owens et al., 2016). In contrast, we propose prevention-oriented relational job crafting will be beneficial for employees' energy and, in turn, task performance in contexts with high task interdependence. High levels of task interdependence require greater emotional and behavioral regulation (Troughakos et al., 2015) and may drain employee's energetic resources (Windeler et al., 2017). Purposefully minimizing further interactions and actively focusing on familiar relationships may be most beneficial in these contexts.

Methodology. We conducted an experience sampling study (10 workdays with two daily measurement points; N day-level = 845) with 126 full-time employees across various organizations during the first COVID-19 lockdown in the UK.

**Results.** In support of our hypotheses, multilevel path modeling indicated promotion-oriented relational job crafting was positively associated with subsequent task performance via increased energy levels, but only when overall task interdependence was low. In contrast, prevention-oriented relational job crafting was positively associated with energy levels and task performance at high levels of task interdependence.

**Limitations.** Our findings could be limited to employees starting to work predominantly from home as we collected data during the first COVID-19 lockdown in the UK.

**Conclusions.** Our findings suggest different forms of day-to-day bottom-up relational job crafting are relevant for employee performance, but their effectiveness depends on the overarching top-down relational job design context. Thereby, our findings also contribute to the ongoing debate on whether promotion- vs. prevention-oriented job crafting can be considered “good” vs. “bad” forms of job crafting, respectively and may shift the perspective of prevention-oriented forms of proactivity to being adaptive for desirable organizational outcomes in certain job design contexts. Employees may use different within-person relational strategies to proactively shape their ‘energy sweet spot’, so that they feel positively energized but avoid a negative too-much interaction effect.

**Relevance to the Congress Theme.** The substantial shift toward remote work during COVID-19 meant a variety of relational challenges for employees. Our research helps to understand how employees adapt to changing ways of work.

**Relevant UN Sustainable Development Goals.** This study relates to the goal of decent work and economic growth for all.

*Keywords: relational job crafting, energetic resources, task performance*

## Paper 4

### How cross-expertise voice facilitates team performance: A relational energy perspective

Jing Wu, BI Norwegian Business School; Pengcheng Zhang, Huazhong University of Science and Technology, China; Steffen R. Giessner, Erasmus University Rotterdam, Netherlands; Daan van Knippenberg, Rice University, US; Subra Tangirala, University of Maryland, US

**Research Goals and Theoretical Background.** Employee voice—employees' expression of challenging yet constructive work-related opinions and suggestions (Van Dyne & LePine, 1998)—has been touted as an important conduit whereby teams can utilize the members' expertise to improve collective outcomes (e.g., Frazier & Bowler, 2015). Indeed, extant research has acknowledged that voice from team members could contribute to desired team outcomes (e.g., Detert, Burris, Harrison, & Martin, 2013; Li, Liao, Tangirala, & Firth, 2017; Liang, Shu, & Farh, 2019). These studies have focused on the overall volume of voice, assuming that influences of voice were exerted on the team as a whole. This approach, however, has restrained us from developing a more nuanced understanding of the influences of team voice (Sherf, Sinha, Tangirala, & Awasty, 2018). To address this issue, we propose that voice might be better understood as being communicated to one or a few, not necessarily all, team members. This points to the necessity of studying voice configuration, that is, who voice to whom in teams. Drawing on relational energy theory (Dutton, 2003; Owens, Baker, Sumpter & Cameron, 2016), we seek to explicate how and when cross-expertise voice, or voice that occurs between team members of different expertise backgrounds, could influence team performance. When voice flows across team members of dissimilar expertise, this may give rise to difficulties in communicating ideas to one another. To overcome the difficulties, it is important to create energy or excitement for others when voicing to them and galvanize them into actions toward improving collective performance. Hence, we predict that cross-expertise voice is likely to enhance team performance through fostering relational energy within the team, because ideas from peers of different expertise backgrounds can provide cognitive simulation, arouse positive affect, and mobilize the recipients to engage in actions for changes (Owen et al., 2016). Furthermore, we predict that the above effect is more pronounced when the business environment is less uncertain because environmental uncertainty likely triggers the intergroup bias and, in turn, prevents individuals from being open-minded toward outgroup members.

**Methodology.** To test our model, we conducted a field survey study in six companies in Central China. They were all engaged in IT-related industries. The final sample consisted of 60 teams. Voice flow was measured with a network approach. Each employee rated how frequently every other team member shared his/her work-related suggestions with the focal person. All participants indicated their college major, based on which we identified four categories of expertise. Cross-expertise voice was calculated as the amount of voice that occurred between expertise-similar dyads divided by the possible maximum amount of voice for each team (Krackhardt & Stern, 1988). We also asked each participant to assess the extent to which every other team member affected the focal person's energy level, and computed density (Kilduff & Brass, 2010) to capture team relational energy. We used adapted or established measures to capture environmental uncertainty (Miller & Dröge, 1986) and team performance (Keller, 2006).

**Results.** Regression analyses revealed that cross-expertise voice was positively related to team relational energy ( $b = 0.27$ ,  $SE = 0.07$ ,  $p < .01$ ) and environmental uncertainty moderated the relationship between cross-expertise voice and relational energy ( $b = -0.21$ ,  $SE = 0.10$ ,  $p < .05$ ).

Monte Carlo test showed that the conditional indirect effect was significant (  $b = 0.72$ , 95% CI = [0.22, 1.35]). These results supported our predictions.

Limitations. Despite the contributions, this study has limitations: The cross-sectional design and a focus on the IT industry. It would be useful for future research to examine our theoretical model using an experimental design to provide evidence for causality and considering other industries to strengthen generalizability of our findings.

Conclusions. Via this study, we enrich voice literature by examining the unique influence of voice configuration above and beyond the volume of voice in teams. Specifically, we identified the mechanism whereby cross-expertise voice could facilitate team performance and the circumstance under which this was more likely to happen. As such, we provided managers with implications on how they may better harness the diversity of employees' expertise by being mindful about team voice flow.

Relevance to the Congress Theme and Relevant UN Sustainable Development Goal. Casting light on environmental uncertainty, our study is relevant to the Congress theme that emphasizes the changing world of work. Since we highlighted the performance implication of cross-expertise communication in an uncertain environment, our study also informed how to manage uncertainty and leverage diverse expertise and would thus contribute to decent work and economic growth and peace, (justice,) and strong institutions, as part of the UN Sustainable Development Goals.

*Keywords: cross-expertise voice, team performance, uncertainty*

## Symposium S117

### **Not burnout as it was before: New empirical research on the conceptualization, impact, recovery and social nature of burnout**

Anja Van den Broeck, KU Leuven

science

Content: Burnout is a well-known phenomenon. Abundant research, generally defining burnout in terms of exhaustion and cynicism (Maslach et al., 2001), largely focusses on its emergence in a context of high job demands and few job resources. Despite – or maybe just because of - the proliferation of this line of research, there are still many aspects of burnout that remain unknown. Adding to the call for more research on the new directions in burnout research (Demerouti et al., 2021), this symposium aims to bring forward a set of empirical contributions that aim to further our understanding of this phenomenon.

First, while previous research has equated burnout with its measurement in terms of the Maslach Burnout Inventory, in the first contribution of this symposium De Beer et al. set of to study the concept of burnout from the Burnout Assessment Tool (BAT), emphasizing that – besides exhaustion and mental distancing – burnout is also characterized by cognitive and emotional impairment, and comes with psychological and psychosomatic complaints. Moreover, using state of the art methodology (i.e. bifactor ESEM), De Beer expands on the processes underlying burnout, which are assumed to be energetic in nature, by showing that (a frustration of) employee motivation is predictive of burnout, even when taking into account social desirable responding.

Second, while past research has mostly focused on examining the burnout as a dependent variable or examined its relevance for employee health and well-being, attitudes and behavior, Michailidis et al. expand on how we consider the impact of burnout by indicating its relevance in influencing other processes in the work context. Specifically, using both between and within person analysis, Michailidis et al. prove that – especially at the within person level – exhaustion, as main component of burnout, may aggravate detrimental processes at work such as when employees become embittered and subsequently start ruminating after being confronted with illegitimate tasks.

Third, whereas to date, most research on burnout is limited in examining the antecedents of burnout or return to work after recovery, Vysniauskaite et al. embark in uncharted waters by deepening our understanding of an individual's recovery process after burnout. Taking an identity lens and focusing on employee values, their qualitative research indicate that the way in which burnout disrupts employees' values may differentially impact their identity work. Specifically, those who become burned-out because they may not express their values in the workplace, retain their identity, while those who are actively opposed in their (masculine) values seem to lose their identity. Finally, those who manage to develop masculine values post-burnout are those who change identity.

Fourth, De Rijk and colleagues open the scope of the burnout research by pointing out its inherent social character. When an employee develops burnout and drops out, also others are involved, not in the least the supervisor of the burned-out employee. Using qualitative case study research in Belgium and The Netherlands, De Rijk et al. indicate that supervisors may pick up early signals of employees developing burnout, much in line with the conceptualization of burnout in the BAT, but that such picking up is influenced by both personal (e.g., has burnout been on their radar before) and work related factors (e.g., organizational culture, team size and working relationship). If being aware of an employee developing burned, these supervisors may feel powerless or, in contrast, take an active role in either supporting actions at the individual (e.g. dealing with work stress, solving

personal problems) or tasks (e.g., adapting job demands and job resources) level. In any case, being confronted with burnout helps supervisors to learn from this experience and improve their actions to prevent burnout in the future.

Relevance: This symposium is relevant to the congress theme “The Future is Now./!/?” as it fosters the understanding of burnout as an urgent important contemporary problem in the workplace, affecting at least 10% of the population.

Implications: This symposium brings together contributions from researchers from across Europe and beyond, using innovative theoretical lenses and different methodological approaches to change the way we understand and do research on burnout and may leads ways on how it can be prevented or overcome.

Conclusion: In sum, this symposium advances our understanding of burnout in terms of its conceptualization, impact, and recovery process for the individual burned-out employee and sets of to explore the social component of burnout by examining the development of burnout through the eyes of the supervisors of the burned-out employee as an important stakeholder.

*Keywords: burnout, stress, well-being*

## Paper 1

### **Does self-deceptive enhancement play a role in the relationships from need satisfaction and need frustration to burnout and work engagement?**

Leon De Beer, North-West University, South Africa; Norwegian University of Science and Technology, Norway; Leoni Van der Vaart, Optentia Research Unit, North-West University, South Africa

#### Research goals and why the work was worth doing

The research goal was to investigate the impact that self-deceptive enhancement (SDE), as an indicator of socially desirable responding, may have in the relationships between basic need satisfaction and frustration on burnout and work engagement.

#### Theoretical background

The self-determination theory focuses on three basic psychological needs: autonomy (i.e., feeling one's actions are in line with one's wishes), competence (i.e., feeling one can master tasks), and relatedness (i.e., feeling cared for) (Vansteenkiste et al., 2020). The satisfaction of these three needs accounts for positive employee outcomes. Contrastingly, need frustration accounts for adverse outcomes (Coxen et al., 2021). However, little is known about how socially desirable responding might play a role in influencing the impact of these needs. Research has shown SDE to be superior to impression management (IM) scales to control for potential response bias (see Uziel, 2014; Uziel & Cohen, 2020). This study uses SDE – referring to socially desirable responding when the person is not aware of it – as a latent control variable to ascertain the potential influence of this response style on the results of need satisfaction and frustration on burnout and work engagement. SDE is, therefore, about self-deception and not other-deception.

#### Methodology

Mplus 8.8 was used to estimate a mixture model with weighted least squares (mean- and variance-adjusted) to create factor scores. That is, need satisfaction and need frustration was indicated by their average scores for each of the three corresponding needs. The remaining items were specified as categorical. For example, burnout was measured by the new Burnout Assessment Tool, and specifically, a bifactor exploratory structural model within CFA was specified for this tool in line with De Beer et al. (2022). Work engagement (UWES-9) was specified as a one-factor structure in line with literature. SDE (see Paulhus, 1991) was measured with an adapted five-item scale used by Mokgata et al. (2022) as a pragmatic indicator. The factor scores for two models were saved (one model including SDE and the other without) and estimated with the robust version of maximum likelihood. Specifically, burnout and work engagement were regressed on need satisfaction and need frustration. In the model with SDE included, the latent factor was specified to be orthogonal, having not only its corresponding items loading onto it but also all other items in the model – in line with the marker variable method to control for the potential bias.

#### Results

The results revealed that both models fitted the data well: CFI and TLI >0.95; RMSEA < 0.08. Furthermore, the standardised results showed that controlling for SDE at item level reduced the significant beta path coefficient values and also lowered the variance explained in the outcome variables of burnout ( $\beta$  SDE = 0.634 vs  $\beta$  = 0.677;  $R^2$  SDE = 33.9% vs  $R^2$  = 50.7%; 16.8% difference = medium effect) and work engagement ( $\beta$  SDE = 0.697 vs  $\beta$  = 0.811;  $R^2$  SDE = 54.8% vs  $R^2$  = 71.7%;

16.9% difference = medium effect). This indicates that SDE, or at least socially desirable responding, may play a nuanced role in basic need satisfaction research and should be considered in future studies as a control variable to obviate inaccuracies in the generation of parameter estimates. All in all, the substantive results showed that need satisfaction is important for work engagement and that need frustration positively impacts burnout. The opposing relationships were not statistically significant, e.g., need satisfaction did not explain significant variance in burnout beyond need frustration ( $\beta = -0.048$ ;  $p = .561$ ).

#### Limitations

Even though SDE is controlled for in this study with a pragmatic shortened scale, it was done with an adapted, shortened scale, and a more comprehensive SDE and IM scale might reveal finer nuances. Specifically, the shortened SDE scale does not include the sensitive item regarding sexual performance.

#### Conclusions – research and or practical implications

The results of this study show that the socially desirable responding, in this case SDE, may play an important role in the consideration of burnout and work engagement in the context of basic psychological need satisfaction and frustration. Researchers should strongly consider including an indicator of SDE in their future models to ensure accurate estimates.

#### Relevance to the Congress Theme

Burnout remains an important aspect of employee well-being in the changing world of work.

#### Relevant UN SDGs

3 - Good health and well-being

8 - Decent work and economic growth

*Keywords: Burnout, need satisfaction, self-deceptive enhancement*

## Paper 2

### **Illegitimate tasks, workplace embitterment and work-related rumination after work: Are exhausted employees at higher risk?**

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#### Research goals and why the work was worth doing

Embitterment is defined as an emotional response to unjust experiences (e.g., exposure to illegitimate tasks) that can have a toll on employee wellbeing. Also, previous research suggests that embitterment may promote preservative thinking about work (i.e., work-related rumination) and prevent detaching psychologically from work. However, little is known about the boundary conditions that determine who and when is at a higher risk of feeling embittered, and when embittered employees are more likely to ruminate about work during off-job time. To address this gap in the literature, the aim of this study was to investigate whether employee exhaustion moderates the indirect relationship between ITs and work-related rumination via embitterment. Addressing this research aim is relevant because it will expand our understanding on the antecedents and consequences of workplace embitterment, as well as the conditions under which embitterment is more likely to occur and more detrimental for employees.

#### Theoretical background

According to the “Stress-as-Offense-to-Self” (SOS) theory (Semmer, 2007), threats to one’s self-image (i.e., anything that signals a lack of appreciation and respect), can trigger stress and unfavorable outcomes. Within this framework, illegitimate tasks (ITs) refer to tasks that are considered as unnecessary and/or unreasonable, and, as such, may threaten one’s self esteem and violate justice rules. In line with this theory, it is argued that exposure to ITs may trigger feelings of embitterment that in turn, promote thinking about work during leisure (i.e., affective rumination and problem-solving pondering) and prevent detachment from work. In line with conservation of resources theory (Hobfoll, 1989) we argue that exhaustion may moderate these relationships because it indicates a lack of energetic resources. Exhausted employees have less energy to invest in order to deal successfully with ITs and as a result ITs are more likely to promote feelings of embitterment for exhausted employees. Similarly, exhausted employees are less able to regulate their feelings of embitterment, and this is likely to boost the positive relationship of embitterment with affective rumination and its negative relationship with detachment. In contrast, exhausted employees are less likely to engage in successful problem-solving pondering when feeling embittered. As such, the positive relationship between embitterment and exhaustion will be weaker for exhausted employees.

#### Design/Methodology

The study hypotheses were tested in a cross-sectional study (Study 1, N = 194) and a daily diary study (Study 2, N = 45), in order to capture within-person variations in the examined processes.

#### Results

The results of Study 1 indicated that unreasonable tasks related positively to embitterment. Also, unreasonable tasks related positively and indirectly to affective rumination via increased levels of

embitterment. Exhaustion did not moderate the proposed indirect relationships. Only a marginal moderating effect was found showing that the positive relationship between embitterment and affective rumination was stronger for those higher (vs. lower) in exhaustion. Results of multilevel analyses (Study 2) indicated that the positive relationship between daily ITs and daily embitterment was moderated by daily exhaustion. Specifically, the positive relationship between daily ITs and daily embitterment was significant only on days employees experienced higher levels of exhaustion than usual. Analyses also indicated that the positive relationship between daily embitterment and daily affective rumination was stronger on days employees experienced higher (vs. lower) exhaustion than usual.

#### Limitations

Important limitations are the relatively small sample size and the use of self-reported data.

#### Conclusions – research and or practical implications

The study findings contribute in better understanding how and under which conditions ITs enact feelings of embitterment and when embitterment is more likely to promote work-related rumination during off-job time. Exhausted employees seem to be at a higher risk to feel embittered when exposed to ITs and are more likely to ruminate about work when feeling embittered. Hence, organizations should make sure to eliminate ITs and unjust work environments.

#### Relevance to the Congress Theme

The study is relevant to the Congress Theme, as research on workplace embitterment is growing exponentially during the past years with important implications for employee well-being.

#### Relevant UN SDGs

The topic is relevant to the Sustainable Development Goals and especially to the goal for good health and wellbeing, and justice and strong institutions.

*Keywords: Embitterment, Rumination, Exhaustion*

### Paper 3

#### **How Masculine and Feminine Value Orientations Constrain and Enable Identity Work After Burnout**

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##### Research goals and why the work was worth doing

Psychological processes underlying recovery from burnout remain a black box which is concerning given the evidence that recovering from burnout can be challenging and relapse is common (Maricuțoiu et al., 2016, Pijpker et al., 2019). This paper brings forward identity work as an important psychological activity that burnout patients engage in during their recovery. The goal of this paper is to investigate the process of recovery from burnout by introducing the theoretical lens of identity work as a novel perspective (Bataille & Vough, 2020).

##### Theoretical background

Identities are people's interpretations of who they are based on their personal and demographic characteristics, the groups they belong to, and the roles they play in society (Caza et al., 2018). People have multiple identities (e.g., related to work, family, religion) (Gecas, 1982; Stryker & Serpe, 1994). When employees undergo burnout, "a state of exhaustion in which [they are] cynical about the value of [their] occupation and doubtful of [their] capacity to perform" (Maslach et al., 1996, p. 20), this will call into question their work identities and—consequently—simultaneously influence their non-work identities (Bataille & Vough, 2020). This will prompt employees to engage in identity work, that is to revise their identities (Caza et al., 2018).

##### Methodology

The first author conducted 19 interviews with 6 men and 13 women working in Belgium and aged between 27 to 50. The interviews were conducted online between December 2021 and July 2022 and lasted on average one hour. The interviews were conducted in English, and were recorded, and transcribed verbatim. The data was then analysed in grounded theory fashion.

##### Results obtained or expected (if not available, it must be made clear when they will be)

For our 19 study participants, we identified three main identity trajectories after burnout: liminality, affirmation, or change. Additionally, interviewees' masculine and feminine value orientations—e.g., careerism and independence, as masculine versus intuition and nurturing as feminine values (Alvesson, 1998, Buzzanell & Lucas, 2006)—were a key factor affecting their engagement in a given trajectory. Post burnout identity work was affected by distinct value orientations in the following three respects: 1) participants who perceived that their burnout arose from not being able to exercise masculine/feminine values in the workplace tended to maintain their identity after burnout, 2) participants who perceived their burnout as disrupting prior masculine value orientation tended to feel liminal, in-between, after burnout, and 3) participants who developed masculine value orientations after burnout tended to position themselves as identity changers. These findings contribute to the under-explored, yet key relationship between identity and values (Turner, 1968, p. 97). Further, this study demonstrates the role of the social structure in burnout emergence (through

disruption of values) while also highlighting individuals' agency in using newly developed values as a resource for identity work.

#### Limitations

While the findings are based on a relatively small sample (19 interviews), this sample size is in line with extant published qualitative studies (e.g., LaPointe, 2013) and data collection is ongoing. Another potential limitation is that study participants are all from Belgium, a country with highly established and relatively straightforward burnout treatment and resources for recovery. Therefore, future research should investigate identity trajectories of burned-out individuals in countries that vary in the degree to which burnout is recognized and treated.

#### Conclusions – research and or practical implications/Originality/Value

The paper provides important knowledge about the fundamental psychological processes in burnout recovery for burnout scholars as well as practitioners by demonstrating that people's identities may change during burnout and that feminine/masculine value orientations are an important factor explaining engagement in distinct identity trajectories.

#### Relevance to the Congress Theme

By introducing a novel approach to practical and theoretical knowledge on employee burnout, this paper corresponds to the interests matching topic 15 - Stress and Dysfunction.

#### Relevant UN SDGs

The paper seeks to promote well-being for the working population—enhancing employee health and happiness—by expanding theoretical and practical knowledge on burnout. Based on the findings, our research team sets out to build guidelines for the long-term recovery from the syndrome that have been lacking so far.

*Keywords: Values, Identity, Burnout*

## Paper 4

### **Noticing and addressing early signs of burnout or not: qualitative research among line managers in Belgium and the Netherlands**

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#### Research goals and why the work was worth doing

Despite our knowledge on risk factors for burnout, there is a lack of knowledge on the role that line-managers play in preventing burnout. We aimed to explore how line managers in Belgium and in the Netherlands recognize early signals of burnout among their employees and if so, which actions they take to prevent their employees to become burned out.

#### Theoretical background

Theory on burnout dimensions and the Job Demands Resources model were loosely used as a lense for this qualitative study. Theoretically, three aspects are characteristic for burnout. First exhaustion, which captures the energetic aspect that is expressed in through the inability to carry out one's work properly because of chronic fatigue. Second mental distance, which highlights the motivational aspect that is expressed by the unwillingness to perform because of mental distance towards one's job. Thirdly the impaired functional capacity to regulate one's emotional processes and cognitive processes. Line managers might notice the various symptoms of burnout, but might also hold their own definition of burnout. Next, as regards causes of the burnout and actions to be taken, line-managers might change their employee's demands and/or resources.

#### Design/Methodology/Approach/Intervention

Two subsequent case-studies were designed. In Belgium, 17 line managers (14 females, aged 43-62) were interviewed during spring 2021. They were working in the educational and health care/local government sectors. In the Netherlands, 16 line managers (7 females, aged 36-61) were interviewed in Spring 2022. They worked in the public and private sector. Because males had been underrepresented in Belgium, the recruitment emphasized welcoming male line-managers to participate. In addition, also other sectors than health and education (in which female line-managers are overrepresented) were targeted. In both countries only line-managers were included who had been confronted with the sickness absence of at least one employee due to burnout in the past five years. The topiclist included: background information of line-manager and employee(s) with burnout, perceived signals of burnout, perceived causes of burnout, how the situation developed including actions taken by the line-manager, reflection and lessons learned. In the Netherlands, also the definition of burnout and how private life issues were handled, were added. Interviews were transcribed verbatim, coded in NVivo, and analyzed according to principles of thematic analysis. The Belgian and Dutch data were analysed separately.

## Results obtained

Both in Belgium and the Netherlands, three different, successive phases could be recognized: picking up signals, taking action, and reflection. Line managers' personal frame of reference (e.g., having experience with burnout) related to whether and how they picked up signals of burnout. In the Netherlands, evidence was also found for the organizational culture to play a role as well as the working relationship and workload / teamsize played a role feeling able to notice signals. The managers noticed symptoms of fatigue, emotional disruptions and lack of concentration. If they picked up these signals, they generally took an active role: they started a conversation and changed work tasks. In the Netherlands, line managers also educated their employees on how to handle work stress, took actions to support private life issues and referred to the occupational physician or social worker. In Belgium, the line-managers confessed often feeling powerless. In both countries, the line-managers revealed that they learned from the experience. Particularly in the Netherlands, regular contact with their subordinates was mentioned as a means to prevent burnout.

## Limitations

Male line-managers were underrepresented in the Belgian study; the Belgian sample also lacked private sector manager. Even though, the results in the Dutch study did not seem to be linked to gender or sector.

## Conclusion research/practical implications

This study shows that improving line managers' knowledge on preventing burnout, e.g., by organizing meetings and/or training, may help them to detect early signals of burnout and take action. Further, an open organizational culture and a smaller teamsize facilitates have good contact with ones subordinates, and subsequently picking up signals and being able to take actions. There were subtle differences between Belgian and the Netherlands.

## Relevance to the Congress Theme

To the best of our knowledge, the prevention of burnout symptoms has not been studied yet from a line-manager's perspective.

## Relevant UN SDGs

Knowledge on how managers notice early signals of burnout and react on them links to the SDGs 'Good health and wellbeing' and 'Decent work and economic growth.'

*Keywords: Burnout, Line managers, Intervention*

## **Symposium S121**

### **Inequalities at the Workplace: Critical Perspectives and Future Avenues**

Edina Doci, Vrije Universiteit Amsterdam; John Mendy, University of Lincoln

science

What will be covered and why

Inequalities are on the rise (Piketty, 2013). Covid and the unfolding climate crisis have shown that when global adversities hit, marginalized groups are hit hardest, leading to the further widening of inequalities. Marginalized and minoritized groups are on average more likely to be exposed to precarious working conditions, unemployment, workplace maltreatment and mental health problems. At the same time, diversity programs in organizations tend to fail to achieve structural changes, as a result of organizational resistance and lack of appropriate managerial support and financial resources.

As organizations are central institutions where the reproduction of social inequalities unfolds, studying the mental health impact of inequalities on the one hand, and the individual, relational and organizational processes through which inequalities are reproduced or challenged on the other, are crucial concerns for work psychologists. This is especially true in times of increasing inequalities and crisis.

However, the field of work psychology is relatively silent in this regard. Many work and organizational psychology studies are conducted with the participation of a narrow segment of the population, whose lived experiences and problems differ considerably from those of minoritized and marginalized group members. While our theories and models often build on the experiences of dominant society, we tend to consider these models and processes universal.

Furthermore, the field tends to individualize psychological experiences, (the antecedents of) organizational behavior and individual outcomes at the workplace. Many of our organizational processes, practices and interventions are based on these individualised models that do not take into account how social stratification and social group membership (gender, ethnicity, dis/ability, sexuality, religion etc.), and related inequalities shape radically people's experiences at the workplace. While these interventions build on and cater to the experiences of dominant society, they are often unavailable to disadvantaged workers, or not applicable to their experiences and situation. The adverse circumstances that marginalized and minoritized workers are subjected to, such as discrimination, harassment or precarity, are of a collective and social nature and tend to be much more severe than the experiences of dominant society. Individualizing workplace psychological processes, and therefore the responsibility for one's well-being, is thus neither adequate nor complete.

The current symposium aims to investigate the lived experience and impact of unequal treatment in the workplace, and the inequalities manifesting in the workplace. Moreover, the symposium aims to investigate the various processes through which inequality structures emerge and get reproduced at the workplace and their psychological impact on employees. The symposium brings together presentations based on both conceptual and empirical work, including both quantitative and qualitative empirical research, and ranging from research on autism at work, the experiences of lesbians and gays in India, inequalities in psychological capital, and precarious work. Overall, the presentations offer deep insights into the wide nature of inequalities at work.

### Relevance to the Congress Theme

The symposium highlights the increasingly unequal and precarious nature of the contemporary workplace, where protection of vulnerable workers is not guaranteed. The theme of the conference points toward the need to change the world of work to enhance greater fairness and equality for workers. To do so, we need to better understand the lived experiences of workers, especially those who are unequally treated due to their 'otherness' in comparison to the prototypical worker. Hence, the symposium fits well with the theme of the conference, and on the basis of the presentations included, provides practical suggestions for how the world of work can be changed toward greater fairness and equality.

### Research/Practical Implications

The symposium has important implications for both research and practice. First, the presentations in the symposium elucidate the nature of how inequalities are experienced in the workplace, and how they relate to well-being. Jointly, they provide insights into the experiences of inequality in the workplace. Second, the practical implications of the symposium include the insights into the manifestation of inequality and the ways through which this could be remediated in organizational life.

### Overall conclusions

This symposium offers new perspectives on inequalities at work, and provides in-depth insights into the lived experience of people disadvantaged at work.

*Keywords: workplace inequality, marginalization, precarity*

## Paper 1

### **Rethinking Workplace Inequality: where Transactional HR serves as marginalization tool for autistic jobseekers**

Mendy John, University of Lincoln

#### Research Background:

Whilst social class, gender pay, migration, ethnic and racial stratification and even within and beyond-nation inequalities have attracted the attention of Social Science scholars from Psychology to Business and Management, focusing on and problematizing workplace inequality from the experiences of marginalized, autistic jobseekers, has received limited research attention. This study highlights how the transactional dominant logic with which Human Resource Management recruitment and selection practices are conducted at the interview stage on disabled people such as 24 autistic jobseekers exposes a wider societal challenge risking the achievement of the UN SDG on reducing inequality in workplaces and society.

#### Research goals and why the work was worth doing

Previous workplace inequality research and theory focused on the factors causing inequality (e.g. wrong organizational strategy, lack of implementation of equality, diversity and inclusion practices, lack of engagement of more diverse, minoritized and marginalized groups, ontological insecurities felt by implementers of equality, diversity and inclusion initiatives, and inappropriate use of managerial power). Such a focus has traditionally been on understanding inequality from those already in work thereby hypernormalizing a fake reality of what workplace inequality really involves. People with varying physical, mental, emotional and cognitive challenges were quite often omitted from research endeavors. This study problematizes this significant gap in workplace inequality research and practice from the perspective and experiences of autistic jobseekers and thereby challenges the traditional, transactional approach with which previous scholarship on the use and benefits of HRM practices on employee quota filling on disabled and marginalized groups. Therefore, whilst recruiting, selecting and interviewing potential employees with disability may have seemingly ticked organizations' boxes on meeting diversity and inclusion targets, this current study suggests that more needs to be done if organizations and society are to be truly inclusive.

This study therefore focuses on the following research goals:

To problematize the bureaucratic, standardized and transactional nature with which HRM job selection practices are conducted to examine their impact on reducing organizational and societal inequality.

To examine the psychological wellbeing and welfare of vulnerable and marginalized groups to ascertain the current (and potential future) state of workplace inequality research and to evaluate impacts on attaining the reduction of inequality in organizations and society.

To rethink workplace inequality from a less dominant autistic jobseekers' perspective as an urgent organizational, societal and global challenges and to propose practical resolutions.

To propose a framework to complement the UN SDGs to help reduce workplace inequality in contemporary society and organizations.

#### Design/Methodology/Approach

The study collected empirical data from 24 autistic jobseekers in the UK using a questionnaire and focus groups.

## Results

The first result is employment brick walls faced by the autistic jobseekers when they attempted to transition into work in the UK. Whilst this finding concurs with previous studies conducted (Lai & Szatmari, 2019; Hedley et al. 2017b; Raymaker, 2017), it highlights the urgency of the inequality challenge of marginalized communities.

The second result is socio-cultural and financial discrimination which aligns with Ngoasong and Groves (2016) but differs from Nicolaidis et al. (2015b) and Kaboski et al. (2017) who advocate for greater agency for communities suffering from inequality.

The third result is entrenched marginalization as confirmed earlier by Guerci (2019) but in contrast with Bardoel et al. (2014) who expected faster adaptation from marginalized groups.

## Relevance to Congress

Given that previous research related to Work Psychology and Management tends to focus on either the contributing factors of the inequality or the benefits of safeguarding the psycho-social and wellbeing of staff through the adoption of logical and appropriate recruitment and selection, performance and reward management policies and procedures. However, what the problematized examination of HRM practices around recruiting, interviewing and selecting autistic jobseekers highlights is the absurdity of standardizing such practices for all potential employees without due consideration onto individuals and certain groups personal, sensory and professional and educational needs. This poses a fundamental organizational challenge in terms of workplace inequality especially for autistic employees. The workplace of the future needs to preempt inequality from already marginalized groups and to develop actions that seek to address their inabilities to access full employment and engagement with society and developing bottom-up strategies that are autism-knowledge-based to resolve the workplace inequalities.

## Relevance to UN SDGs

This study is relevant to reducing inequality. I extend the SDG by spotlighting the adverse experiences of autistic jobseekers being treated unequally. I also surface the transactionality with which HRM practices are conducted to show 1) how it serves to politicize contemporary discourses on inequality; 2) the complex and problematic nature of employee-employer transactional relations that promote organizational, societal and ontological inequalities 3) the urgency of the inequality challenge facing organizations and society and what actions need to be taken politically, ideologically and ethically; 4) how the internalization of dominant logics of transactionality may risk internally, organizationally and externally reifying inequality and challenge restitutive actions from individuals, civil society and other groups.

*Keywords: workplace inequality, autistic jobseekers, HRM*

## Paper 2

### **Lesbians' and Gays' Conquest of Fear and Bullying through Courage: From Individual to Organizational Levels**

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#### Research rationale and goals:

Our interests in workplace diversity and inclusion; ethical, responsible and empowered workplaces; workplace dignity; and workplace bullying led us to this study. We noted a gap in academic scholarship around LGBTQI issues in organizations. This gap was alarming given the commonly reported mistreatment this community is subjected to. We realized the crucial need for systematic and rigorous research to provide a solid base for policy and practice aimed at facilitating inclusion and integration of all sexual orientations.

#### Theoretical background:

The study was anchored in the workplace courage literature. Courage is a positive and ethical response to threats, involving the readiness to take upon oneself negativity anticipated by fear, for the sake of a fuller positivity. The courageous choice results in authenticity because it opens the possibility of becoming who one is, realizing one's potential and lessening fear and anxiety by developing meaning in one's life. Workplace courage is largely conceptualized as a personal disposition, ignoring its social dimensions which bind the seemingly solitary actor to a broader community, thereby motivating the individual agent to act. Not surprisingly, most courage scholars acknowledge that fear and courage are closely entwined. A person who shows courage respects fear, attempts to master fear and acts despite some level of fear being present. Courage is a voluntary act executed after mindful deliberation in the face of fear or risk.

#### Design/methodology:

A hermeneutic phenomenological study in two phases over a three-year period was undertaken in two major Indian cities. Lesbians and gays, identified through the researchers' personal contacts and snowball sampling, participated in semi-structured interviews. Data were subject to sententious and selective thematic analyses.

#### Findings:

We found that fear marks lesbians' and gays' (LGs') experiences of work in Indian organizations, being subjected to unethical acts of workplace bullying which get manifested through constant guesswork, comments and questioning about their sexual identity in a hostile social context. LGs usually cope through 'passing' and 'covering' strategies, opting for secrecy and leading a double life, in order to manage economic, social and psychological risks. Even so, the attempt to be courageous and endeavour to live authentic lives despite the hostile broader organizational and social context is evident. LGs' courage at work is manifested mainly through deliberate micro-disclosures and a sense of defiance which can be enhanced if organizations are designed to be more inclusive and ethical. To this end, organizations must be crafted and sustained to be courageous within a hostile social climate, for employees to overcome their fears. Leaders and top management have a crucial role to play in this. Courage must necessarily go beyond the individual to the workplace. In this way, our findings rewrite the negative tenor of lesbians, gays, bisexuals and transexuals research by

emphasizing courage as an empowering and positive antidote to the fear and trauma which accompanies an alternative sexual orientation.

Limitations:

The study did not include bisexuals and others with alternative sexual orientations.

Conclusions/contributions/implications:

Academically, the study (a) addresses a gap in the literature on LGBTQIs at work and on the category-based workplace bullying experienced by sexual minorities; (b) extends the workplace courage literature beyond its existing focus on personal courage to emphasize organizational courage; and (c) provides a conceptualization and definition of inclusive ethical organizations. Policy-wise, the study (a) emphasizes the importance of leaders' and top managers' courage in creating truly inclusive ethical organizations, even in the face of hostile societal contexts; (b) underscores the crucial role regulation plays in making workplaces inclusive, particularly in terms of policy design and deployment, which not only sets the tone for organizational values and ethos, but equally importantly, serves as a protective shield that mistreated targets can invoke when needed, thereby facilitating empowerment and well-being.

Relevance to the Congress theme:

The study, speaking to workplace diversity and inclusion and to ethical inclusive and responsible workplaces, directly reflects the Congress theme in regard to the ongoing unfolding of the future and the changing nature of the world of work. Moreover, the study is relevant to the inequalities and critical streams of FOWOP due to its focus on the social category of sexual orientation and its emphasis on personal and workplace courage as means of empowerment.

Relevant UN SDGs:

Reduced inequalities, decent work and economic growth, good health and well-being, responsible workplaces endorsing justice

*Keywords: diversity and inclusion, LGBTQI, workplace bullying*

### Paper 3

#### **The predicaments of precariousness: Relationships of conditions and experiences of precarious employment with psychological health and wellbeing**

Severin Hornung, Jurgen Glaser, Lisa Seubert, Christian Seubert & Carla Czilczer | University of Innsbruck

Research goals and why the work was worth doing:

Labour market changes in recent decades have proliferated conditional and temporary work arrangements, increasingly replacing full-time long-term employment. Resulting insecurity and economic risks for workers socially mandates research into precariousness. After reviewing conceptualizations of objective conditions and subjective experiences of precarious employment, we empirically operationalize these and report their associations with employee health and well-being, based on cross-sectional and longitudinal data from a representative survey conducted in 2015 and 2017 by the German Federal Institute of Occupational Safety and Health (FIOSH or BAuA).

Theoretical background:

Sensitivity to work-related uncertainty and insecurity has increased, yet, precarious employment is hardly well-defined. A review of the sociological literature suggests job insecurity, wages below subsistence level, lacking access to social security systems, and reduced opportunities for control and influence as constitutive factors. These converge with a recent systematic review on definitions of precarious employment, identifying employment insecurity, income inadequacy, and lack of worker rights and protection as objective dimensions. Associated subjective experiences are conceptualized in a five-dimensional taxonomy of reproductive–material, social–communicative, legal–institutional, status and recognition, and meaningful–subject-related aspects. Building on this integrative multidimensional framework, we examine the roles and relevance of objective and subjective characteristics of precarious employment with regard to health and well-being.

Design/Methodology/Approach/Intervention:

Data stem from two waves (2015 and 2017) of a representative survey among employed persons in Germany (BAuA Working Time Survey), using computer-assisted telephone interviews with randomly generated phone numbers. Analysed are cross-sectional data from the first wave (N = 20,030) and the longitudinal panel (N = 6,539). Questions assessed sociodemographic variables, work and employment conditions, and personal experiences and health. Suitable proxy variables were identified to represent objective and subjective indicators of precarious employment. Estimated work ability, psychological complaints, and psychosomatic symptoms were selected as health-related outcomes. Employed methods were confirmatory factor analysis and structural equation modelling.

Results obtained or expected:

Eight indicators of “objectively” precarious working conditions were allocated to the dimensions of employment insecurity (e.g., job cuts, involuntary underemployment), income inadequacy (less than 1500 Euros per month), and lack of employee rights and protection (e.g., scope of decision-making, unscheduled overtime, insufficient work breaks). Subjective experiences were operationalized with nine items representing the reproductive–material (e.g., making ends meet), social–communicative (e.g., lack of community), legal–institutional (e.g., perceived opportunities for participation), and meaningful–subject-related (i.e., satisfaction with work) dimensions. Measurement models were

established in confirmatory factor analyses. Cross-sectional and longitudinal analyses based on structural equation modelling supported significant relationships between objective indicators of precarious employment and negative health-related outcomes, partially mediated by subjective experiences of precariousness.

Limitations:

Analysing an existing data set, proxy variables were used and not all concepts could be fully represented empirically in all their dimensions. The questionnaires in the 2015 and 2017 waves differed somewhat, restricting longitudinal analyses. Future studies should be designed with improved measurement of targeted constructs.

Conclusions – research and or practical implications:

Previous studies tend to focus on single aspects of precarious employment. Multidimensional conceptualizations facilitate broader understanding of relevant factors that constitute precarious employment and its psychosocial effects. Our analyses allow inferences on the relative importance of different objective conditions and subjective experiences of precariousness for health and well-being. Based on these, interventions can be designed and recommendations for policy-makers derived, to counteract the most dysfunctional aspects of precarious employment.

Relevance to the Congress Theme:

Employment relationships in Europe have become increasingly polarized and precarious. In the future, this trend threatens to be accelerated by economic crisis. Work and organizational psychologist urgently need to deliver on their professional responsibility by contributing to calling out, challenging, and reversing this socially corrosive and decivilizing symptom of economic exploitation, eroding society and public health.

Relevant UN SDGs:

No poverty, good health and wellbeing, reduced inequalities, decent work and economic growth.

*Keywords: Precarious employment, conditions and experiences, health and wellbeing*

## Paper 4

### **The hidden social inequalities behind psychological capital: A plea to integrate psychological capital in the study of social reproduction**

Edina Doci, Vrije Universiteit Amsterdam; Christophe Vanroelen, Joeri Hofmans, Deborah De Moortel & Bram Spruyt | Vrije Universiteit Brussel

#### Theoretical background

During the past decade, a rich literature emerged focusing on ‘psychological capital’, a multidimensional concept referring to self-efficacy, hope, optimism and resilience. So far psychological capital has been predominantly studied as an individual level variable, in the areas of work and organizational psychology, management, and organizational behavior. In this paper, we argue to take a sociological perspective on psychological capital by integrating it into Bourdieu’s capital framework. By doing so, we can better understand how social inequalities are reproduced through labour market and workplace processes. In his seminal work, Bourdieu (2021) differentiates between social, cultural and economic capital. Bourdieu argues that different types of capital (social, cultural, economic) can be converted to each other, and that this conversion of capitals plays an important role in the reproduction of the social structure by allowing for a disguised transmission of power and privileges within dominant social groups. We propose to include psychological capital within this framework.

#### New perspectives / Contributions

We postulate that psychological capital corresponds with Bourdieu’s definition of capital (2021: 16) which describes capital as “accumulated history” that contains “a form of power that is effective within a certain space, where it produces effects – in particular effects of differentiation [...]”. First, psychological capital is accumulated history and gets accumulated through transmission processes in people’s social and career trajectories. People invest time and energy into achieving goals, and the resulting mastery experiences produce psychological capital. The more psychological capital people possess, the more likely they will set high goals and pursue achievements, which in turn reinforce their high levels of psychological capital, setting positive cycles in motion. Psychological capital accumulates as history because of repeated success experiences, positive assessments, social feedback and recognition. Second, psychological capital enhances productivity and pays off. A plethora of research documented how psychological capital and related positive psychological characteristics enhance productivity and ‘buy’ career success and status (e.g., Avey, Nimnicht, & Pigeon, 2010). Third, psychological capital is unequally distributed in society and in organizations and is a basis for social distinction and exclusion (e.g. Francis & Jones, 1996). Psychological capital is a quality that signifies worth in workplaces and society. People from higher societal echelons tend to convey high levels of psychological capital, indicating their class status this way, and they are rewarded for it by recognition, high level jobs and inclusion in prestigious networks (Hartmann, 2000). Fourth, psychological capital is a form of capital that can be clearly distinguished from economic capital and can be transformed to other forms of capital. Constituents of psychological capital, such as confidence, optimism, resilience and a positive outlook on the future are highly valued in organizations. Because these characteristics are perceived as signifiers of worth, competence and leadership potential, they are often rewarded with recognition, trust and positive selection and promotion decisions (Hartmann, 2000), and are thus relatively easily convertible to economic and social capital.

We postulate that psychological capital plays an important role in the reproduction of inequalities in organizations and society and in the reinforcement of social stratification in organizations. Managers (who are mostly from dominant social groups) create opportunities for some employees to develop psychological capital and deprive others thereof, and their behaviors differ when targeting in-group and out-group members. Through relational processes, psychological capital is maintained and reproduced within dominant social groups in the workplace, for example through offering opportunities for mastery and success to in-group members; recognizing, appreciating and supporting in-group members; offering in-group members more time, attention, information, visibility and credit and evaluating their performance more positively than they would do in the case of others; and offering them high status assignments and responsibilities and thus setting in-group members up for success (Dóci, Knappert, Nijs, & Hofmans, 2022).

Furthermore, dominant group members are not only more likely to develop high levels of psychological capital in the first place, but they also recognize, appreciate and reward these very qualities in others as signs of familiarity and trustworthiness. This points at the crucial role of psychological capital in social reproduction, that is, in the masked transmission of power within dominant social groups and in the maintenance of social hierarchies over time. At the same time, social, economic and cultural capital can also be converted to psychological capital. For example, research shows that belonging to higher social classes, and thus having access to a high-status social network (social capital), good education (cultural capital) and wealth (economic capital) enhances one's self-esteem and self-efficacy (e.g. Francis & Jones, 1996). This way, capital begets capital.

That economic, social and cultural capital are unequally distributed in society between members of different classes, ethnic groups and genders has been long acknowledged. High status societal groups tend to accumulate all forms of capital through their conversion, thereby maintaining their rich capital pool within the group both intra- and intergenerationally and reproducing their elite position in society. At the same time, low power social groups tend to experience deprivation of all forms of capital. Similarly to social, economic and cultural capital, we put forward that high status social groups maintain and reproduce high levels of psychological capital within the group which contributes to reproducing their elite position in organizations and society.

#### Conclusions, research implications

Psychological capital to date have been mainly studied in WOP / OB research, on the individual level and as a predictor of work outcomes. We argue that the relevance of psychological capital is broader, that understanding its social origins and its role in social reproduction is crucial and thus it needs to be studied in interaction with other forms of capital. Studying these processes would show how inequalities in one context spill-over or reinforce inequalities in other contexts. We believe that the notion of psychological capital offers excellent opportunities for interdisciplinary research and will stimulate productive exchange between disciplines that so far have often talked past each other.

#### Relevance to the congress theme

In times of multiple crises and growing inequalities, it becomes an important task of work psychologists to understand the (socio)psychological processes through which inequalities are reproduced at the workplace.

#### Relevant UN SDGs

SDG 5: Gender Equality

SDG 10: Reduced Inequalities

*Keywords: psychological capital, workplace inequalities, social reproduction*

## **Symposium S124**

### **EFPA Survey of Attitudes to Tests and Testing - findings and impact for WO psychologists**

Nigel Evans, NEC, UK; Dragos Illescu , University of Bucharest, Romania

science\_practice

What will be covered and why?

The main goal of the European Federation of Psychologists 'Associations (EFPA) Board of Assessment (BoA) is the improvement of testing practices in European countries. In order to reach this goal, the BoA carries out various actions and projects.

To better inform its work, the EFPA BoA decided to survey the opinions of professional psychologists on testing practices, started in 2000, and then extended, due to the pandemic, across 20 European countries.

The emphasis in this symposium will be on the new data but comparisons with the results from the previous surveys will also be presented. Five main dimensions were distinguished in the survey: concern over incorrect test use, regulations on tests and testing, Internet testing, appreciation of tests, and knowledge and training relating to tests and test use.

Relevance to the Congress Theme:

Advances in technology alongside requirements of fairness in work assessment increases the need to monitor test perceptions and practice by WO psychologists. Psychologists then informing and supporting allied professionals within commerce and government is critical to advancing future assessment practice.

Research and Practical Considerations:

The EFPA Questionnaire on Test Attitudes of Psychologists (EFPA EQTAP) has been designed to cover five thematic domains in professional use. The survey asked questions about the structure of the sample (age, gender and professional speciality) and preferences on tests of used in individual practice. Each Member Association was also able to include additional questions specific for their purpose and context.

Overall Conclusions:

Important differences between countries were found on these five dimensions. Also the most commonly used tests were questioned. Finally, some future perspectives will be discussed including the impact of practice and legislation, with particular reference to WO practice. The extended reach of the EFPA Test Model and Methodology outside of Europe was also welcomed.

*Keywords: Tests, Assessment, Quality*

## **Paper 1**

### **The Attitudes of European Psychologists Toward Tests and Testing: 2012 and 2020**

Paul Jimenez, University of Graz, Austria

**Background:** It is important to know about the testing practices and the attitudes towards tests and testing amongst Professional Psychologists working across Europe given the importance placed on quality assessments in decision making.

**Goals:** To gain a pan-European view of tests and testing perceptions with a common methodology.

**Methodology:** A survey on the opinions of professional psychologists on testing practices was carried out in 2000 (in six countries) and 2009-2012 (in 17 countries, N > 12000) and now in 2020/21 as a third wave. The current sample in 2020/21 includes approx. 12000 persons from 20 countries (Austria, Belgium, Brazil, Croatia, Cyprus, Czech Republic, Germany, Italy, Lebanon, Lithuania, Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, Spain, Turkey, Ukraine, United Kingdom). The same questionnaire as in 2009 was used to allow comparisons. It contained 24 attitude items, one item about test-use problems (with 8 subitems) and one open question about the most frequently used tests. The evaluated areas in the survey covered attitudes towards the following aspects: Concerns over incorrect test use, Regulations on tests and testing, Internet testing, Appreciation of tests, Knowledge and training. The survey was conducted in each country on its own, partly additional items and research questions were added in the countries.

**Results :** An overview of the sample and first results in general will be presented. Overall, only minor differences can be found between the results from 2012 and 2020, e.g. over all countries, only the agreement on the use of internet testing increased compared to the last survey in 2012. Among other results which will be presented the current survey also shows differences regarding concerns over incorrect test use between the age groups (<30, 30-39, 40-49, >50). We find higher concerns within younger psychologists over all countries, these age differences don't appear for each country.

**Limitations:** Different sample sizes across European populations.

**Conclusions:** The data will guide the actions and measures taken by EFPA, but also ITC and other stakeholders and contribute to training and awareness campaigns to improve psychologists' use of tests across Europe.

**Relevance to the Congress Theme:** Perceptions to tests and testing need to be monitored in a rapidly changing world.

**Relevant UN SDGs:** Partnerships for the goals

*Keywords: Tests, Practice, Improvements*

## Paper 2

### **Professional identity of a WO psychologist: findings based on results of the Polish edition of the European survey on tests attitudes of psychologists**

Urszula Brzezinska, Practest, Poland

**Background:** In 2020 Polish psychologists were surveyed on their attitudes on tests and testing. This was the second time when Poland participated in a European programme of monitoring the testing culture.

The EFPA Questionnaire on Test Attitudes of Psychologists (EFPA EQTAP) is designed to cover five thematic domains: concern over incorrect test use, regulations on test and testing, Internet testing, appreciation of tests, and knowledge and training relating to tests and tests use. Beside that the survey asked questions about the structure of the sample (age, gender and professional speciality and preferences on tests of first choice used in individual practice).

**Goals:** the objective of this paper is to highlight the challenges in coding professional specialties among psychologists. The issues of an emerging identity of test users working in a multicontextual environment will be introduced. The WO context will be used as a showcase. Tests are an important source of information used in high stake situations in a range of contexts that are regulated by the Polish state law. One of them is the assessment of how a person fits the job he/she has chosen in favour of legitimate proper selection of candidates. In Poland this context of test use is especially important for jobs understood as so called dirty, dangerous and demanding.

**Methodology :** dataset of 650 records from 2020 edition of the survey will be exploited to analyse how psychologists use labels to present their areas of expertise.

**Results:** proposal of a new system of coding specialties, based on pointing out what actually a psychologist is competent to and not on the speciality he/she was artificially assigned to. The list of extended cafeteria of professional specialties that better reflects the scope of work that psychologists do on a daily basis will be presented.

**Limitations:** sample imperfections like lack of randomness and representativeness that are a strong argument against the generalization of the results

**Conclusions:** measuring testing culture in the longitudinal approach require not only keeping content of the questionnaire up to date but understanding the changes imposed to the identity of the profession of a psychologist. It is important to analyse not only the results but also who the participants are because it helps to understand how the real structure of the psychological workforce looks like in Poland.

**Relevance to the Congress Theme:** Rapid changing world forces the matching of career paths to the reality of the labour market and not to the categories imposed by universities

**Relevant UN SDGs:** Partnerships for the goals

*Keywords: training, qualifications, workforce*

### Paper 3

#### Improving testing practices in European Work and Organizational Psychology: the case of Spain

Ana Hernandez, University of Valencia, Spain; José Muñiz, Nebrija University, Spain; José R. Fernández-Hermida, University of Oviedo, Spain; Francisco J Abad, Autonomous University of Madrid, Spain; Paula Elosua, University of the Basque Country, Spain

Background: Tests are essential tools in work and organizational (WO) contexts. They are used for different purposes (selection, placement, assessment of training needs, evaluation of intervention effectiveness, etc.), and contribute to making decisions that are crucial for employees and organizations. Therefore, the inadequate use of tests can cause serious harm.

To improve tests and testing practices, the Spanish Test Commission, aligned with the EFPA Board of Assessment (BoA) has been taking different actions and projects.

Goals: In this presentation we share the results of two projects:

- 1) The survey on attitudes of WO psychologists regarding tests and testing practices. It is crucial to know the opinions and problems perceived by practitioners in order to design and implement effective actions; and
- 2) The report on the use of psychological tests for personnel selection in Public Administrations. This report is motivated by a recent court judgment that settled case-law on test use for personnel selection in these contexts.

Methodology: For project 1, we analyzed the responses of 69 psychologists in the field of WO psychology. Data was collected in 2020. Participants responded to a 30-item questionnaire using a 5-point response scale (1-5). Specifically 5 dimensions were assessed: 1) attitudes towards tests, 2) problems in use of the tests, 3) test and test users' regulations, 4) training and knowledge about tests, and 5) skepticism regarding internet, computerization, and automation in testing. For project 2, we analyzed 8 judicial appeals and court decisions on the use of psychological tests for selection purposes in Spanish Public Administrations.

Results: Participants in the survey show favorable attitudes towards psychological tests, when used properly ( $M=4.09$ ,  $SD=.56$ ), and they are in favor of increasing the control and regulation of test use ( $M=4.14$ ;  $SD=.56$ ). Although the surveyed WO psychologists show certain skepticism regarding the incorporation of new technologies in testing practices ( $M=2.63$ ;  $SD=.59$ ), they are more open to the incorporation of these technologies than clinical and educational psychologists. Participants also acknowledge the need for continuous training in testing, because the average score on knowledge and information is relatively low ( $M=2.76$ ,  $SD=.79$ ). Finally, regarding the problems of using the tests WO psychologists recognize that there are aspects in need of improvement. Although below 3.5 in a scale that ranges from 1 to 5 in frequency of occurrence, the most frequent problems are the following: Not being up to date, not contrasting interpretations with others, not taking into account the measurement errors of the scores, and not restricting the application of tests to qualified personnel.

When focusing on the use of test for personnel selection in Public Administrations, the appeals and court decisions analyzed also indicate the need of improving testing practices in this context, especially regarding the justification and documentation of the decisions made during the process. However, it also shows that, in some instances, legal operators such as lawyers and judges lack

information about the idiosyncrasy of psychological testing. The report provides a series of good practice recommendations for the public administration and testing services, and clarifies the particularities of psychological testing, and the differences from testing other variables, such as professional knowledge or physical competences.

Limitations: The sample was not random and was small (for both the WO surveyed practitioners and the number of appeals and court decisions analyzed), which precludes generalization.

Conclusions: Tests are considered useful tools by WO practitioners. However, there is room for improving testing practices in WO contexts, including Public Administration services. Dissemination of information and good practices, continuous training and an increase of control and regulation can be useful ways of improving testing practices. The actions and projects boosted by the EFPA Board of Assessment serve as a framework of cooperation and exchange that can contribute to improving testing practices around the world.

Relevance to the Congress Theme : Technological advances in testing (internet, computerization, automation) and increasing testing fairness are crucial for the changing world of work.

Relevant UN SDGs: Partnerships for the goals

*Keywords: testing, opinions, selection*

## **Paper 4**

### **Using the European Model to Survey Australian Psychologist's opinions on Tests and Testing**

Peter Macqueen, Compass Consulting, Australia

**Background:** It has been over 30 years since Australian psychologists have been surveyed on their use of, and attitudes to, psychological testing and assessment. This contrasts with several administrations of a European centric survey conducted via ITC/EFPA since 2000.

**Goals:** To gather information on Australian psychologists' test usage and attitudes, and to compare the findings with earlier studies.

**Methodology:** A survey was conducted over seven months from November 2021 to June 2022. It was designed to capture views of psychologists on attitudes to psychological testing, perceived training needs, and data on actual test usage across various contexts. To make comparisons, the survey included all items from the ITC/EFPA survey, with 34 Likert scaled items in total. Some additional items were written to assess topics considered by the present researchers to be important in the context in which the survey was to be administered. Extensive demographic information was gathered, including work settings and years of practice. In order to ensure good coverage of the domain of interest, as well as item relevance and clarity, the survey was pretested in full using a snowballing sample of psychologists known to the researchers.

**Results:** Initial results confirmed much of the factor structure of Evers et al (2017), with acceptable reliabilities obtained for all but one factor. With 821 respondents, which included 4.3% of fully registered psychologists holding Australian Psychological Society (APS) membership, a range of interesting findings should be provided. Content analysis of the qualitative component of the survey should add to the richness of these findings.

**Limitations:** Small sample size to caution on over generalising findings.

**Conclusions:** This paper's focus is primarily on the Technology (7 items) and Standards (9 items) scales where there is much potential for disparate views across age groupings and areas of practice, critically involving the WO domain.

**Relevance to the Congress Theme:** Test Standards need to be maintained, despite the advances in Technology and changing demands amidst global uncertainty.

**Relevant UN SDGs :** Partnerships for the goals

*Keywords: testing, practice, opinions*

## Paper 5

### **Work & Organisational Psychologists influence on UK Survey – Remaining positive despite observing bad test practice**

Nigel Evans, NEC, UK

**Background:** The European Federation of Psychologists' Association (EFPA) study on Tests and Test Attitudes included the UK as a key partner and promoter since conception.

**Goals:** To affirm that perceptions of Tests and Testing in the UK is positive and further support practitioner psychologists in the use of test within assessment.

**Methodology:** The methodology of the UK survey responses, co-ordinated by the British Psychological Society (BPS), utilised the EFPA Questionnaire on Test Attitudes of Psychologists (EFPA EQTAP) European Questionnaire. Survey items and analysis followed established guidelines of previous studies (Evers et al, 2017). The survey ran in Spring 2021 and was disseminated to the BPS membership through various internal and external communication channels.

**Results:** A total of 351 respondents completed the survey, with a high representation of work and organisational (WO) psychologists in the sample. The results generally show a positive attitude of the participants towards the use of tests to benefit their practice. However, respondents reported seeing frequent instances of bad test practice, including some in breach of legal and contractual obligations when using tests.

**Limitations:** A small sample size and WO skewed perspective cautions against over generalising findings.

**Conclusions:** Respondents are calling for more legislation to stop the abuses of testing, along with wanting the BPS as the National Psychology Association, to do more to improve test use. Implications of the survey findings for users, test providers, clients, alongside wider stakeholders are discussed.

**Relevance to the Congress Theme :** Standards in test and testing need to be monitored, even in mature markets so that fairness and equality prevails in high stakes assessment.

**Relevant UN SDGs:** Partnerships for the goals

*Keywords: testing, opinions, legislation*

## Symposium S022

### **Balancing work and life in a healthy way: Predicting spillover processes by organizational, cognitive, and behavioral factors in longitudinal studies**

Carmen Binnewies, Micha Hilbert | University of Muenster

science

This symposium aims at a deeper understanding how employees can balance work and life in a healthy way which is important in times of high stress and increasingly blurring boundaries between life domains. The group will cover five presentations with presenters from four different countries (Austria, Germany, Greece, Switzerland) that will each focus on different aspects and phases of spillover processes between the work and non-work domain. Presentations will focus on different workplace characteristics (e.g., workload, job autonomy, segmentation norm), environmental characteristics experienced during recovery time (e.g., natural environments), positive and negative thought processes during recovery time and about recovery time, behavioral responses (e.g., technology assisted supplemental work, boundary management strategies), recovery experiences (psychological detachment from work, relaxation), psychological well-being as well as performance-related outcomes. In sum, the presentations examine both spillover processes from the work domain to the nonwork domain and vice versa, all using longitudinal designs covering different time frames from daily effects up to weekly effects over several months. Therefore, the collection of contributions enables us to disentangle how spillover processes between life domains develop and to shed light on mediating and moderating effects and the outcomes in terms of well-being and performance-related outcomes.

The presentation of Baierer and Glaser focusses daily work stressors as predictors of active (self-determined) and passive (externally motivated) technology assisted supplemental work (TASW) and daily psychological detachment and relaxation during leisure time as outcomes of daily TASW. Baierer and Glaser conducted a daily diary study over seven days with two measurement occasions per day (in the evening and next morning) in a sample of 43 employees (241 days). For nearly half of the sample they also gathered objective smartphone behavior via an app to validate the self-report measure of TASW.

The presentation of Hilbert, Binnewies, and Berkemeyer addresses environmental characteristics during recovery time (i.e., natural and attractive environments) as predictors of daily psychological detachment, relaxation, and affective well-being. Hilbert et al. used a daily diary design over two consecutive weekends with three measurement occasions per day (in the morning, evening, and at bedtime) and gathered data from 81 employees (239 days).

The presentation of Noja and Kubicek investigates main and interactive effects of job autonomy and cognitive flexibility on negative and positive cognitive-affective involvement in work during leisure time and on subsequent work-related well-being. Noja and Kubicek gathered data of 314 employees in a three-wave longitudinal study design with a time lag of one month.

The presentation of Meier and Cho examines workplace segmentation norms and employees' own and their partner's segmentation preference as predictors of boundary management strategies as actual segmentation behavior. Boundary management strategies are hypothesized to be negatively related to work-family conflict and to function as a buffer in the relationship between workload and work-family conflict. Meier and Cho performed a longitudinal study over 10 consecutive weeks (every Friday evening) and collected data of 270 employees.

The presentation of Xanthopoulou, Gkamotsos, Gkorezis, Bellou, and Bakker will focus on the spillover from the nonwork domain to the work domain by investigating the reflection about a specific recovery activity during weekend leisure time and outcomes for well-being and performance-related outcomes at the start of the working week. Specifically, the authors focused on soccer fans and examined positive and negative reflection about a game of their favorite team during the weekend as predictors of vigor, flow, and performance after the weekend at work. Data was gathered from 60 soccer fans using a weekly diary study over the course of three to six weeks with two measurement occasions on Mondays (in the morning and afternoon).

In sum, all five presentations reveal important results that extend our theoretical knowledge and imply various practical implications for workplace design, developing cognitive and behavioral strategies how to balance work and life in a healthy way, and thus for sustaining high performance at work. The symposium helps us to understand how employees can cope with a changing world of work with blurring boundaries and increasing demands and autonomy at work and help us develop proactive solutions for individuals and the workplace.

*Keywords: Spillover processs, Recovery, Boundary Management*

## Paper 1

### **Job stressors, technology-assisted supplemental work and recovery: a daily diary study utilizing smartphone sensor logs**

Ferdinand Baierer & Jürgen Glaser | University of Innsbruck

Relevance, goals, background. Smartphones are increasingly used by employees to engage in work related activities during non-work time, thus impeding recovery. In the wake of the ongoing digital transformation, technology assisted supplemental work (TASW) is expected to be a widespread phenomenon. Therefore, the goals of this study were threefold. First, drawing from Action Regulation Theory and Self-Determination Theory we wanted to show that job stressors lead to active (self-determined) and passive (externally motivated) TASW-behavior. Second, we tested how TASW-behavior impedes recovery experiences based on the stressor-detachment model. Third, following numerous calls we explored if objectively obtained data are comparable to subjective data or may even be advantageous in measuring TASW.

Design, methodology . We conducted a daily diary study over seven consecutive days. To collect subjective data N = 43 participants filled in two questionnaires per day in an interval-contingent design to assess job stressors (work interruptions, work overload) and (active vs. passive) TASW-behavior every evening and recovery experiences (psychological detachment, relaxation) in the following morning. Data from 241 days nested within 43 employees could be included in the analyses. To obtain objective data, n = 19 participants installed an open-source app for mobile sensing which logged their smartphone behavior. For discriminating private from TASW-smartphone-use an event-contingent diary design was established. The data was analyzed using multilevel modeling.

Results. Daily active, but not passive TASW is predicted by daily work interruptions and daily work overload, especially on weekends. In line with the stressor-detachment model, daily active TASW behavior impedes daily relaxation in the evening, mediated by a lack of psychological detachment from work. Daily objective smartphone data correlates highly with questionnaire data of TASW-smartphone-use suggesting convergent validity. However, objective data fitted better with subjective data when discriminating active and passive TASW behavior rather than using one overall TASW construct.

Limitations. Time granularity used in our study does not suffice to make causal claims. We focused on two specific job stressors assumed to impair finishing work tasks during working time. Further job stressors might be relevant to especially explain passive TASW behavior which is heavily dependent on colleagues', supervisors' or customers' availability expectations. Moreover, we encountered certain problems with the installation and utilization of the sensing app which resulted in several corrupted smartphone logs.

In a second study we plan to replicate our results and improve some of the limitations by incorporating further job stressors and improving the collection method of smartphone logs. Preliminary results are expected by May 2023.

Conclusions. Job stressors are prolonged into leisure time due to actively engaging in daily TASW behavior. Through a lack of psychological detachment from work, TASW behavior then impedes relaxation experiences. We can show that objective smartphone data is worth pursuing in future research as it provides additional context information on triggers and actions of TASW behavior.

Relevance to SDG. Excessive empirical evidence demonstrates the importance of successfully recovering from work for the workforce's well-being and health. By showing that job stressor-related TASW behavior restricts recreational experiences necessary to recover, our research contributes to the SDG Good Health and Well-Being

Relevance to congress theme. To be able to design work which preserves and boosts employee's health, it is crucial to show how recovery is impacted by job stressors and work behavior in the changing world of work, where unpaid labor creeps into leisure time by means of TASW behavior, facilitated via the ubiquity of digital technologies and devices.

*Keywords: technology assisted supplemental work, recovery experiences, job stressors*

## Paper 2

### **Nature Is Calling: A Daily Diary Study on Natural Environments, Recovery Experiences, and Affective Well-Being**

Micha Hilbert, Carmen Binnewies & Laura Berkemeyer | University of Muenster

Up to now, recovery research focused on recovery activities (i.e., social, physical, and low-effort activities) and recovery experiences (i.e., detachment, relaxation) as predictors of recovery from work (Sonnentag, 2001; Sonnentag et al., 2008), which is relevant for employees' long-termed physical health, psychological well-being, and job performance (Sonnentag, 2017). Previous research showed the beneficial effects of contact with nature on physical health and psychological well-being (Bowler et al., 2010; Hartig et al., 2014; Twohig-Bennett & Jones, 2018; Ulrich, 1984). In this study, we addressed environmental predictors (i.e., natural and attractive environments) of recovery from work in order to extend the existing recovery framework by an environmental component. Drawing on appraisal theory of emotion and recovery experiences (Roseman & Smith, 2001; Sonnentag et al., 2008), we proposed a serial mediation model of the relation between experiencing nature and indicators affective well-being (i.e., high positive activation, low negative activation, high serenity, low fatigue) with perceived attractiveness as a 1<sup>st</sup>-stage mediator and recovery experiences (i.e., relaxation and psychological detachment) as 2<sup>nd</sup>-stage mediators.

In a daily diary design over two consecutive weekends, 81 employees filled in three daily questionnaires (i.e., in the morning, evening, and at bedtime) about perceived environments, recovery experiences, and affective well-being via smartphone on 239 days. Mediation analyses based on the Monte Carlo method (Tingley et al., 2014) revealed indirect relations between contact with nature and affective well-being via perceived attractiveness and relaxation in the case of high serenity and low negative activation, but not for high positive activation and low fatigue. No direct relation between contact with nature and affective well-being was found. Surprisingly, contact with nature was negatively related to detachment. Additional multilevel path analyses based on multilevel structural equation modeling (Preacher et al., 2010) gave evidence for our proposed serial mediation model with attractiveness as a 1<sup>st</sup>-stage mediator and relaxation as a 2<sup>nd</sup>-stage mediator.

Considering limitations, we relied on self-report measures and therefore common method variance could be a problem (Podsakoff et al., 2003). Assessing objective data like greening via satellite pictures might be useful to reduce common method bias (Goward et al., 1991).[CB1] [MH2] Moreover, the mainly female and highly educated sample with a high proportion of leaders is not representative for all German employees. Referring to the circadian rhythm, a biphasic response to nature might be possible, with a stimulating effect as a short-term and a calming effect as a middle-term outcome. Therefore, different time lags should be used to distinguish these potential short- and middle-term effects of contact with nature.

Our study contributes to research on recovery by showing that environmental characteristics have incremental validity over recovery activities predicting relaxation and indirectly indicators of affective well-being (i.e., high serenity, low negative activation). We discuss practical implications for policy makers (e.g., conservation of natural environments), organizations (e.g., workplace design), and employees (e.g., weekend activities). The current results are relevant to achieve the UN sustainable development goals 3 (i.e., good health and well-being) and 11 (i.e., sustainable cities and communities) by showing the relevance of nature in residential areas for recovery. Healthy employees are especially relevant to master the everchanging world of work.

*Keywords: Recovery Experiences, Natural Environments, Diary Study*

### Paper 3

#### **Job- and person-related antecedents of positive and negative cognitive-affective involvement in work during leisure time: A moderated mediation model**

Noja Andrea & Kubicek Bettina | University of Graz; Tement Sara, University of Maribor

**Research goals:** Due to increasing digitalization and flexibilization, the boundaries between work and private life are gradually blurring and employees are increasingly involved in work during their leisure time through positive and negative cognitions and emotions. This involvement, specifically the so-called positive cognitive-affective involvement, may build employees' resources and increase work-related well-being. Negative cognitive-affective involvement, on the other hand, may hamper the necessary recovery from work and may result in impaired work-related well-being. While there is some evidence on the (work-related) consequences of positive and negative cognitive-affective involvement, the job-related (i.e., autonomy) and person-related (i.e., cognitive flexibility) antecedents of negative and specifically of positive involvement are less well understood. Therefore, the aim of the present research was to investigate the main and interactive effects of job autonomy and cognitive flexibility on positive and negative cognitive-affective involvement in work during leisure time and on subsequent work-related well-being (i.e., work engagement, emotional exhaustion, cynicism).

**Theoretical background:** Based on the Conservation of Resources Theory (Hobfoll, 1989), we assume that job resources, such as job autonomy (i.e., the extent to which the job provides freedom and independence in decision making) may increase resource-building experiences such as positive cognitive-affective involvement and decrease resource-depleting experiences such as negative cognitive-affective involvement in work during leisure time. Moreover, cognitive flexibility (i.e., the ability to shift perspective and adapt to a changing environment) may interact with job autonomy in predicting positive and negative cognitive-affective involvement. Specifically, high cognitive flexibility may strengthen the associations between job autonomy and cognitive-affective involvement and strengthen the indirect effects of job autonomy on work-related well-being (i.e., work engagement, emotional exhaustion, cynicism) via positive and negative cognitive-affective involvement.

**Design and methodology:** Using a three-wave longitudinal study design with a time lag of one month, we collected data via the online panel Prolific Academic in the United Kingdom. The final sample comprised 357 employees that fully completed the survey in all three waves. The age of the participants ranged from 20 to 64 years ( $M = 37.76$ ,  $SD = 9.94$ ) and there was a balanced gender ratio (45% female). The employees worked on average 40 hours per week ( $SD = 4.97$ ). All measures were assessed at all three waves of data collection. However, we only used data from the predictors of the first wave of data collection, the mediators of the second wave and the outcomes of the third wave to test the study hypotheses.

**Results:** Results from path analysis revealed that cognitive flexibility strengthens the relationships between autonomy and both positive and negative cognitive-affective involvement. We found a significant positive association between autonomy and positive cognitive-affective involvement for individuals with high cognitive flexibility, but not for individuals with low cognitive flexibility. For negative cognitive-affective involvement, we found a significant negative association with autonomy for individuals with high cognitive flexibility, but not for individuals with low cognitive flexibility. Our study also indicated that both positive and negative cognitive-affective involvement mediate the relationship between autonomy and work-related well-being (i.e., work engagement, emotional

exhaustion, cynicism). In addition, cognitive flexibility moderates the indirect effects of job autonomy on work-related well-being via positive and negative cognitive-affective involvement.

Limitations: One limitation of the study is the use of self-reported data. Thus, common method variance could have biased the results. However, this may be reduced by using a time lag of one month between predictors, mediators, and outcome variables. Second, data were collected via an online panel, which may have some disadvantages (e.g., panel bias). However, the online panel used, Prolific Academic, ensures representative samples by recruiting new participants, keeping the participation frequency low and intrinsic motivation high. Nevertheless, the replication of the results is required to enhance generalizability.

Conclusions: The results expand scholarly knowledge about the antecedents and outcomes of positive and negative cognitive-affective involvement in work during leisure time. They also indicate that employees can benefit from interventions to increase job autonomy and trainings to foster cognitive flexibility.

Relevance to the Congress Theme: Current changes in the world of work, such as the increasing spread of telework arrangements, blur the boundaries between work and private life. Therefore, it is paramount to better understand when positive or negative involvement in work during leisure time occurs and which effects this might have on work-related well-being.

Relevant UN SDGs (=United Nations Sustainable Development Goals):

Good health and wellbeing

Decent work and economic growth

*Keywords: Positive and negative cognitive-affective involvement, cognitive flexibility, work-related well-being*

## Paper 4

### **A Dynamic and Multi-Dimensional Approach towards Work-Family Boundary Management: A 10-Week Longitudinal Study**

Laurenz Meier, University of Neuchâtel; Eunae Cho, National Chengchi University

#### Research goals and why the work was worth doing

The future of 'working from anywhere, at anytime' has become a reality for many workers. With an ongoing digitalization of work, an increasing use of information and communication technology (ICT), and the COVID-19 pandemic, working-from-home has been widely endorsed as a new way of working. Evidence to date suggests that these changes blur boundaries between work and private life, making it difficult for individuals to separate the life domains. Such difficulty may lead to greater work-to-family conflict, especially for those who desire to segment the two life spheres. As such, it is critical to understand effective ways to manage work-family boundaries in the new world of work. Although previous research has identified work-family boundary management strategies, much remains to be known about whether and when different strategies are used, what characteristics of the work, home, and the individual influence the use, and to what extent the use impacts employees' work-to-family conflict. A better understanding of the antecedents and outcomes of boundary management strategies not only advances boundary management theories but also generates knowledge of practical relevance that can be taught in workshops to promote work-life balance.

#### Theoretical background

Boundary management strategies are tactics that individuals use to create or maintain their ideal level of work-home segmentation or integration (Kreiner et al., 2009). Previous research identified various types of tactics (e.g., physical, temporal, social, ICT-use related; see Kreiner et al., 2009, 2016) and showed that individuals differ in the extent to which they use these tactics (Carson et al., 2016). However, little is known whether these differences are evident for all types of strategies and to what extent individuals use these strategies in a routine manner (e.g., more or less to the same extent across weeks) versus a situation-specific way (e.g., depending on the demands of the work week). As an exploratory research question, we, therefore, investigate the temporal dynamics of work-family boundary management and test to what extent boundary management strategies are used in a stable versus fluctuating manner.

We also examine antecedents of the use of boundary management strategies. Preliminary findings suggest that individuals who prefer to segment work and private life use strategies more often than individuals who prefer to integrate life domains (Carlson et al., 2016). Extending this, we propose that one's partner's segmentation preference and one's team norms affect the use of strategies. Specifically, we hypothesize that (H1a) employees', (H1b) their partner's segmentation preferences, and (H1c) workplace segmentation norms predict greater engagement in segmentation-oriented boundary management.

Furthermore, we investigate to what extent the use of strategies reduces work-to-family conflict. Findings from cross-sectional studies suggest that individuals who use more tactics report better work-life balance and well-being than individuals who use few tactics (e.g., Reinke & Gerlach, 2022). Extending this line of research, we hypothesize that (H2a) the use of boundary management tactics is negatively related to work-to-family conflict and that (H2b) the use of boundary management tactics buffers the positive effect of workload on work-to-family conflict.

Design/methodology/approach/intervention.

Longitudinal study of approximately 270 employed individuals who completed an online questionnaire on Friday evenings for 10 consecutive weeks.

The exploratory research question will be addressed using latent trait-state models (Steyer et al., 1992), and the hypotheses will be tested using multilevel analyses (Hox et al., 2019).

Results obtained or expected (if not available, it must be made clear when they will be)

Data and results will be available in December 2022 and ready to be presented at the conference in May 2023.

Limitations

All measures are self-reports.

Conclusions: Research/Practical Implications /Originality/Value

As the first study that takes a dynamic approach on the multi-dimensional work-family boundary management strategies, this study will offer a more nuanced understanding about temporal changes of different types of boundary management tactics, determinants of the use of different tactics, and benefits of using such tactics. Flexible work is here to stay, hence further knowledge about work-family boundary management will be of great practical value.

Relevance to the Congress Theme

In the changing world of work, 'working from anywhere, at anytime' is part of the new normal. This study informs employees' use of various types of boundary management tactics, predictors of the use, and benefits of the use in reducing work-to-family conflict, a critical stressor known to predict suboptimal well-being.

Relevant UN SDGs

Good health and well-being of employees

*Keywords: Work-Family Boundary Management, segmentation preference and norms, dynamic longitudinal modelling*

## Paper 5

### **The spillover of football games to work: A test of the work-home resources model among employed football fans**

Despoina Xanthopoulou, University of Thessaloniki; Arnold B. Bakker, University Rotterdam; Victoria Bellou, University of Thessaly; Panagiotis Gkorezis & Georgios Gkamotsos | University of Thessaloniki

Research goals: Negative and positive work reflection during off-job time is considered a relevant determinant of the recovery process. Previous research suggests that when employees engage in negative work-related thoughts during their free time, their resources are drained. As a result, they have fewer resources to invest in order to recover from the effort they devoted at work. In contrast, positive work-reflection during off-job time may result in resource gains that facilitate successful recovery. Although the process of recovering from job demands is cyclical and expands from work to off-job time and vice versa, previous studies have only looked at how people reflect about their work during leisure, and how this type of reflection promotes or impedes recovery. However, studies so far generally neglected the role of recovery-related reflection during work. This is an important omission because employees are likely to think about their recovery activities during work, and the way they think about these activities may determine how well they function. To address this gap in the literature, we focused on the role of reflection about leisure-time activities during work time, and investigated whether reflecting about a recovery activity in a positive or negative way during work may function as a boundary condition that determines the degree to which state of recovery before work promotes work-related outcomes. We focused on a specific category of employees -those who are also football fans- because previous research suggests that following the game of one's favorite team is a relevant recovery activity that may spill over to the work domain and determine fans' work engagement and job performance.

Theoretical background: In line with the work-home resources (W-HR) model and the recovery literature, we hypothesized that employees' satisfaction with the recovery activity (i.e., the performance of their team in the previous game during the weekend) indicates resource replenishment, and as such will relate positively with their state of recovery (i.e., vigor) on Monday morning. In turn, vigor in the morning will associate positively with work-related well-being (i.e., flow) and (task and contextual) performance during work on Monday. This is because employees, who have more energy before starting work, they have the necessary resources to become absorbed in their tasks and to fulfill their work goals. Furthermore, in line with the cognitive perseverance hypothesis, we argued that negative game-reflection during work on Monday will deplete employee's (emotional and mental) resources, while positive game-reflection during work will replenish resources. Hence, the positive relationship between vigor in the morning on the one hand, and flow and job performance on the other hand, will be stronger on days employees reflect more positively and weaker on days employees reflect more negatively about the recovery activity during work.

Methodology: Sixty football fans with a paid job (93% men) completed a weekly diary study for three to six weeks, twice every Monday: in the morning after waking up and before starting work, and in the afternoon, when finishing work.

Results: Multilevel analyses revealed that satisfaction with the team performance related positively and indirectly to flow and contextual performance during work via its positive association with vigor on Monday morning (after controlling for positive and negative affect on Monday morning). The

moderating role of positive and negative game reflection on the link between vigor and flow/performance was not supported. However, additional analyses showed that positive game reflection moderated the relationship between positive affect in the morning and flow, in a way that the relationship was positive only on days employees were reflecting about their team in a more positive way during work.

Limitations: The relatively small sample size and the use of self-reported data are possible study limitations.

Conclusions: The study findings support the main tenets of the WH-R model, since they highlight the positive spillover of recovery activities during off-job time on work-related well-being and performance during work via the promotion of employees' energy levels. Also, the results underscore the relevant role of reflecting about off-job activities for employee functioning during work. These results are relevant for theory and practice because they reveal important cognitive mechanisms that help understand the complex interplay between work and nonwork time.

Relevance to Congress Theme: The study is relevant to the Congress Theme, as research on recovery has important implications for employee well-being and job performance.

Relevant UN Sustainable Development Goals: The topic is relevant to the Sustainable Development Goals and especially to the goal for good health and wellbeing.

*Keywords: Spillover from Non-work domain to work domain, Positive and negative reflection about recovery, Performance*

## Symposium S074

### Career calling across cultures, contexts, and time: new answers to “old” questions

Anna Dalla Rosa, University of Padua

science\_practice

What will be covered and why. Perceiving work as a calling has been shown to be a way to gain greater well-being, satisfaction, and health at work. Career calling can be broadly understood as a purposeful, meaningful, and passion-driven engagement in a career that one feels drawn to pursue and that contributes to a greater good. Despite the promising increase in the study of career calling, the understanding of the generalizability of the concept to different cultures and its development over time are still limited and raise issues for the theoretical development of the field and the applicability of results to organizational contexts. First, the lack of a systemic analysis of the meaning and equivalence of calling across cultures limits the generalizability of theory and practice to research with culturally diverse workers. Second, the limited knowledge about organizational and social predictors of calling limits the development of interventions to promote its development at work. Finally, the absence of knowledge on the dynamic nature of calling prevents the understanding of how calling can be maintained and developed every day. To address these questions, the symposium brings together four empirical contributions to share new and original insights.

The first presentation, by Vianello et al., will discuss cross-cultural differences in the conceptualization of calling. Using samples from India, Turkey, China, Italy, the United States, and The Netherlands, they observed that the concept of calling may be universal in its structure and, surprisingly, that the level of calling is higher in non-western countries.

Next, Gerdel et al. will focus on predictors of calling and specifically on the role of leader’s calling in promoting follower’s calling through perceived supervisor support and leader-member exchange. The preliminary results supported the partial mediation of perceived supervisor support and leader-member exchange in a trickle-down effect from perceived leader’s calling to follower’s calling. This study, which will be enriched by longitudinal data at the time of the conference, addresses the need in the literature for more studies that investigate predictors of calling at the social and organizational levels.

The third and fourth contributions will explore calling as a dynamic phenomenon. The third contribution by Conway and Clinton will focus on career calling enactment and consequences in everyday life using two daily diary studies. The results showed that the intensity of calling positively influences the level of engagement in daily activities and influences the report of positive and negative events, which in turn affect daily wellbeing and motivation. For the first time, evidence will be provided that calling affects behaviors and perceptions on a daily basis, highlighting the need for more research that investigates the dynamic of calling with an even-base perspective.

The fourth contribution by Schleithoff and Uslu will present the results of a mixed method study including qualitative semi-structured interviews and a quantitative diary study. The findings revealed that people dynamically change their orientation from perceiving work as a calling or a career and that the way people approach their calling, in terms of identification and purpose, affect the daily stability and resilience of their calling orientation.

The presentations will be followed by a discussion led by Dr. Anna Dalla Rosa who will provide comments on each presentation as well as recommendations for future research on calling.

Relevance to the Congress Theme. The symposium aligns with the goal of the congress by focusing on the future of work as more equal, diverse, and inclusive. Understanding how people approach work and how a meaningful and healthy approach to work as a calling can be developed will be critical to creating more decent, healthy and sustainable careers for everyone in the future.

Research/Practical Implications. The symposium has both theoretical and practical implications. All presentations address relevant and under investigated open questions about career calling. Contributors will provide valuable insights for practitioners by giving advice on how workers from different cultural contexts interpret career calling, and on how calling can be promoted and influence people in the workplace.

Overall conclusions. In conclusion, the symposium will present results that support the generalizability of research and theory on calling across different cultures, identify predictors of calling at the organizational and social levels, and suggest that calling is a dynamic phenomenon that changes and influences daily work experience.

Intended audience. The symposium is of interest to both academics and practitioners.

*Keywords: Career Calling, Calling Orientation*

## Paper 1

### Is Calling Conceptualized Equivalently across Cultures? A Comparative Study across Six Countries

Michelangelo Vianello, University of Padua; Anna Dalla Rosa, University of Padua; Jingzhou Pan, Tianjin University; Evgenia I. Lysova, Vrije Universiteit Amsterdam; Serdar Karabati, Istanbul Bilgi University; Jince Gomez, Indian Institute of Technology; Nelson D'Silva, Xavier School of Management; Brittany C. Buis, Northern Illinois University

The concept of calling is deeply rooted in western culture, but research in other cultures is increasing. In the last 25 years, the concept has been applied to work, giving rise to a large and increasing corpus of studies on why and how individuals approach work as a calling. Researchers from many non-Western nations began to study the construct of career calling, which seemed to be relevant in their societies. Yet, the equivalence of the concept of calling has not been adequately investigated, construct and measurement equivalence of existing measures has been assumed rather than tested, and the influence of culture on calling has been overlooked. Also, some authors suggested that the concept of calling does not exist outside Christianity (Cahalan & Shuurman, 2016).

Yet, many non-western traditions prescribe, suggest, or at least implicitly include a reflection on the importance of approaching work as a way to find a purpose in life, to build a personal identity, to help others or the society, even indirectly, and to answer a transcendent summons, either coming from within or from a greater entity. Calling might change in meaning across cultures or be a universal human experience, and researchers might have overstated the generalizability of previous empirical evidence or the importance of its Western origins.

Using a recent conceptualization of calling (Vianello et al., 2018) that unifies the different theoretical approaches that emerged in the literature we investigated the cross-cultural generalizability of calling across six nations (N = 2491): India, Turkey, China, Italy, the United States, and The Netherlands. Calling was measured with the Unified Multidimensional Calling Scale (UMCS; Vianello et al., 2018) that defines calling as composed by seven facets: Passion, Sacrifice, Transcendent Summons, Prosociality, Pervasiveness, Purposeful Work, and Identity. Participants were active business college students; Countries were selected to maximize cultural differences according to Hofstede's six cultural dimensions (Hofstede, 2011; van de Vijver & Tanzer, 2004).

Using multi-group structural equations model, we ascertained invariance and estimated unbiased factor scores. We observed that the multidimensional structure of calling and the relative importance of the different dimensions of calling in defining the construct are the same across cultures. This result contributes to the theoretical debate on the conceptualization of calling and its generalizability. Drawing on an integrated model of calling, we show that a conceptualization that combines both neoclassical and modern components is valid in countries that were deeply influenced by such varying philosophical and religious traditions as Christianity, Confucianism, Islam, Buddhism, and Hinduism. Pursuing work as a calling is an important factor of people's work experiences, regardless of their heritage (Steger et al., 2010).

We also surprisingly observed that the overall level of calling is higher in non-western countries, putting into question the western origin of the concept and opening important research questions. Small cross-cultural differences were observed in the intensity with which people from different countries approach their calling domain. Comparisons conducted at the level of facets indicated that Italian and Dutch participants scored lower in Transcendent Summons and Pervasiveness, while

Chinese participants scored the highest. Callings in India are especially high in the Purpose and Identity components. These results are based on convenience samples of business students; hence, results cannot be generalized to the whole nation, nor to nations that were not included in our sample.

The main contribution of this research is the empirical evidence that approaching work as a pervasive and transcendent source of purpose, passion, prosociality, self-sacrifice, and personal identity is an experience that is shared across very different cultures. This is in line with the surprisingly high agreement across religious traditions about the way individuals should approach their work.

Calling may be universal in its structure and meaning, and this result validates the many studies that investigated calling and its nomological network in cultures that are different from those in which the construct or its measurement were originally conceived. Also, the different profiles of calling that we identified and that characterize different nations are useful to practitioners and counselors who work in the increasing number of multicultural work environments because they inform on the extent to which people, who have been influenced by different traditions, approach their work as a source of meaning and passion. Furthermore, perceiving work as a calling is a resource that leads to greater well-being and resilience. Hence, this study is also relevant to the 3<sup>rd</sup> and 8<sup>th</sup> Sustainable Development Goals, which tackle well-being, decent work, and economic growth.

*Keywords: Career Calling, Cross-cultural research, Measurement invariance*

## Paper 2

### How Leader's Calling Changes Employees' Calling through the Means of Perceived Supervisor Support and Leader-Member Exchange

Sophie Gerdel & Michelangelo Vianello | University of Padua; Sabine Bergner, University of Graz

Employees with a career calling are passionate about their work, derive a sense of life purpose from their work which engulfs their life, is central to their identity and useful to society. They are willing to make sacrifices and they think they have been called by something greater to do their work (Vianello et al., 2018). Empirical evidence suggests that employees who experience their job as a career calling are more satisfied, have fewer turnover intentions and perform better in their job (e.g. Duffy et al., 2018; Vianello et al., 2021). It has been shown that calling is not stable and fluctuates daily and throughout life (Duffy et al., 2014; Vianello et al., 2020; Zhu et al., 2021). Identifying organizational antecedents of calling and investigating its longitudinal development are relevant for practice, given the many positive outcomes of calling, and for the theoretical development of the field. However, the literature on calling antecedents and its development is scarce, especially regarding the organizational processes that can promote the development of a calling. To better understand the origin of calling and its changes, it is important to investigate key antecedents: What are the organizational antecedents of a calling and how can leaders influence their employees' calling?

We draw on social exchange theory and argue that employees' career calling is stronger when they experience their leaders to have stronger callings. Perceiving that one's leader is called to perform their job might create a stimulating and passionate work environment which is perceived as supporting. Perceiving support from the leader enhances the quality of the relationship between the leader and the employee. It is then this enhanced relationship quality that empowers employees to develop their very own career calling.

In a two-wave study, we investigated the mediation of perceived supervisor support (PSS) and Leader-Member Exchange (LMX) on the relation between perceived leader's calling and follower's calling. In three different Italian organizations, employees and their leaders were asked to fill in an online questionnaire. Multilevel models in Mplus were used to separate effects that occur across individuals and across teams. The intraclass correlation coefficient ranged from .07 to .13, indicating that team membership explained considerable variance in individual ratings of PSS, LMX and calling. Results from the first wave of data collection (N = 461) at the individual level showed that perceived leaders' calling is positively related to followers' calling ( $\gamma_{10} = .23, p < .001$ ) through the partial mediation of PSS and LMX (indirect effect: .08,  $p < .05$ ). Specifically, perceived leaders' calling was positively related to PSS ( $\gamma_{20} = .54, p < .001$ ), but not to LMX ( $\gamma_{30} = .06, p > .05$ ). LMX, but not PSS ( $\gamma_{50} = .09, p > .05$ ), was positively related to employees' calling ( $\gamma_{40} = .22, p < .05$ ). The relation between PSS and LMX was positive ( $\gamma_{60} = .7, p < .001$ ). Between effects were small and non-significant. The second data collection, that will allow testing for the longitudinal direction of the relations is in progress, and results will be available in March 2023.

Limitations of this study might be the small cluster size which could lead to an overestimation of results. Further, other mediators (e.g. trust) could explain the relation between leader's and follower's calling.

Having called leaders who perceive their work as a calling is beneficial because followers are more likely to be called too. This positive effect also benefits work teams that are more likely to show

higher performance and be more satisfied overall. The results inform human resource managers, providing suggestions on how to manage leaders and teamwork in order to increase the perception of having a calling. This study informs the theory regarding calling development in the organizational context and is relevant for the Sustainable Development Goals of well-being, decent work and economic growth.

*Keywords: Career calling, Leadership, Multilevel*

## Paper 3

### An event-based analysis of calling intensity

Neil Conway; Michael Clinton

#### Research goals and why the work was worth doing

We examine the degree to which calling intensity has its effects on daily moods/ motivations via the everyday activities that people perform. We consider calling intensity both in terms of how it directly affects engaging in everyday activities and, in turn, daily moods and motivation, and whether calling intensity amplifies (i.e., moderates) the effects of activities and events on outcomes.

The research is worth doing because it shows how the lived experience of calling rests crucially on everyday activities, from which many implications follow. For example, how can organizations and individuals clear the path for people with a calling to pursue relevant daily activities.

#### Theoretical background

The broad theoretical background is the event-based turn in organizational research that acknowledges everyday events as crucial to understanding employee mood, motivation, and behaviour (Morgeson, Mitchell & Liu, 2015). Beyond organizational research, there is a strand of literature that investigates how individual differences (e.g., personality traits) are enacted in everyday behaviour. Our research considers how a prominent individual difference relevant to calling – calling intensity – is enacted in everyday behaviour, along with its implications. We argue that people with calling intensity have an outlook characterized by, for example, personal mission, being called-to-action, serving others, and making the world a better place, which establishes a mental frame of reference that disposes them cognitively and motivationally to seek out everyday activities and interpret daily events consistent with this outlook.

#### Method

We examine our research goals via quantitative and qualitative data from two daily diary studies of Church of England ministers. In study 1, 193 Church of England ministers (22% of original target sample) completed a background survey and then up to seven consecutive daily diaries (N = 1,111 days of data). In study 2, a different sample of 105 Church of England ministers (18.8% of original target sample) completed a background survey and two online diaries a day for up to seven consecutive days (N = 486 complete diary days of data).

Calling intensity was measured in the background surveys. Daily activities and events were measured in the daily diaries, alongside perceived features of the activities and events (e.g., relevance to calling, perceived competence), and measures of daily mood and motivation.

#### Results obtained

Preliminary findings from multilevel analyses show that calling intensity related to daily activities in several respects. Participants with higher calling intensity were more likely to perform certain activities relevant to their calling (e.g., prayer), and more likely to perform activities where they perceived themselves as competent overall. Calling intensity also predicted reports of unexpected positive or negative events occurring during the day, where calling intensity positively predicted perceiving the occurrence of unexpected negative events, but was unrelated to unexpected positive events. Written descriptions of the events offered explanations for some of these associations.

Further analysis shows how calling intensity is connected to daily wellbeing and motivations in both positive and negative ways via these the enactment of these everyday activities and experience of these unexpected work events.

#### Limitations

Self-reported data.

#### Conclusions

Overall, findings show calling intensity operates in part through daily activities and events, which in turn affect daily wellbeing and motivation outcomes. This is original as it shows how a dispositional orientation within the field of calling – calling intensity – is enacted through everyday activities which have implications for the lived experience of the calling. Practical implications include how parties (individuals with callings, organizations and occupational bodies, and professional occupational counsellors) can facilitate opportunities for people with callings to more readily enact their callings on a daily basis.

#### Relevance to the Congress Theme

The world of work is currently grappling with how occupations can balance employees achieving meaningful work and quality of working lives against a backdrop of neo-liberal capitalism, work intensification, AI substitution, and many economies facing recessions and stagnation. Our focus on calling speaks directly to debates of meaningful work.

#### Relevant UN SDG

Our study of calling intensity, events, and daily wellbeing is relevant to all occupations (particularly those regarded as called-to occupations) and therefore relevant to the SDGs of 'Good health and wellbeing' and 'Decent work and economic growth'.

*Keywords: Career calling, Daily Diary Studies, Wellbeing*

## Paper 4

### Exploring the fluctuation of calling experiences in the field of diversity and inclusion

Schleithoff Claire Schulze & Uslu Dilek | Vrije Universiteit Amsterdam

Today a significant number of people expect more from their work than just a source of income and financial rewards (Cascio, 2003) but rather choose to pursue a purposeful occupation with a deep sense meaningfulness (e.g., Berg et al., 2010). Therefore, it is not surprising that callings, which are the belief that one's work is personally fulfilling, contribute to the common good and are viewed as individual's purpose in life (Bunderson & Thompson, 2009; Wrzesniewski et al., 1997), have attracted various scholars in the past (e.g., Lysova et al., 2018; Schabram & Maitlis, 2017).

However, much of the research looks at calling as a stable phenomenon, yet, some limited research draws attention to the dynamic nature of calling (e.g. Dobrow, 2013; Schabram et al., 2022). The absence of knowledge on how calling develops or changes over time is problematic as it limits our understanding of how calling can be maintained in difficult and challenging times (e.g., Duffy & Dik, 2013). The relevance and importance of exploring calling as a dynamic phenomenon finds support in calls of OB scholars for the inclusion of the role of time in studying experiences in the context of work (e.g., Aguinis & Bakker, 2020; Tang et al., 2020).

To address these outlined knowledge shortages, we aim to answer how do individuals working in the diversity and inclusion field perceive calling as a work orientation and how do difficulties shape these calling experiences? We thought it would be particularly promising to take a temporal lens on the concept of callings by utilizing a mixed method study. More specifically, we started our research by conducting qualitative semi-structured interviews on a sample of (N=30) to continue with quantitative diary studies (N=100) for ten working days. Diary studies have been chosen as they exemplify a particular promising research design to capture time and fluctuations (e.g., Vantilborgh et al., 2018).

Our study draws on the context of D&I practitioners for three key reasons. First, despite individuals working in D&I are often driven by personal values (i.e., fairness) and the intrinsic motivation to foster equality throughout organizations, they also face high job demands and drawbacks (i.e., negotiations about budget, disagreements, insults etc.). Thus, we expect that their calling orientations are likely to underly fluctuations. Second, we answer the calls of prior scholars (e.g., Schabram et al., 2022) and aim to get insights from a less extreme context than usually provided in the calling literature (i.e., animal shelter, zookeeper etc.). Lastly, although surprising for the aforementioned reasoning, to the best of our knowledge this study is the first that combines the calling literature with D&I.

Our preliminary findings reveal that most D&I practitioners view their work with a calling orientation. In line with the iterative nature of our qualitative study phase the concept of calling was not selected a priori. Rather, the construct was considered during data collection and analysis as we realized that the descriptions of our interviewee's work orientations are in line with prior definitions of callings (Charmaz, 2006; Strauss & Corbin, 1998). However, we saw differences in how individuals perceive their callings with impacts on the fluctuation of their deeply meaningful work experiences.

In fact, while some individuals are driven by their intrinsic motivation and purpose and actively decouple their personal identify from their calling orientation others strongly identified with their work. More specifically, while the first experienced their calling as stable and resilient towards

difficulties, the latest experienced it as being very unstable and even questioned the D&I approach. Based on these findings we propose that there is an “ideal level” of work identification for calling orientations and experiences of deeply meaningful work. These insights further build on the study of Schabram and Maitlis (2017) on animal shelter workers with “good” and “bad” calling paths.

In addition, we demonstrate the dynamic of work orientations (Schabram et al., 2022) since some of our participants emphasized that they deliberately decided to view their work as a career as they aim to protect themselves from the dark side of callings, which has been investigated in the past (e.g., Bunderson & Thomposon, 2009). This switching from calling to career orientation may demonstrate the fluctuating nature of work orientations (Schabram et al., 2022).

We believe that our study significantly contributes to the congress theme as the wish for deeply meaningful work is a main driver for many people, especially of the younger generation. In addition, we help to develop strategies to enhance the benefits of callings which will subsequently lead to more sustainable careers by fostering happiness, health and productivity (De Vos et al., 2020).

*Keywords: Career Calling, Diary Study, Diversity and Inclusion*

## Symposium S035

### **Current directions in Australian work wellbeing intervention research: Examples, opportunities, and recommendations**

Paula Brough, Griffith University

science\_practice

Organisational interventions aim to change workplace policies, practices, or procedures through collaborative action in order to improve the health and wellbeing of employees. Sharing intervention research – not only the evaluation of intervention processes and outcomes, but also the realities of carrying out such research – can improve the design of future interventions and advance intervention theory and research. This symposium consists of four papers describing innovations in recent work wellbeing intervention research, conducted by three researchers and one practitioner based at different Australian universities. The programs are trialled in different occupation groups.

Paper 1 presents three individual case studies based on the interconnections between organisational culture, leaders, and workers in order to design and produce effective work wellbeing intervention programs. Paper 1 summarises the lessons learnt from these intervention programs, including the key hinderances and benefits, the impact of culture and leadership upon employee wellbeing, and the implications for theoretical explanations of employee wellbeing.

Paper 2 presents learnings from the process evaluation of a five-phase intervention, delivered as a primary prevention strategy for workplace bullying. Grounded theory analysis (Gioia et al., 2013) of multiple data sources from multiple applications of the intervention across diverse industries was used to identify enablers and barriers for intervention effectiveness and distinguish mechanisms of change. Findings suggest that the intervention contributes to changing culture, creating safety, and cultivating connection. Success is aided by integrating each intervention stage within organisational operations; finding the right cadence for intervention activities; and enabling two-way communication. These findings advance knowledge about the foundations of change in wellbeing interventions, and highlight core practical considerations for change execution.

Paper 3 presents findings from the first stage of a study designed to increase employee resilience in mining. Interviews and a national survey yielded evidence that is being incorporated into a series of workplace interventions. A key finding was that employee assessment of job-related attributes as stressful demands or supportive resources was influenced by their subjective appraisal, pointing to the important role of cognition as an influential factor in resilience. Our design of a series of workplace resilience interventions will consequently focus on attention and cognition (for example, Junker et al., 2020; Knowles et al., 2016; Salguero et al., 2021) as well as employee experience. This finding is practically important and informs the design of a series of workplace resilience interventions that will consequently focus on attention and cognition in our understanding of job demands and resources (for example, Junker et al., 2020; Knowles et al., 2016; Salguero et al., 2021).

Finally, paper 4 describes the lived 'reality' of implementation and conducting work wellbeing intervention programs from a practitioner's point of view. Paper 4 discusses the impact of different types of occupational stress upon workers, including the tendency for some to overwork to 'rescue' critical and urgent work disruptions, subsequently resulting in burnout. Paper 4 also identifies organisational culture as an influential factor in these programs, albeit in terms of workers perceiving themselves to be part of a community, sharing values and stressors.

Relevance to the congress theme: This symposium directly relates to two congress themes: (#15) stress and dysfunction (stress and burnout), and (#18) wellbeing (mental health). This symposium also advances discussion of two of the UN Sustainable Development Goals (2015): good health and wellbeing, and decent work and economic growth.

Research/practical implications: The four papers present innovations in work wellbeing intervention research concerning both theory testing and methodological considerations, as is highly recommended (Burgess et al., 2020). Specifically, the interventions tested theoretical explanations of occupational stress, primarily the Job-Demands Resources model (Demerouti et al, 2001). Also, the interventions were primarily based on quasi-experimental research designs, to estimate the actual social and economic impacts of the programs compared to control groups of workers. The practical reality of the long-term adoptions of these programs in our workplaces is also discussed.

Overall conclusions: This symposium advances discussions of why workplace wellbeing interventions are rarely effective and in general, have minimal impact on the increasing social and economic costs of occupational stress reported by workers. The symposium emphasises the 'reality' of why the long-term implementations of these carefully designed programs are rarely adopted.

*Keywords: Intervention, wellbeing, research*

## Paper 1

### Optimising occupational wellbeing: Workers, leaders, and culture

Paula Brough, Griffith University

**Research goals:** This presentation aims to clarify the connections between organisational culture, leaders, and workers for the effective occupational wellbeing of employees. The discussion reminds researchers of these inter-connections in order to produce well designed and effective wellbeing interventions.

**Theoretical background:** Theoretical explanations of occupational stress generally present consistent content since Cooper and Marshall's (1976) initial description. These theoretical explanations specify that adverse work conditions focused on job demands (e.g., work hours), inadequate levels of job control, social support, and work-life balance (and other job resources), activate employee's cognitive stress appraisals and coping responses (Brough et al., 2013; Lazarus & Folkman, 1984). These, in turn, affect individual outcomes (job attitudes; e.g., job satisfaction and engagement), work performance (e.g., productivity, attendance, presenteeism), wellbeing (e.g., strain, mental health, fatigue), and organisational outcomes (e.g., productivity, sick leave, stress claims, profits; Brough et al., 2018). Recent evidence indicates the stress process is also influenced by other specific factors, including organisational climates and cultures (Dollard & Bakker, 2010); future-orientated coping to manage anticipated stressors (Drummond & Brough, 2016); specific taxonomies of job demands (Raper & Brough, 2021; Searle, Tuckey, & Brough, 2022); and the impact of non-work contexts (e.g., work-life balance) on work stress (Brough et al., 2014; Brough, Wall, & Cooper, 2022). Multiple industries have applied these theoretical explanations via their employee wellbeing programs with varying degrees of success (Clinchamps et al., 2021). However, the social and economic costs of occupational stress continue to rise, with stress perceived to be a global predicament (Brough et al., 2021), a "sizeable financial burden on society" (Hassard et al., 2018, p.1), and a key justification for the renewed emphasis on methods to effectively managing workers' wellbeing (Guest, 2017). Additionally, approximately 53% of organisational occupational health programs are atheoretical, that is, are not based on research evidence (Burgess et al., 2020). The majority of organisational wellbeing programs are thus, not evidence-based and typically produce limited success, especially for long-term outcomes of staff wellbeing and retention and program cost-effectiveness.

**Design:** Three examples of occupational wellbeing programs are described. Each program was conducted in a large organisation, adopted quasi-experimental research designs (longitudinal, repeated measures, control and experimental groups), and consisted of multiple mixed methods components (interview, focus groups, surveys, intervention, evaluations).

**Results:** Significant results are summarised, with the programs producing significant improvements for employee wellbeing over time in regards to perceived stress, strain, job engagement and retention. Results regarding leadership practices and the influence of organisational cultures are also presented.

**Limitations:** The limitations of each program are discussed and include the lack of objective HR data to demonstrate cost savings in occupational stress injury claims over time, the lack of clear evidence of the return on investment for each program, and the lack of long-term intervention adoption by each organisation.

Conclusions: The presentation ends with summarising the lessons learnt from these organisation wellbeing intervention programs, including the key hinderances and benefits, the impact of culture and leadership upon employee wellbeing, and the implications for theoretical explanations of employee wellbeing. Practical recommendations about pertinent emerging constructs are discussed, including the assessment of ethical leadership and distributive leadership. Recommendations concerning the delivery of these interventions are also highlighted, including evidence about the utility of of web-based programs which aim to accommodate the needs of flexible and remote workers. Finally, the utility of adopting occupational-specific approaches are also discussed, such as health-service leadership models.

*Keywords: Wellbeing, leaders, culture*

## Paper 2

### **Changing the underlying conditions relevant to workplace bullying through organisational redesign**

Michelle Tuckey, University of South Australia; Yiqiong Li, University of Queensland; Annabelle Neall, University of Queensland; Alice Rose, University of South Australia

Background: Participatory organisational interventions aim to change workplace policies, practices, or procedures through collaborative action in order to improve the health and well-being of employees (Nielsen & Christensen, 2021). At their core, such interventions target how work is organised, designed, and managed. In the case of interventions for workplace bullying, an additional goal is to transform the organisational conditions relevant to bullying prevention (Murray et al., 2020). Understanding factors that influence the success of interventions is critical to achieving the most favourable outcomes possible (Murray et al., 2020). Though the general literature on participatory organisational interventions provides some guidance, knowledge of success factors for workplace bullying interventions is barely at a foundational stage (Murray et al., 2020). It's important to evaluate workplace bullying interventions specifically within the broader field because experiencing bullying can shape employees' perceptions of the work environment (Agervold & Mikkelsen, 2004). In addition to identifying critical success factors, mapping the mechanisms through which organisational conditions relevant to bullying can be changed is a crucial knowledge gap. Evidence from the wider literature indicates that the success of health and well-being interventions is contingent on activating intended or emergent mechanisms of change (Daniels et al., 2021). There is no published data on this issue for workplace bullying interventions, limiting our understanding of how to effectively prevent bullying.

Intervention and approach: Three case studies were included in the research, in which the organisational redesign intervention was applied in: (1) 60 supermarket stores; (2) four government departments; and (3) two youth justice centres. The intervention process had five phases: 1. Preparation builds awareness of the project and readiness for action. 2. Diagnosis uses an evidence-based risk audit tool to guide the selection of the focal areas for the intervention in combination with organisational data. 3. Solutions involve staff members, team leaders, and managers, working together in co-design workshops to unpack the challenges and generate intervention strategies in the focal areas. 4. Implementation involves activating the solutions generated at the workshop at multiple levels. 5. Finally, Evaluation involves re-surveying to demonstrate the impact of the solutions and conducting focus groups and interviews to investigate success factors and mechanisms of change. Following the Gioia method for inductive qualitative research (Gioia et al., 2013), we generated insights into intervention success factors and mechanisms of change using multiple data sources for each case study: focus groups, interviews, workshop materials, implementation meeting notes, and field notes. Data were collected in three waves, with preliminary analysis in each wave informing data collection in the next wave.

Results: Final data analysis across all data sources is in progress and will be completed in January 2023. Emerging findings suggest that the system mindset and participatory processes underpinning the intervention contribute to changing organisational culture, creating a safe space for making positive changes, and cultivating connections among employees. The data also suggest that intervention success is aided by integrating each stage within the organisations' daily operations; optimising the cadence of the intervention activities to capitalise on the momentum that builds in each stage; and enabling two-way communication across different levels of the organisation throughout the intervention process.

Conclusions: The findings of this study are unique within the literature in highlighting the value of participatory intervention processes for preventing workplace bullying. In particular, our research advances bullying prevention knowledge and practice by demonstrating how workplace conditions linked to the emergence of bullying can be effectively changed through collaborative efforts. Through changing culture, creating safety, and cultivating connection, co-design processes enable sustained changes to working practices, policies, and procedures relevant to bullying risk, revealing the potential to 'design out' bullying from workplaces.

*Keywords: Bullying, redesign, wellbeing*

### **Paper 3**

#### **The Impact of Workplace Factors on Employee Resilience in Mining**

Rebecca Mitchell & Raymond Trau | Macquarie University; Brendan Boyle, University of Newcastle; Jane Maley, Sabanci University

**Background:** The mining occupational environment includes unique stressors that contribute to psychological distress and decreased mental health (Ling et al., 2016). Recent studies have found that mining employees had psychological distress levels that were significantly greater than a comparable community sample (Bowers et al., 2018; Considine et al., 2017). This increased recognition of mental health issues faced by the mining industry (Bowers et al., 2018; Considine et al., 2017) has prompted a surge of research interest into the potential impact of work and organisational factors on mining employees' mental health and suicide (Considine et al., 2017). Early studies indicate that workplace factors are a substantial contributor to distress and poor mental health (James, Tynan, Roach et al, 2018).

While previous research has provided empirical evidence regarding the negative impact of work characteristics on mental health and in the mining industry (Considine et al., 2017), the positive impact of work supports and resources on resilience have yet to be studied. Resilience reflects the capacity to effectively negotiate, adapt to or manage significant sources of stress or adversity (Windle, 2011) Resilience has been shown to decrease the negative impact of workplace stressors and is associated with increased quality of life, improved mental and physical health and effective adaptation (Caza & Milton, 2012). Resilience has been shown to enhance mental health in a range of industries. Previous research into resilience has focused on individual traits and interventions (King et al., 2016). Interventions have been demonstrated to improve help-seeking behaviour and reduce stigma associated with mental health (Tynan, James Considine et al, 2018) however there remains little understanding of the organisational and work-related factors that influence resilience and may, therefore prevent mental health issues arising (King et al., 2016). There is emerging evidence however, that a range of workplace characteristics may have the potential to build employee resilience (Hartmann et al., 2019; Khan et al., 2019; Khan et al., 2017; Meneghel et al., 2016), but this work is still in its infancy.

**Approach:** In order to achieve our research aims, we first undertook a two-phase study to ascertain the workplace factors that support resilience. The first phase used interviews to explore the perceptions and practices of employees and senior leaders regarding the strategies and practices that are successful in supporting resilience and mental health and the barriers that may lessen or undermine this goal. The second quantitative phase used a survey to investigate the pattern of factors that are most likely to explain and predict resilience at work. Data was collected from more than 300 mining employees in two time points to minimise the risk of bias due to common source (Podsakoff et al., 2012). The survey reflected first phase data in addition to validated scales, including the Brief Resilience Scale (Smith et al., 2008).

**Results:** A number of factors that helped workers develop resilience and mitigate stress were identified through the analysis, such as job satisfaction, teamwork, social support and belonging, as well as the ability to psychologically detach at the end of the shift. Workers and their families also saw positive changes associated with shift patterns and employment benefits. Factors such as gaps in communication, concerns about safety, work patterns, physical conditions and high workload levels, were demonstrated to be detrimental to resiliency. Key themes related to the erosion of resilience

were the volatility and uncertainty of the mining sector. Our participants provided evidence that their assessment of job-related attributes as stressful demands or supportive resources was influenced by their subjective appraisal which, in turn, was influenced by the focus of their attention and the experienced impact of these factors. For example, employees noted that the societal impact of mining contributed to resilience. Where employees assessed the contribution of mining in terms of its historical, local and economic impact, they appraised this as an important source of resilience. In contrast, appraisal of the mining's impact in terms of climate change was perceived as resilience-depleting. This finding allows us to make an important contribution by confirming the important role of cognitive appraisal in occupational resilience. Our design of a series of workplace resilience interventions will consequently focus on attention and cognition (for example, Junker et al., 2020; Knowles et al., 2016; Salguero et al., 2021) as well as employee experience.

Conclusions: Our key findings suggest that employees may assess the same pivotal job-related attribute as either supporting or undermining their resilience, which has significant implications for their wellbeing and the suite of interventions we are designing to build resilient-strengthening workplaces (Métais et al., 2022). Theoretically, our findings have potential to extend Job-Demands Resource (JD-R theory), by highlighting role of appraisal in JD-R and the circumstances that may affect such appraisal.

*Keywords: Resilience, Mining, Wellbeing*

## Paper 4

### **Rethinking workplace stress with what we already know: Considerations for wellbeing interventions from a practitioner's perspective.**

Wendy Muller, Griffith University

Theoretical background: The Transactional Stress and Coping Model describes stress as an individual decision based on one's cognitive appraisal, where demands are perceived to be stressful according to the subjective negative appraisal of the person experiencing it (Lazarus & Folkman, 1984). However, as opposed to Selye's suggestion of stress as an involuntary response, Lazarus and Folkman viewed stress as an interactive process that incorporates intra-level stress stimulus and response, influenced by factors in one's external environment (Kalliath, Brough, O'Driscoll, Manimala, Siu, & Parker, 2013). When faced with a stressor, individuals will evaluate the potential threat (primary appraisal) and make a judgment about its significance. The second appraisal follows, as an assessment of resources. Finally, efforts aimed at regulating the threat enable strategies for coping (Kalliath et al., 2013).

Such theoretical frameworks have greatly influenced organisational psychological perspectives for the explanation of stress and wellbeing in the workplace, emphasising appraisal, engagement, and resilience for how individuals and teams feel, behave, and react at work. Arguably though, traditional views of stress as a linear process aimed at 'eliminating' singular threats do not generally represent workplace environments. Nor does the notion that workplaces focus on specific stressors or strain effects. For many individuals and teams, wellbeing is not perceived to be the absence of stress (e.g., working business as usual, as per job descriptions), but rather, accepting how to 'work with' the presence of perpetuating and external stressors beyond their control, regardless of their individual or collective cognitive appraisal/s. Notwithstanding, the act of merely accepting stress as 'the new normal' is not a sustainable coping strategy for mitigating workplace strain in the long term. Extant stress literature emphasises the stress perception, rather than stress presence (Kalliath et al., 2013). Whilst it is important to recognise individual differences for the ways in which stressors are appraised, it is undeniable that the consequences of COVID-19 have been severe, impacting labour shortages, work demands and expectations, both for self and others (McKinsey Global Institute, 2021; OECD, 2021). The pandemic has disrupted and reformed how work is conducted. For example, some occupations adjusted locations to working from home and communicating via virtual methodologies. For occupations involving the maintenance of physical proximity with clients or equipment, whilst fewer changes were made operationally, work roles required additional processes to take place for health and safety compliance. Such determinations highlighted stress for those working 'towards the threat' of COVID-19 (e.g., frontline and service roles), and highlighted wellbeing concerns related to communication, micromanagement, fairness, work life balance and the impact on relationships at home (Brough, Muller, & Westman, 2018; McKinsey Global Institute, 2021).

Contributions: As a practitioner involved in the provision of wellbeing interventions, three contributions are offered:

1. Occupational versus organisational stress. Workshops/ team level discussions unpacking stress types, especially when tendencies towards feelings of blame or guilt exist for 'underperforming' to achieve outcomes beyond their control (COVID-19 or otherwise) or propensities to overwork are present to 'rescue' ongoing urgent disruptions.

2. Tripartite model. Murphy (1988) proposed three levels of stress management interventions, each aimed at addressing workplace stress according to focus (i.e., primary, secondary, tertiary). As a practitioner, the preferred approach to wellbeing interventions is an integrated approach. In reality, however, many requests for service involve single, and reactive interventions to remedy multiple and ongoing issues. Whilst secondary (e.g., psych-education) and tertiary (e.g., employee assistance) interventions are beneficial, in isolation, their individualistic approach is seemingly superfluous without changes considered at systemic levels. Furthermore, it deflects potential organisational accountability. Holistic programs across multiple time points are recommended.

3. Human needs. Feedback from a wellbeing intervention focused on the discussion of wellbeing strategies, found that rather than the content, participants valued being part of a community, sense of belonging, and felt validated in their perceptions of stress (COVID-19 or otherwise). Most of all, they felt that sharing laughter and taking a moment to 'pause' increased work productivity.

As the impact of COVID-19 continues, and the focus shifts towards 'new ways to work', creating engaged and resilient teams and hybrid workforces, it is imperative that wellbeing interventions evolve to align with the realities of how stress is truly experienced and the manifestations for individuals at work and home (McKinsey Global Institute, 2021; Muller & Brough, 2017).

1. Occupational versus organisational stress. 'I love my job, but I hate the workplace' - from a practitioner standpoint, this profound comment differentiated between the occupation (provides internal motivation) and the organisation (provides external motivation) stress. Wellbeing is threatened when there is a misalignment between the two, especially when the latter is out of their control. Proactive interventions to improve coping mechanisms that incorporate control and influence frameworks are necessary.

2. Tripartite model. It is imperative that primary interventions that directly address the changing world of work, evaluate work roles, team culture, monitor work demands and available resources occur. Not implementing an integrated approach to wellbeing interventions can hinder the effectiveness of secondary and tertiary programs.

3. Human needs. Whilst workplace stress is not a novel concept by any means, individuals report increased feelings of exhaustion and burnout, contributing to negative workplace behaviours (OECD, 2021). It is important to actively discuss appropriate workplace behaviours, including meetings, virtual interactions and all communication methodologies.

*Keywords: Practitioner, stress, interventions*

## Symposium S076

### Attitudes and Mindsets During Organisational Transformation

Hui Zhang, The University of Sheffield, UK

science

Organisational transformation is increasingly common in workplaces due to various triggers (e.g., digital technologies, environmental conditions). Employees are crucial in transformational processes because they are the actors who implement the changes made by organisations. Employees' acceptance of or resistance to a transformation is influenced by their attitudes, which reflect their mindsets and beliefs about personal and contextual resources available within a transformation (e.g., self-efficacy, organisational support; Edison & Geissler, 2003; Solberg et al., 2020). This symposium aims to explore what and how personal and contextual factors affect employees' attitudes towards organisational transformation via a literature review, measure development, empirical and intervention studies.

This symposium starts by providing a comprehensive overview of the attitudes research landscape within the context of digital transformation (Zhang et al.). Digital transformation is a prevalent process within organisations that has been made possible by the extensive use of digital technologies (e.g., AI, automation, hybrid cloud, and other digital technologies). Since employees have a significant impact on the actual use of new technologies and implementation of digital tools, there is a need to understand their attitudes to digital transformation processes. This review thus aims to map the key definitions and operationalisations of digital attitudes, what factors influence digital attitudes, and the consequences of digital attitudes.

Next, this symposium introduces a new comprehensive measure of employees' digital attitudes from a multilevel and multidimensional perspective (Grozev et al.). In this measure, personal attitudes towards technology are combined with people's beliefs about the nature of resources available within the context of digital transformation at four levels – individual, group, leader, and organisational. This multilevel and multidimensional measure forms the basis of a toolkit that aims to pinpoint maladaptive digital attitudes, the findings from which could then be used to enhance transformation processes and attitudes within organisations.

The impact of contextual factors on employees' attitudes is further supported by an empirical study that investigates how resources at the leader level play a significant role in relation to employee attitudes and outcomes (Adamska). This empirical study examines the interaction effects of leaders' and employees' mindsets (Dweck, 1999) on employees' job burnout during the COVID-19 pandemic. When employees had to quickly adapt to new digital work solutions (i.e., the way employees work changes), leaders' growth mindset may act as a valuable resource in protecting employees from job burnout and in building a supportive workplace culture. This finding suggests that organisations might benefit from undertaking interventions to stimulate leaders' growth mindsets.

Finally, this symposium presents an intervention study (Quataert et al.). The mindset intervention - 'Digital For All' - was developed to stimulate positive beliefs about digital transformation and digital skills. In order to benefit from the ongoing introduction of novel technologies and organisational transformation, it is important for employees' mindsets to be growth-orientated (i.e., viewing transformation as providing opportunities and resources for professional growth). These positive beliefs influence the extent to which employees engage in transformation and allow them to respond to transformational challenges in an effective manner. Managers and employees can use the mindset

intervention to proactively stimulate and leverage growth mindsets for organisational transformation.

The symposium closes with an open discussion on how personal and contextual resources can be improved to promote employees' positive attitudes towards organisational transformation. Providing resources at all levels of an organisation is important to create a work environment that is conducive to individual acceptance of the changing world of work caused by organisational transformation.

This symposium showcases new research on attitudes and mindsets in organisations. The literature review and the case study provide valuable insights into the importance of personal and contextual resources on employees' attitudes in a time of organisational transformation. The new measure toolkit offers a road map that identifies what resources should be improved and action plans for prompting employees' positive digital attitudes. The mindset intervention serves as a starting point for improving personal resources and promoting employees' growth mindset in the context of digital transformation. Future research can extend these study findings to consider both personal and contextual resources as part of an action plan to cultivate a work environment that promotes more positive attitudes to organisational transformation.

Vladislav Grozev

*Keywords: Attitudes, Mindsets, Organisational Transformation*

## Paper 1

### Digital Attitudes: A review of the literature and a research agenda

Hui Zhang, The University of Sheffield, UK; Jo Yarker, Affinity Health at Work, UK; Nathan Palmer, Affinity Health at Work, UK; Vladislav Grozev, Karina Nielsen & Carolyn Axtell | The University of Sheffield, UK

#### Theoretical background

In recent years, understanding the dynamics that can influence employees' acceptance of new technologies and digital changes have become increasingly important due to rapid digital transformation in organisations (Maran et al., 2022; Paganin & Simbula, 2021). The majority of research available on the topic has focused on why and how employees' beliefs about technological attributes (e.g., ease of use, usefulness; Mohr & Kuhl, 2021) and personal resources (e.g., digital self efficacy, mindsets; Edison & Geissler, 2003; Solberg et al., 2020) can influence employees' technology acceptance and adoption. More recent research proposed that employees' technology acceptance is also based on their beliefs about the wider resources within the context of a digital transformation. That is, employees' beliefs about the nature of resources available at all levels of an organisation create variation in the way employees engage in or withdraw from a digital transformation (e.g., supervisor support, organisational support; Guo et al., 2019; Solberg et al., 2020). We refer to these beliefs towards digital transformation as an employee's "digital attitudes".

#### Research goals and why the work was worth doing

Research of employees' digital attitudes has been narrowly focused on individuals up until recently. Thus as we enter this era of development that studies the impact of contextual factors on digital attitudes, we review the literature with the goal of clarifying the state of the art in the field. More specifically, we examine: (1) What are existing conceptualizations and operationalisations of digital attitudes? (2) What are the consequences of digital attitudes? (3) What is known about contextual factors (individual, group, leader or organisational) which affect digital attitudes?

Understanding employees' attitudes towards both technology and how organisations undertake digital transformation can help individuals and organisations develop action plans and cultivate conditions at all levels of an organisation that yield employee engagement in digital transformation processes.

#### Methods

The Preferred Reporting Items for Systematic Reviews (PRISMA) was used to guide the reporting of this review (Pageet al., 2021). We identified search terms through a scoping review and discussion with the research team. These terms were used to search the ABI, Academic Search Complete, Business Source Premier and PsychInfo databases. All searches were limited to peer-reviewed, academic journals in English that were published from January 2016 until the data of the search in January 2022. 180 titles from the searches of these databases were collected in Zotero and then deduplicated (n=132). We identified K =40 studies that met the inclusion criteria of our review. Of the identified papers, 6 were reviews (a combination of meta-analyses and systematic reviews), 31 were research studies using cross-sectional data and 3 were case studies of individual organisations.

#### Results, Conclusions, and Implications

Results and Conclusions. In general, there was a broad range of literature on employees' attitudes about technology itself and technology acceptance / resistance (Venkatesh et al., 2003), but very little studying employees' attitudes towards digital transformation processes and the wider resources (Solberg et al., 2020), which has been a newer addition to the literature. Our review revealed research on digital attitudes using quantitative measures is limited and fails to consider the interaction of resources available at all levels of an organisation, in affecting employees' attitudes and behaviours during a digital transformation. Consequently, we propose the need for a new integrative definition with a sound theoretical basis to better operationalize digital attitudes for future research. Finally, we advocate the importance of attending to the context in which employees are embedded, including psychological climate, supervisor support, organisational support, industry factors, and social influence.

Implications. It is well recognised that many digital transformations often struggle to deliver on their aims because people are reluctant to accept and use technological innovations (Venkatesh et al., 2003). Enabling people to develop more positive digital attitudes will help improve inclusion of different people in digital transformations (Solberg et al., 2020). It will also allow organisations who are making greater use of technology to identify those in need of support and help them to deal more effectively with changes associated with introducing new technologies (Solberg et al., 2020).

#### Relevance to the Congress Theme

Much has been said about the impact of new technologies and digital transformation on jobs and the future of work. By understanding employees' digital attitudes towards digital transformation and the wider resources, individuals and organisations can positively shape attitudes and prepare employees to work alongside new technologies and digital transformation.

#### Relevant UN SDGs

Decent work and economic growth

Good health and wellbeing

*Keywords: Digital Attitudes, Personal and Contextual Resources, Digital Transformation*

## Paper 2

### Development and Validation of a New Measure of Digital Attitudes in Organisations

Vladislav Grozev & Hui Zhang | The University of Sheffield, UK; Jo Yarker & Nathan Palmer | Affinity Health at Work, UK; Karina Nielsen & Carolyn Axtell | The University of Sheffield, UK

#### Research goals and why the work was worth doing

Digital attitudes – or employees' attitudes towards digital transformation in their organisation – are important predictors of the success of digital transformation. Nonetheless, the majority of current scales that measure attitudes towards technology at the workplace focus only on a specific attitude or are not specifically oriented towards digital transformation. Thus, in order to measure attitudes towards digital transformation at the workplace more comprehensively, we sought to create a new measure of digital attitudes in organisations.

#### Theoretical background

A current review of the digital attitudes literature (Zhang et al., this symposium) revealed that while different digital attitude scales exist, those scales capture only some attitudes (e.g., digital mindsets, computer self-efficacy, personal innovativeness) that employees may hold towards the implementation of new digital tools in their workplace. The review also revealed that the effect of digital attitudes on successful digital transformation will be influenced by personal (e.g., experience) and contextual (e.g., supervisor support) factors at the workplace. Therefore, in the new measure we considered employees' previous experiences with new technology being introduced to their workplace and we differentiated between the support given to employees at different levels of the organisation through incorporating the IGLO framework (referring to the individual, group, leader and organisational levels of an organisation; Nielsen et al., 2017).

#### Methodology and results obtained

In order to create and validate our augmented measure of digital attitudes in organisations, we are following best practice recommendations for measure development (Wright et al., 2017). We first examined the other scales measuring digital attitudes in organisations and adapted their items to refer explicitly to digital transformation. Next, we conducted interviews with employees who had undergone digital transformation, which prompted us to add new items which referred to the perceptions of the support given to employees at IGLO levels, as well as items that referred to previous experience or risks and opportunities of technology adoption. Conceptual validation was ensured through administering all items in a questionnaire to eight employees who had undergone digital transformation and asking for their feedback using semi-structured interviews immediately afterwards. After revision, we ended up with a list of pre-existing and new items that we believed measure digital attitudes. We also added measures of closely related constructs to digital attitudes (e.g., global mindset) as well as established outcome factors of digital attitudes in the literature to establish concurrent validity.

We invited Prolific participants who had undergone digital transformation in their workplaces to participate in two surveys in order to establish predictive validity for our new measure. Exploratory factor analysis and reliability analysis will be conducted on the Time 1 data, and confirmatory factor analysis and reliability analysis will be conducted on the Time 2 data. To establish measurement invariance between samples, we are also currently administering the questionnaires in an

organisation that is undergoing digital transformation. Due to ongoing data collection, we will present information about the psychometric properties of the measure (reliability, construct and concurrent validity) during the symposium.

#### Limitation of the present research

A limitation of our work is that we conducted our initial measure validation test with a convenience sample from a survey panel site rather than with a sample from a particular institution. As the sample was heterogeneous in terms of workplaces, the degree to which their workplaces have undergone digital transformation may also vary. Such discrepancies in the timing of digital transformation could affect the factor structure of the data and produce measurement variance between the initial sample and the sample from our partner organisation.

#### Conclusion

Our goal is to produce a new measure of digital attitudes in organisations. Firstly, we believe that our new measure will help organisations manage digital changes more effectively and create interventions to develop more positive attitudes towards technology within the organisation. Finally, we hope that this measure will help other researchers in finding ways to transform maladaptive digital attitudes.

#### Relevance to the Congress Theme and United Nations Sustainable Development Goals

The current movement towards Industry 4.0 has predetermined the central role of technology in the workforces of tomorrow, yet we maintain that the successful adoption of this technology is dependent on employees' accommodating digital attitudes. Thus, we envision that the development of our measure will help the successful adoption of technology at the workplace and facilitate the move towards Industry 4.0 as we are working towards the United Nations Goal of ensuring decent work and economic growth at the workplace.

*Keywords: Digital Attitudes, Personal and Contextual Resources, Digital Transformation*

### Paper 3

#### **When leaders' and employees' mindsets don't match – influence on the job burnout during the COVID-19 pandemic**

Katarzyna Adamska, Norwegian Business School, Norway

##### Research goals and why the work was worth doing

Burnout is a state of chronic exhaustion at work. People are more likely to be burned out in situations of little control. COVID-19 pandemic is such a crisis situation, especially that many people must now work remotely and may feel disconnected from their leaders and other support. We need to identify psychological resources, which might make employees more resilient. This research examined if leaders' and employees' growth mindset can be such a protective buffer and under what circumstances.

##### Theoretical background

Fixed and growth mindset (also called entity and incremental implicit theories) are beliefs about ability of people to change the levels of their skills (Dweck, 1999). While growth mindset (GM) assumes that it is possible to increase our basic ability and attributes (intelligence, personality, skills), fixed mindset (FM) assumes they are stable and unlikely to change. While majority of research is grounded in educational setting, GM has also been linked with positive outcomes in the work context, i.e. GM leaders provide better coaching to employees (Heslin et al., 2006). I predicted that because GM increases the sense of agency in employees, those with higher GM will suffer from less burnout during COVID-19 pandemic. I expected this influence to be moderated by perception of leader's fixed mindset and one's intolerance of uncertainty (a personality-like variable indicating how anxious one feels in uncertain situations).

##### Design/Methodology/Approach/Intervention

Study 1: The data was collected as a two-wave online survey at a retail organization in Norway. GM, FM, leader's perceived FM, and intolerance of uncertainty were measured at T1. Burnout was measured at T2. I controlled for self-efficacy. The survey yielded 116 matched responses across both time points.

Study 2: The data was collected via Prolific and resulted in a sample of 406 UK-based employees. GM, FM, leader's perceived FM were measured at T1 and burnout was measured at T2 in a two-week interval.

##### Results obtained

The results were obtained by testing moderated regression models using the PROCESS macro (version 3.5) for IBM SPSS (version 27). The key findings consistently supported in both studies were that employees FM and perceived manager's FM positively predicted burnout reported two weeks later. GM alone was only a significant (negative) predictor of burnout in Study 2. Additionally, Study 1 (but not Study 2) found an interactive influence of GM and perceived manager's FM, where employees inclined to strongly agree with GM statements paired with managers they perceived as fixed reported highest burnout. Contrary to expectations, there was no interaction between IU and employees' GM or FM when burnout was predicted in Study 1.

##### Limitations

The data was survey-based. Considering the recent popularity of the GM concept in organizations and potential for the GM answers being more socially desirable than FM, it may be more useful to ask for behavioral examples of GM, rather than assess it by survey.

I only assessed perceived leader's mindsets rather than the leaders' own self-rating of mindset. Future studies could assess leader's mindset directly which can shed light on how those self-assessments relate to employees' perceptions.

#### Research/Practical Implications

Mindsets can be trained, so if perceiving a leader as less fixed relates to less burnout in employees, it may be a cost-efficient intervention. Perception of the leader's mindset seems to predict burnout more consistently than employees own GM or FM, which suggests interventions may predominantly focus on leaders.

#### Relevance to the Congress Theme

Since the pandemic the world is changing towards more remote solutions for many types of work. This can lead to burnout in some employees who feel unsupported. This research suggests that in such crisis situations, leaders perceived as fixed may have a negative influence on employees such that they report more burnout. Training leaders away from fixed mindset so that they rather project a message of growth might be a valuable resource when we are building the culture of the future workplaces, which are 1) robust during crisis 2) supportive for remote work solutions.

#### Relevant UN SDGs

Good health and well-being

Decent work and economic growth

*Keywords: Mindsets, Psychological Resources, Job Burnout*

## Paper 4

### **DIGITAL FOR ALL: Developing and Evaluating an Intervention to Stimulate the Digital Growth Mindset of Knowledge Workers**

Sarah Quataert, Koen Dewettinck, Dirk Buyens & Valérie Legrand | Vlerick Business School, Belgium

In a rapidly changing and digitalising world of work, in which new professional roles are emerging and skill requirements are shifting, change readiness and learning motivation have become crucial assets for employees. In order to thrive at work, workers need a growth mindset (Dweck, 2007), characterised by positive self-beliefs, such as high self-efficacy and strong malleability beliefs about one's ability to learn new skills. A digital growth mindset, in particular, which we define as having a growth mindset towards digitalisation and digital skills, has become a necessity for workers in all industries. This is especially the case for knowledge workers, as their jobs are becoming more complex due to automation and new business models, leading to new skill demands that are more technical, digital, and interpersonal.

Consequently, there's a growing interest within the field of Work and Organisational Psychology when it comes to developing workplace interventions that stimulate positive self-beliefs, as they positively impact people's motivation to learn and actual learning behaviour (Bandura, 1977; Burnette, O'Boyle, VanEpps, Pollack, Finkel, 2013; Mangels, Butterfield, Lamb, Good, Dweck, 2006; Rigolizzo, 2021). A related challenge is the quest for effective yet pragmatic methods to assess the effectiveness of these interventions and understand why certain interventions work while others don't (Berge, 2008; Griffin, 2011).

Relying on the Double Diamond Process (British Design Council) and following an iterative process of prototyping and user testing, the online mindset intervention 'Digital For All' (DFA) was developed in 2020-2021, to positively shape mindset beliefs of knowledge workers in the context of digital transformation and digital skills. The intervention consists of 8 different learning modules, all related to the general concept of the growth mindset: (1) digital awareness, (2) digital technology, (3) digital growth mindset, (4) digital (re)thinking, (5) digital self-leadership, (6) careers in the digital world, (7) digital resilience and (8) digital data.

From February to June 2022, DFA has been implemented in several organisational contexts to evaluate its effectiveness by means of case studies. In line with the formulated selection criteria and striving at a diverse set of cases (diversity in terms of employment status, function, age and gender), the research team selected and analysed a total of 12 cases. We relied on multiple data sources for the case studies: interviews with participants, interviews with observers or coaches who were part of the intervention, and survey data. Process tracing analysis (Beach & Pedersen, 2013) was used as a within-case method for theory-based impact evaluation to understand how our intervention led to increased growth mindset beliefs in most of our cases, and why positive effects were missing in others. Process tracing is seen as a promising methodological avenue for empirically studying causal mechanisms, especially in social science disciplines (Beach & Pedersen; 2013; George & Bennett, 2005; Bennett, 2008).

As part of the symposium 'Attitudes and Mindsets During Organisational Transformation', we will first introduce our developed DFA intervention to practitioners and scholars in the field of Work and Organisational Psychology. Secondly, we will provide an overview of the insights and results derived from the conducted case studies, and we will elaborate on the causal mechanisms explaining how

DFA has led to its hypothesised effects. Thirdly, we will share our lessons learned with the audience and reflect on limitations of our research. Doing so, we want to inspire practitioners seeking for effective and rigorous ways to support employees in futureproofing their skillset via mindset interventions. Also, we want to inspire academics interested in exploring process tracing as a research method for evaluating those interventions. For Work and Organisational Psychologists conducting research in real-world business settings, process tracing might be an interesting approach to assess and increase the effectiveness of certain practices in a profound yet pragmatic manner.

We hope to contribute to two Sustainable Development Goals, as described by the United Nations. First, our work is relevant in relation to 'Decent work and economic growth', by encouraging employees to invest in their employability and considering growth mindsets as a prerequisite for sustainable employment and economic growth. Second, we will contribute to 'Quality education', considering DFA as a training intervention stimulating lifelong learning.

*Keywords: Digital Mindsets, Intervention, Digital Transformation*

## Symposium S058

### **New horizons of crafting: Needs-based crafting in changing working lives**

Miika Kujanpää, School of Business, University of South-Eastern Norway

science

#### Contributions:

The changing world of work presents multiple challenges and opportunities for employees and leaders. This trend requires them to make proactive adjustments in order to meet psychological needs. Recently, a conceptual framework for needs-based crafting has been developed based on the Integrative Needs Model of Crafting (de Bloom et al., 2020; Kujanpää et al., 2022). More specifically, employees engage in efforts to shape their job and off-job lives in order to meet DRAMMA needs (i.e., detachment, relaxation, autonomy, mastery, meaning, and affiliation; Brauchli et al., 2022; Newman et al., 2014). As such, needs-based crafting provides a holistic perspective on employees' crafting efforts across different life domains. Moreover, the concept can be extended to examine leaders' proactive efforts focused at shaping their employees' psychological needs, thereby having the potential to lead to new conceptualizations. Distinct approaches for measuring crafting efforts and outcomes can also be developed based on needs-based crafting. In this symposium, we present three novel contributions to the crafting literature, each examining needs-based crafting in a different context: in the first contribution, Kerksieck et al. examine future-oriented job crafting based on the DRAMMA model. They studied 18.000 employees in 35 countries, investigating the role of anticipated needs-based crafting as the perceived opportunity to shape their future of work. To understand the systematic spread of such crafting efforts around the globe, they assess how crafting is related to horizontal/vertical individualism and collectivism (HVIC) in the surveyed countries. In the second contribution, Toyama et al. focus on leaders' crafting efforts using the DRAMMA model. They conducted a pilot study among Finnish managers to investigate whether leaders craft their own leadership behaviors with the aim of meeting psychological needs of their subordinates. Their study provides preliminary evidence on the psychometric characteristics of a measure of needs-based leadership and the scientific utility of the concept. In the final contribution, Kujanpää and Olafsen examine off-job crafting efforts in the context of recovery experiences in a daily diary study at the within-person level among Norwegian employees. Complementing the literature focusing on recovery experiences, they discuss how needs-based crafting can act as a proactive strategy for recovery attainment, with potential benefits for occupational health and performance.

**Relevance to the Congress Theme:** Work-related challenges may become increasingly individualized and personal in the future of work, with a need for employees and leaders to manage their own wellbeing and to proactively adjust to changes across life domains. The concept of needs-based crafting can be helpful in understanding how individuals adapt to such challenges and take action in order to meet their psychological needs.

**Research and practical implications:** Needs-based crafting is a dynamic concept that is relevant for employees and leaders to meet new challenges occurring in the future of work. As needs-based crafting centers on shaping psychological needs, it can be flexibly used to adjust to changes both in the self and the environment and can be trained in interventions.

**Conclusions:** Needs-based crafting is a newly developed conceptual framework that explains how employees and leaders proactively adjust job and off-job time in order to meet psychological needs. Such proactive adjustments through needs-based crafting efforts may be increasingly important in the face of pressing societal and economic crises. Combining organizational efforts (e.g., leadership

crafting to support subordinates need satisfaction) with employees' individual crafting efforts (e.g., future-oriented crafting, crafting recovery time) may yield best results in terms of producing sustainable job and off-job lives that offer a plenty of opportunities for need satisfaction.

Georg F. Bauer

*Keywords: Needs-based crafting, Psychological needs, Job crafting*

## Paper 1

### **Future-oriented job crafting. How crafting shapes employees' perception of the future of work. A survey on 18.000 employees in 35 countries.**

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#### Theoretical background

The future of work holds challenges but also opportunities for individualized work design (Demerouti, 2022; Parker & Grote, 2022; Schlogl et al., 2021). We are interested in employees' perspectives regarding their agency for change concerning the future of their work. Particularly, do they foresee opportunities for pro-actively shaping (crafting) this future of work (Parker & Grote, 2022) according to their own needs and standards?

We build on pioneering needs-based job crafting research (De Bloom et al., 2020; Newman et al., 2014). Assessing by how far employees anticipate that they can pro-actively shape the future of their work ("future-oriented job crafting") to meet their DRAMMA needs (crafting for detachment, relaxation, autonomy, mastery, meaning, affiliation; Kujanpää et al., 2020). Anticipating the chance to adjust proactively and craft work can influence employees' subjective perspective of the future of work. Therefore, future-oriented job crafting may be associated with people's expectations of future opportunities at work (Zacher & Frese, 2011). Further, we are interested in how future-oriented job crafting as an individual-level behaviour is related to participants' appraisal of horizontal/vertical individualism and collectivism (HVIC) in their respective societies (Triandis & Gelfand, 1998). Consequently, we will study HVIC as a moderator of the relationship between future-oriented job crafting and expected future opportunities at work.

**Design/Methodology:** We surveyed 18,100 gainfully employed individuals in 35 countries. Combining established and newly developed scales, we will assess i) if employees intend to job craft for meeting their DRAMMA needs in the future (De Bloom et al., 2020) by using an adapted 18-item scale that measures crafting for these six needs, ii) how this is associated with employees rating on the future opportunities at work scale (Zacher & Frese, 2011), and iii) the role of HVIC for such future-oriented job crafting around the globe.

**Results obtained:** i) taking a global perspective involving all countries at once, we identified significant associations between future-oriented job crafting and HVIC ranging from  $r = .17$  to  $.51$  ( $p < .01$ ) across all crafting DRAMMA needs. ii) taking a country-specific perspective, we identified associations between future-oriented job crafting and future opportunities at work ranging from  $r = .34$  to  $.68$  ( $p < .01$ ).

#### Limitations

Our study used self-report measures, which might limit accuracy, and is cross-sectional. Cultural differences in response to this self-report survey might be present (Harzing, 2006).

#### Conclusion – research and practical implications

Addressing these questions will help identify and promote beneficial individual-level strategies and behaviours for employees to adjust their situation at work proactively. In this way, our research can

support society at large and individuals themselves to better prepare for changes and challenges due to the accelerating digitalization processes in the work context.

Relevance to the Congress Theme

Future-oriented organizational behaviours such as future-oriented job crafting are linking very well to this upcoming EAWOP conference topic. Moreover bottom-up work design through job crafting offers an important behaviour for adapting to e.g. technological change (Parker & Grote, 2022).

Relevant UN SDGs

Good Health and Well-being / Organisational Design and Development

*Keywords: future of work, needs-based crafting, global survey*

## Paper 2

### **Shaping leadership behaviors to meet the psychological needs of subordinates: Toward a concept of proactive leadership design**

Hiroyuki Toyama, Katariina Salmela-Aro & Katja Upadyaya | Faculty of Educational Sciences, University of Helsinki, Finland

Theoretical background: Proactive behavior—self-initiating change, or “making things happen,” with the aim of achieving a different future (Parker et al., 2010)—has been prized by organizations for its potential advantages to both employees and organizations. In particular, such behavior among leaders is of key importance for maintaining effective functioning, competitiveness, and the development of organizations in today’s increasingly complex and dynamic job landscape. Nevertheless, in proactivity research, little attention has been directed toward leaders’ proactivity. Where leadership roles are concerned, it is possible that proactivity may have different meanings than those held by ordinary employees in terms of its content and purpose (Wu & Wang, 2011). Thus, it is important to shed light on leaders’ proactive behavior in their leadership roles. In the present study, we introduce the concept of proactive leadership design, namely leaders’ proactive changes in their leadership behaviors aiming at subordinates’ psychological needs satisfaction. By combining proactivity theory (the basic ideas of the Integrative Needs Model of Crafting; de Bloom et al., 2020) and leadership models based on psychological needs theory (e.g., the Self-Determination Theory; Deci & Ryan, 1985), we argue that leaders may proactively shape their own leadership behaviors in order to meet the psychological needs of their subordinates (e.g., DRAMMA needs: detachment from work, relaxation, autonomy, mastery, meaning, and affiliation; Kujanpää et al., 2020; Newman et al., 2014), and this may ultimately contribute to the optimal functioning of the subordinates or teams they lead. In this presentation, we provide an outline of this new concept along with preliminary evidence on the scientific utility of the construct.

**Methodology:** A cross-sectional pilot study was conducted with 150 IT managers in 2022. Participants completed online questionnaires on job crafting, leadership crafting, work engagement, psychological needs satisfaction at work, team effectiveness, team proactivity, and followership. The data were analyzed using SPSS 27.0.

**Results:** The Proactive Leadership Design Scale (PLBS) showed sufficient internal consistency ( $\alpha = .92$ ). The mean of the overall scale was 4.1 (SD = .44). The scale showed a moderate correlation with the Needs-based Job Crafting Scale ( $r = .44$ ,  $p = .001$ ). The correlation analysis where age, gender, and needs-based job crafting were controlled, showed that off-job crafting dimensions are significantly related to higher team well-being, team performance, and positive followership.

**Limitations:** The main limitations of this study are the use of a small sample obtained exclusively from IT managers and the application of a cross-sectional study design that does not allow for inferring the causality of observed associations.

**Implications:** The results of this study suggest that leaders may proactively shape their leadership behaviors targeting the psychological needs satisfaction of their subordinates. This in turn may contribute to team well-being, performance, and followership. The concept of proactive leadership design extends traditional taxonomic leadership approaches that rely heavily on subordinates’ evaluations by shedding light on leaders’ subjective experiences in shaping their leadership on their own initiative.

Originality/Value: This study introduces a new concept, proactive leadership design, which describes leaders' proactive efforts to shape their leadership behaviors in a way that meets subordinates' psychological needs.

Relevance to the congress theme:

Organizations are facing tremendous challenges in today's increasingly complex and dynamic work environment. In this context, proactive leaders are crucial to ensure organizational growth and success. This study suggests that leaders may be able to take proactive steps to address these challenges by making deliberate efforts to shape their leadership behaviors to support the psychological needs of their subordinates.

*Keywords: Leadership, needs-based crafting, psychological needs*

### Paper 3

#### Take action, recover well? The role of proactive recovery strategies for day-level recovery processes

Miika Kujanpää & Anja H. Olafsen | School of Business, University of South-Eastern Norway

**Purpose:** As a process of reducing and eliminating physical and psychological strain symptoms caused by work (Sonnetag & Fritz, 2007), recovery from work is increasingly important in today's knowledge society where the boundaries between work and off-job time are often blurred. Over the past decade, a research stream has highlighted the importance of such recovery processes for employees' occupational health and performance (for a review, see Sonnetag et al., 2022). Recent research has called for studies that focus not only on whether experienced recovery from work is directly beneficial for occupational health and job performance, but also on more intricate person-level processes that can better capture how recovery is enacted in daily life (Steed et al., 2021). Notably, although experiences of recovery have been widely studied, whether and how employees may proactively seek to attain these experiences in daily life has not been examined. In this study, based on the Integrative Needs Model of Crafting, Conservation of Resources theory, and Self-Determination Theory as our frameworks, we focus on daily proactive off-job recovery strategies (i.e., shaping off-job time in a proactive and self-initiated way in order to attain recovery experiences) and their role in benefiting daily recovery experiences, occupational health, and performance.

**Methodology:** Daily diary measurements were conducted among a sample of 383 Norwegian employees across a period of two weeks in February 2022 (from Monday to Thursday, i.e., eight measurement days in total). Participants answered questionnaires on occupational health and performance during afternoons (at work), and questionnaires on occupational health, and recovery strategies and experiences during evenings (at off-job time). Proactive recovery strategies were measured with the recently validated Needs-based Off-job Crafting Scale. Mediation models are tested in Mplus 8.7 to examine the daily relationships between recovery processes, occupational health, and performance at the within-level.

**Results:** Proactive recovery strategies, recovery experiences, and occupational health and performance indicators show sufficient variability both within and between persons. Preliminary results show that daily proactive recovery strategies are positively associated with daily recovery experiences. Moreover, using proactive recovery strategies during off-job time is positively related to occupational health indicators measured in the evening. Mixed results are found regarding the spillover effects of daily proactive recovery strategies for occupational health and work performance on the following day.

**Limitations:** Our data collection relies on self-report questionnaires, thus providing initial evidence for the role of proactive recovery strategies in daily recovery that could be complemented with other methods in future studies (e.g., using objective measures).

**Implications:** This study advances the field of job recovery by focusing on daily recovery processes (i.e., proactive strategies for recovery, recovery experiences). Taking care of daily recovery can be challenging in a changing and intensifying working life. Leaders, HR experts, and occupational health practitioners can benefit from learning about recovery processes as they take place in "life as it is lived".

Originality/Value: So far, recovery has only rarely been investigated from the perspective of proactive recovery efforts. This study focuses on how employees may seek to attain recovery experiences through proactive recovery strategies, and whether these strategies are successful, complementing earlier studies on positive effects of recovery experiences which have generally not commented on how employees attain those experiences.

Relevance to the congress theme: The context of work and off-job time is rapidly changing due to technological advances and unforeseen challenges, such as the COVID-19 pandemic. By crafting their recovery time, employees can meet some of these challenges proactively in order to promote their health and wellbeing among different, changing life circumstances.

Relevant UN SDGs: Good health and wellbeing

*Keywords: Proactive recovery strategies, recovery experiences, off-job crafting*

## Symposium S122

### **Time is on your side! How adopting a dynamic lens can challenge our understanding of workplace phenomena**

Joeri Hofmans, Vrije Universiteit Brussel; Omar Solinger, Vrije Universiteit Amsterdam

science

**State of the Art:** Around 500 BC, Heraclitus famously stated “Change is the only constant in life”, and what is true for life in general is also true for our working lives. Indeed, virtually all workplace phenomena are in constant change. Think about how our motivation or performance changes from one moment to the next. Or how socialization or organizational change are processes that dynamically unfold over time. As these examples show, many of the key constructs of interest to work and organizational psychologists emerge, evolve, and dissolve over time. Oddly enough, most of our studies have factored out such dynamism. This has important implications because it restricts our understanding of key constructs and phenomena in our field. Fortunately, however, we stand on the edge of a new frontier. Thanks to theoretical (e.g., theories based on dynamic system thinking), methodological (e.g., experience sampling and sensor research), and statistical advancements (e.g., continuous time modeling), a temporal dynamic perspective on workplace phenomena no longer is a pipe dream.

**New Perspectives/Contributions:** This symposium brings together five studies that adopt a dynamic lens to a variety of workplace phenomena, showcasing the relevance of time and dynamics in understanding work. For each of these phenomena (i.e., counterdispositional behavior, witnessed incivility, motivation, organizational change, and leader-member exchange), the authors demonstrate how adopting a radically dynamic lens challenges and/or expands our current knowledge. Moreover, several of the talks are characterized by substantive-methodological synergy, with the authors demonstrating how novel methodological and statistical tools can help in the study of workplace dynamics.

**Presentations:** In the first presentation José Navarro will present an event-based approach to studying emotions at work. Using a diary study among 58 employees (N = 751 repeated measurements), they show that different situational features trigger different discrete emotions, thereby providing support for the importance of events in generating basic emotions. In the second presentation Joanna Ritz will discuss the theoretical and practical value of looking at organizational change through the lens of dynamic systems theory. By doing so, she argues, research can shift from simply describing organizational change to explaining and predicting it. In the third presentation, Sarah Cameron will present a radically dynamic and dyadic perspective on Leader-Member Exchange (LMX) relationship development. Using narrative analysis of interviews with 32 leaders and followers, five prototypical narratives of LMX development were found, with these narratives offering a detailed explanation of how LMX relationships of varying quality develop. In the fourth presentation, Evy Kuijpers will present the findings of two experience sampling studies in which she studied the affective consequences of engaging in counter-typical conscientiousness-related behaviors. Studying concurrent, delayed, and cumulative effects, she demonstrates that self-rated conscientious behavior is generally beneficial, even if this behavior goes against one’s typical behavior. In the final presentation, Yara Bouckaert discusses the findings of a longitudinal study in which she studied the dynamic relationship between witnessed incivility and instigated incivility. Her findings show that observing how others perform incivility acts can explain why observers conduct incivility acts later themselves.

Research/Practical Implications: Adopting a dynamic lens when looking at workplace phenomena helps us understand what happens, how things happen, and why things happen at the workplace. Such knowledge clarifies how and when organizational interventions should be set up.

*Keywords: dynamic, time, change*

## Paper 1

### **Dynamic Interplay between Emotions and Motivation at Work: An Application of the Affective Events Theory**

José Navarro, David Leiva & Rita Berger | University of Barcelona; Rita Rueff-Lopes, Esade Business School

Research goals and why the work was worth doing: There is an important body of evidence about the changes of work motivation over time. At short term (e.g., hours, days) there has been estimated that around the 54% of the variance in work motivation can be attributable to the within-participant level (Navarro et al., 2022). However, the causes of these motivational changes continues to be unclear. A serious potential candidate could be the emotions and affective reactions that employees experience at work. The link emotions/affective reactions and motivation is a classic in psychological literature but it has not been fully explored in work setting. For example, there already are empirical evidence about the relation between affect (positive and negative) and work motivation, but little is know about the role of discrete and basic emotions (e.g., joy, anger, surprise).

Theoretical background: The affective events theory (AET; Weiss and Cropanzano, 1996) is a framework that allows us to understand the causes and consequences of affect and emotions in work contexts. This framework proposes that events happen at work that are not neutral generating affective responses that, in turn, influence on employees' behaviors and attitudes. As a theory AET is reputed in the field having encouraged a lot of empirical research. Work attitudes such as job satisfaction, for instance, is now recognized as a consequence of the previous affective experience lived by the employee. There is also some evidence of this affective influence on motivational related phenomena (i.e., attention) but this theory has not been directly apply to understand work motivation as we have trying to do in this research. This would be the main goal here.

Methodology: Using a diary study 751 repeated assessments were collected from 58 employees from different professions. In order to measure emotions, we used the event reconstruction technique (Kahneman et al., 2004). Participants had to remember an important recent event and answer then about how they felt. We measured the six basic emotions (i.e., joy, anger, sadness, disgust, fear and surprise) and also some important dimensions of that event (i.e., relevance, novelty). After we asked about the task the employee was doing at that moment and asked about their level of motivation about that task using a 3-item scale created ad hoc for this purpose (multilevel reliability RkF = .98). All the data are analyzed at within-participant level.

Results obtained: The results found support of the importance of events in generating emotions. Specifically, novelty, valence (positive or negative) and relevance of events are significantly related to all the basic emotions (anger, joy, sadness, fear, disgust and surprise). For example, novel events produce the reaction of surprise ( $r = .39, p < .01$ ); or relevant events produce reactions of joy ( $r = .24, p < .01$ ) or fear ( $r = .19, p < .01$ ). In addition, some of these emotions, for example joy, are also significantly related to task motivation ( $r = .13, p < .01$ ).

Limitations: Sample size and type (e.g., the majority of workers can be characterize as white-collar workers) have to be amended in future research.

Conclusions: AET can be a fruitful framework to understand motivational dynamics at work. From a practical point of view, the theory and these results invite us to consider two elements in the people management field. First, we should pay attention to the emotions that our employees experience on

a daily basis, for example, having assessment systems for this. And second, it would be necessary to do a detailed analysis on what type of work events generate these emotional responses.

Relevance to the Congress Theme: This research contributes to understand the relevance of emotions at work and the importance to consider work setting as places rich in triggering emotional responses.

Relevant UN SDGs: Promoting well-being at work just considering emotional well-being as critical facet of that employee well-being.

*Keywords: work motivation, emotions at work, intensive longitudinal design*

## Paper 2

### **A dynamic systems approach to organisational change: Implications for theory, research and practice**

Ritz Joanna, University of Amsterdam; Creelman David, Creelman Research; Doci Edina, Vrije Universiteit Amsterdam; Vullingsh Jesse, Vrije Universiteit Brussel

Theoretical background: Typically, theoretical models of organisational change offer step-by-step guidelines for practitioners that focus on the sequential states that organisations must go through to successfully achieve change (e.g., Lewin's (1951) three-step model, Bullock & Batten's (1985) model, or Kotter's (1995) eight-step program). However, because organisations are complex, constantly changing, and virtually impossible to fully control, managers often struggle to apply these programs in practice (Buchanan, Claydon & Doyle, 1999; Burnes, 2014; Dawson, 2011). In response to that, some researchers started to conceptualize change as a continuous and dynamic process that emerges in an unpredictable and unplanned fashion – emergent change (Arnold et al., 2016). Yet, the emergent approach and the assumption that change is chaotic and unpredictable means it is difficult to translate it into research and practice (Burnes, 2005; 2014). So, neither the 'full control' nor the 'no control' approach is suitable for change in the modern workplace, as the former appears untannable in practice and the latter would make management literature on organizational change obsolete altogether. In this paper, we address this issue by taking a dynamic systems perspective to organisational change, which conceptualises organisations as complex, adaptive systems that change over time. By doing so, we can identify the generic principles that drive (seemingly unpredictable) organizational change, without submitting to the illusion of full control, but also without sacrificing its complexity.

New perspectives and contributions: To offer an analytical, structured way to analyse processes within organisations from a dynamic systems perspective, we integrate research on organisational change and research on dynamic systems. In particular, we discuss three main themes: (1) elements of the system (e.g., levels, subsystems, complexity, environment), (2) interactions between the elements (e.g., synergies, feedback loops, interdependence), and (3) self-organisation of the system (i.e., emergence). Each theoretical part is illustrated with examples from organizational domain and combined with practitioner points that should be considered when planning and implementing change. Next, we discuss how the dynamics of organisational change can be examined empirically. In particular, we provide concrete suggestions for conceptualising organisational change for research purposes, for designing and collecting appropriate data, and for statistical methods that can be used to study the dynamics of organizational change.

Research and practical implications: Typically, research on organizational change focuses on comparing the organizational before and after the change, which represents the content of change (Barnett, 1995). Yet, in order to empirically examine change from a dynamic perspective, researchers have to consider not only the content of change, but also the processes that drive it (i.e., how the change occurs). In addition, the technological advances and increased use of Big Data allows to examine complex dynamics of a system and how it evolves over time and across different sources of information (Calvard, 2016). By doing so, the researchers can shift from simply describing organizational change to explaining and predicting it. From a practical perspective, dynamic systems theory on organizational change has a potential for a wide variety of applications due to its focus on the mechanisms that drive change, rather than attempting to prescribe a step-by-step progression of events or conceptualizing change as chaotic and uncontrollable. The focus of practitioners operating

under this paradigm should be to leverage the principles of change in an organization to amplify their limited degree of control.

Originality and value: The dynamic systems perspective we focus on has been shown useful in various domains in organizational science. In this paper, we combine insights from several disciplines to provide a theoretical account of organizational change that is relevant to research and practice. By capturing the complexity of organizational change in a practically relevant way, we provide a set of tools that are a step forward in building comprehensive account of organizational change. Though effective change management can be a daunting task, often at risk of failure, the approach we offer here has a potential to improve organizational change interventions.

*Keywords: organizational change, dynamic systems, ecosystems*

### Paper 3

#### **“What Makes a Match?”: A Narrative Investigation of LMX Development**

Cameron Sarah & Vullingsh Jesse | Vrije Universiteit Brussel; Solinger Omar & ter Schure Anne | Vrije Universiteit Amsterdam

For over 40 years, Leader-Member Exchange (LMX) theory has received significant attention in the leadership literature, with a host of studies demonstrating the correlation of LMX with organisational outcomes such as job performance, organizational citizenship behaviours and organisational commitment (Dulebohn et al., 2012, Graen & Uhl Bien, 1995, Gerstner & Day, 1997). LMX theory distinguishes itself from other extant leadership theories in approaching LMX as a fundamentally social process, formed through a series of exchanges or “double-interacts” between leader and follower. In doing so, LMX theory acknowledges the role both leaders and followers play in defining the nature of the relationship (Day & Miscenko, 2015, Dulebohn et. al, 2012).

Despite the inherent dynamism in early conceptualizations of LMX theory, research in recent years has adopted a more variance oriented approach in focusing on the antecedents, correlates and outcomes of LMX (McClean et al., 2019; Nahrgang & Seo, 2015). Specifically, research on how LMX relationships develop remains scant, with the three phase role making model of Graen and Scandura (1987) being the only extant theorization, with limited empirical support (Nahrgang & Seo, 2015). Thus, to more thoroughly understand the process through which LMX relationships develop, this study adopts an exploratory research design (Langley, 1999). The design allows for an investigation of how the form and sequencing of exchanges between leader and follower accumulate over time to determine the nature of the relationship.

The value of this work is twofold. Firstly, in applying a dynamic approach to studying LMX development, this research provides insights into the temporal patterns of the behaviours, cognitions and affective responses that determine how and why an LMX relationship reaches a certain level of quality, responding to numerous recent calls to include the concept of time in leadership research (Castillo & Trinh, 2018; Hofmans et al., 2019; Vantilborgh et al., 2018). Secondly, in using the dyad as the central point of analysis, this research sheds further light on the role followers play in the leadership process (Sin & Nahrgang, 2009).

For this study, interviews with 32 leaders and followers were conducted. Participants were asked to retrospectively tell the story of how their LMX relationships developed over time, divide this story into distinct chapters, and provide ratings of LMX quality at each chapter. LMX Quality was measured using the LMX-MDM scale (Liden & Maslyn, 1998). These ratings resulted in graphs of LMX quality over time for each narrative (see Appendix 1). Narrative analysis of the qualitative interviews revealed five prototypical narratives of LMX development: Symbiotic Growth, Honeymoon Hangover, Keep Calm and Carry On, Struggle and Accept, and Crash and Burn. Each narrative is subsequently divided into three or four developmental phases. The five narratives capture the broad developmental pathways of LMX relationships, while the individual phases detail the precise mechanisms that occur within each phase to determine the quality and nature of the relationship. In doing so, these narratives offer a more detailed explanation of how LMX relationships of varying quality develop.

The narratives presented in this study specifically account the role of time in the development of LMX, and highlight how the sequencing of specific exchanges (e.g. affective events) impact

developmental trajectories. For example, the Struggle and Accept narrative demonstrates how dyads experience and move beyond negative affective events, and how these negative events impact the state of the relationship after initial development. Furthermore, these results question the extent to which LMX relationships ever achieve stabilization, as participants recount how expectations of their dyad pair continue to evolve well beyond the initial developmental phases.

The primary limitation of this research pertains to the recall bias of participants due to retrospective interviewing. Future studies would benefit from a longitudinal approach, with participants interviewed at weekly or monthly intervals to more accurately capture the moment to moment exchanges that contribute to the relationship development.

For practitioners, these results provide more detailed insights into the mechanisms that drive changes in the nature and quality of leader-follower relationships. For example, the behaviours and affective responses highlighted in the Symbiotic Growth narrative demonstrate how experiencing personal events together can serve as a catalyst for the development of a higher quality relationship, while the Keep Calm and Carry On narrative highlights the temporality of cognitive coping. In summary, the results of this study offer insight into the dynamism inherent in leader-follower relationship development and maintenance, and how the sequencing of behaviours, cognitions and affective responses contributes to LMX quality.

*Keywords: Leader-Member Exchange, Temporal, Development*

## Paper 4

### **Does it Pay Off to Act Conscientiously, Both Now and Later? Examining Concurrent, Lagged, and Cumulative Effects of State Conscientiousness.**

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**Research goals:** The aim of this study was to look at the relationship between state conscientiousness, emotional exhaustion, and negative affect, not only concurrently, but also delayed, and cumulated over time. Although several studies indicate that both trait and state conscientiousness are positively related to desirable life and work outcomes, there are also studies that suggest that conscientiousness might be a double-edged sword, leading to later fatigue. Furthermore, the Behavioral Concordance Model posits that out of character behavior might be costly for the individual. Because we expect that the depleting effect of (counterhabitual) conscientious behavior might not become evident immediately, we examine how these effects may evolve over time.

**Theoretical background:** Conscientiousness has often been identified as the personality dimension that is predictive of health behaviors, academic success, and work success. This raises the question of why we do not uniformly invest in becoming more conscientious. In the present paper, we suggest that the answer may lie in the fact that between-person relationships might not straightforwardly translate to the within-person level. So far, most studies have looked at the effects of counterhabitual behavior in the moment or examined the effects of acting out of character immediately after the behavior took place. However, because the effects of counterhabitual behavior might (a) build over time and (b) need some time to 'sink in', we believed it is crucial to examine how the effects of (counterhabitual) conscientiousness materialize over time.

**Methodology:** We relied on two Experience Sampling Method (ESM) designs using 157 and 96 participants (N= 1,699 and N = 2,151, respectively).

**Results:** Results revealed that higher levels of conscientiousness are concurrently related to lower levels of emotional exhaustion, resource depletion, and negative affect. When looking at delayed effects, no conclusive evidence was found for affective or cognitive costs of counterhabitual conscientiousness. Finally, analyzing cumulative effects revealed that repeated negative deviations from one's typical level of conscientiousness were positively associated to exhaustion, depletion, and negative affect, while repeated positive deviations were negatively associated with depletion and unrelated to exhaustion and negative affect. Altogether, our findings suggest that self-rated conscientious behavior is generally beneficial, even if this behavior goes against one's typical behavior.

**Limitations:** First, we relied on self-reports to measure our focal variables, and although this way of measurement is not uncommon with these constructs, it makes our findings susceptible to common method bias. Second, it should be noted that causality could not be established with our study design.

**Research/ practical implications:** Previous research has shown that the consequences of counterhabitual behavior might differ depending on the time frame that is adopted. We wanted to add to this by looking at both concurrent, delayed, and cumulative effects simultaneously. Despite the importance of this issue, several studies still (implicitly) assume that effects at a certain moment

in time (here and now) can be directly translated to different time scales (later). By combining different time perspectives within one study and by moving away from the isolated focus on the present, we gain insight in what happens when we act out of character, and when. This understanding can help us when designing interventions that act upon incongruences at work.

Relevance to the Congress Theme: Ever changing demands in the workplace force people to act in a way that is inconsistent or even counter to their typical behavior. We evaluate whether these behaviors are indeed costly.

Relevant UN SDGs: Good health and well-being

*Keywords: conscientiousness, counterhabitual behavior, emotional exhaustion*

## Paper 5

### **Should I Look Away? A Dynamic Perspective on the Relationships Between Witnessed Incivility, Exhaustion, and Instigated Incivility**

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**Research goals:** The aim of this study was to look at the dynamic relationship between two previously overlooked incivility components, namely witnessed incivility and instigated incivility. Whereas previous research has taken a static rather than a dynamic approach to studying workplace incivility, we proposed that the rate of change in witnessed incivility was positively related to the rate of change in instigated incivility via changes in exhaustion. Accordingly, we obtained insights into how these relationships develop over time.

**Theoretical background:** Workplace incivility is “low-intensity deviant workplace behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect” (Andersson & Pearson, 1999, p. 457). Uncivil behaviors are rude, discourteous, and display a lack of regard for others. Workplace incivility consists of three types: experienced incivility entails being the target of uncivil behavior, witnessed incivility involves the consequences of uncivil encounters with bystanders, and instigated incivility denotes the performance of uncivil acts toward others (Schilpzand et al., 2016).

Drawing upon social learning theory (Bandura, 1977) and incivility spiral theory (Andersson & Pearson, 1999), we investigated the relationship between witnessed incivility and instigated incivility. We reasoned that incivility spreads through the workplace because employees directly observe others repeatedly violating norms of civility, prompting incivility to become the new workplace norm. Moreover, in line with the job demands-resources theory (Bakker & Demerouti, 2017), we propose that exhaustion, a dimension of burnout defined as “a severe loss of energy that results in feelings of both physical and mental exhaustion” (Schaufeli et al., 2020, p. 27), mediates the association between witnessed incivility and instigated incivility.

**Methodology:** We adopted a longitudinal research design with three measurement occasions separated by one-week time lags. Dutch-speaking employees (N = 429) filled out online questionnaires. We tested the hypotheses using a parallel process mediation latent growth curve model.

**Results:** Results illustrated that the rate of change in witnessed incivility is positively related to the rate of change in instigated incivility, indicating that employees who experience an increase (or a decrease) in witnessing uncivil events also increased (or decreased) in their display of uncivil events. Furthermore, the rate of change in witnessed incivility was positively related to the rate of change in exhaustion, indicating that when employees experienced an increase (or decrease) in witnessing uncivil events, their feelings of exhaustion subsequently increased (or decreased). Finally, the rate of displaying incivility did not change as a result of increased (or decreased) feelings of exhaustion.

**Limitation:** Our measure of exhaustion tapped into both physical and emotional aspects of exhaustion, with the former one probably being less relevant.

**Implications:** Theoretically, the results suggest that social learning is a key mechanism for rapid incivility spread in the workplace. That is, our findings point out that observing how others perform

incivility acts can explain why observers conduct incivility acts later themselves. Moreover, we show that changes in exhaustion is an outcome of changes in witnessed incivility, which expands the nomological network of witnessed incivility to emotional outcomes. Practically, the results recommend that organizations should continuously monitor their workplace incivility trends and take tailored-based approaches toward organization-wide prevention for both targets and witnesses of incivility.

Relevance to the congress theme: Incivility spreads rapidly in the workplace. To better understand this spread, we take a dynamic rather than a static approach to studying workplace incivility and thereby investigate whether social learning is a key mechanism for this rapid incivility spread.

Relevant UN SDGs: Good Health and Well-being, Decent Work and Economic Growth

*Keywords: incivility, witnessed incivility, exhaustion*

## Symposium S079

### **Burnout Assessment Tool (BAT) advancements II: The dynamics of burnout measured with the BAT and using longitudinal designs**

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science

Title Burnout Assessment Tool (BAT) advancements II: The dynamics of burnout measured with the BAT and using longitudinal designs

What will be covered and why? Recently, a new burnout questionnaire has been developed to support better understanding of burnout in research and practice: the Burnout Assessment Tool (BAT; Schaufeli, Desart & De Witte, 2020). According to the BAT, burnout is a syndrome that includes four core dimensions (exhaustion, mental distancing and cognitive and emotional impairment), as well as secondary symptoms (e.g., irritability, sleeping problems, and tension headaches). An international consortium is currently using the BAT as the instrument of choice to measure burnout. This two-part symposium presents advancements regarding I) the dynamics within the BAT and its clinical validation and II) the dynamics of burnout measured with the BAT and using longitudinal designs. Symposium II comprises four contributions from different countries presenting results using BAT in longitudinal designs, in order to shed light on the dynamics of burnout. Various theories were used: the Job Demands Resources model, the Conservation of Resources theory and the Self-Determination Theory. First, Basińska and colleagues developed profiles of employees' wellbeing with latent profile and latent transition analysis in a Polish sample using BAT-12 in a two-wave study. Second, Li and colleagues tested longitudinal relationships between indicators of employee wellbeing and mental health in a Finnish sample using BAT-12. Third, Hakanen studied whether burnout, boredom, work addiction, work engagement and job satisfaction are equally important for employee outcomes. They did so with BAT-23 in a two-year follow-up study in the Finnish general working population. Finally, Glaser tested the relationships between basic psychological needs, meaning in work and burnout (measured with BAT-23), with a three-wave study in the German and Austrian workforce.

Relevance to the Congress theme Burnout with its heavy human and economic cost is a persistent challenge for organizations in the changing world of work. These studies support the view that the BAT can provide valuable scientific and practical tool to tackle the burnout problem. Moreover, these longitudinal studies suggest that investing in job resources and fulfilling the employees' psychological needs will prevent burnout while mitigating burnout is beneficial for promoting employee health, workability, and work-related attitudes. This knowledge helps to build a sustainable future of work.

Research/practical implications The BAT has been translated in more than 20 languages, and validation studies have been published. It is now important to use the BAT in longitudinal studies. Next, these insights into the dynamics of burnout will support better monitoring practices and will promote intervention development for preventing burnout.

Overall conclusions These longitudinal studies emphasize the work-related character of burnout, with individual behaviour reinforcing detrimental processes. Lack of job resources and lack of addressing employee psychological needs increase burnout, while strongly burned-out employees lose their resources while continuing to invest them. Moreover, burnout in turn affects job attitudes

and health outcomes negatively. This 'burnout-process' differentiates from that found in relation to engagement, depression and anxiety.

*Keywords: Burnout Assessment Tool (BAT), longitudinal designs*

## Paper 1

### Profiles of employees' well-being in two time points: latent profile and latent transition analysis

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**Research goals and why the work was worth doing** This study examines profiles of employees' well-being as a combination of job burnout and work engagement as well as the within-person stability of these profiles across a one-year period. It also presents the implications of the profiles for employees' job satisfaction and general health and investigates the role of job demands (work overload and illegitimate tasks) as a covariate of profile membership.

**Theoretical background** Job burnout is a syndrome of four core symptoms, namely, exhaustion, mental distance, and cognitive and emotional impairment. In line with the circumplex model of affect, occupational well-being is viewed as the interplay between the independent dimensions of job burnout and of work engagement, which may lead to different profiles. According to the Job Demands-Resources theory, job demands (work overload and illegitimate tasks) are expected to be related to well-being profiles, because when excessive, they can impair employees' overall health and job satisfaction over time.

**Design/Methodology** A sample of 1201 Polish employees took part in a longitudinal study consisting of two measurement points. Data were collected in 2019 (before the pandemic) and one year later (during the first lockdown). The drop-out rate was 32%. Employees were  $42 \pm 10.2$  years old and on average reported job tenure of  $19 \pm 10.9$  years. Among the participants, there were professionals (education, health care, public administration and IT) mainly with higher education (90%). Women represented 66% of the sample.

The participants completed the Burnout Assessment Tool (BAT-12), Utrecht Work Engagement Scale (UWES-3), Bern Illegitimate Tasks Scale, and Work overload, job satisfaction and self-rated general health from the Energy Compass. Latent profile analysis was used to identify subgroups of employees with different profiles of occupational well-being. The decision for the final profile solution was driven by theoretical considerations as well as by the fit indices of the specified models. Latent transition analysis was applied to examine a stability of profile membership between both time points.

**Results** Latent profile analysis revealed five distinct occupational well-being profiles representing highly engaged (14.4% of the sample), moderately engaged (40.2%), mildly burned-out (30.5%), strongly burned-out (12.4%) and disengaged employees (2.5%). The last two profiles had the highest level of burnout, but with some differences regarding its components. Disengaged employees showed a deficit on the identification dimension (i.e., higher level of mental distance vs. lack of work engagement), while strongly burned-out employees scored high on all symptoms of burnout. The profiles differed significantly on the level of job demands (work overload and illegitimate tasks) as well as on the level of the outcomes (job satisfaction and general health). Negative outcomes and excessive demands were reported by the burned-out employees, however, the lowest level of job satisfaction at both measurement points was reported by the disengaged employees. Nonetheless, the burned-out and disengaged employees experienced positive changes during the pandemic. They declared significantly better health and higher job satisfaction.

In a temporal perspective, significant changes in belonging to a given profile were observed. For the strongly and moderately engaged, and strongly burned-out profiles, stability of 62%, 60%, and 50%, respectively, was noted. For the disengaged profile a transition of membership was observed, mainly to the strongly burned-out profile, whereas members of the moderately burned-out profile migrated in both directions, i.e., to moderately engaged and strongly burned-out profiles.

**Limitations** Employees volunteered for the study, thus, the sample was not representative. The timeframe of the study covered large changes in work practices due to the pandemic and related social processes. Moreover, the second measurement point took place during the first lockdown, thus, drop-out among more exhausted employees, perhaps also due to new work conditions, might have been significantly higher.

**Conclusions – research and or practical implications/Originality/Value** In line with theoretical rationales of the Conservation of Resources theory, strongly burned-out employees lose their resources while continuing to invest them. In contrast, disengaged employees seem likely to withdraw their resources, which manifests in a lack of identification with work and the organization. In the study, we observed a lack of stability of profiles within one year, which may reflect dynamics triggered mainly by unusual external circumstances. The results of this study showed that a person-centred approach may give substantial insights into individual pathways of employees' well-being.

**Relevance to the Congress Theme** Stress and dysfunction (Stress and burnout)

**Relevant UN SDGs** Good health and wellbeing

*Keywords: Burnout, latent profile analysis, latent transition analysis*

## Paper 2

### Cross-lagged associations between burnout and anxiety and depression

Jie Li, Jari Hakanen & Janne Kaltiainen | Finnish Institute of Occupational Health, Helsinki, Finland

**Research goals and why the work was worth doing** The goal of our study is to investigate associations between burnout and two general mental illness symptoms: depression and anxiety. Mental illness issues are one of the most prevailing concerns of today and are among the top reasons for applying for sickness benefits among others in Finland. Despite various studies showing the distinctiveness of burnout compared to other general mood disorders, some studies are still questioning the validity of the concept. While acknowledging that work-related and general ill-being are interrelated, from a practical point of view it is important to gain knowledge on how they affect each other.

**Theoretical background** The theoretical background builds upon the Burnout Assessment Tool (BAT), which is a new measure based on novel conceptualization of burnout. BAT conceptualizes depression as a secondary symptom but due to the comorbid nature of depression, it is reasonable to investigate anxiety symptoms as well. Our study also builds upon the Conservation of Resources theory, which states that resource loss at work could lead to loss spirals and deteriorated well-being.

**Design and Methodology** A randomized population survey of Finnish citizens (ages 23-65) was utilized. The first survey was collected in the summer of 2021 (T1) and the follow-up survey was collected in the summer of 2022 (T2). For the analysis, we included participants that participated in both time points and reported at least 10 working hours in a week in T1 as well as in T2 (n = 849). Burnout was measured using the 12 item version of the BAT, anxiety was measured using the Generalized Anxiety Disorder Questionnaire, and depression was measured with four items drawn from the Four-Dimensional Symptom Questionnaire.

Structural equation modeling was used to estimate over-time associations. Latent change scores were utilized to capture within-person changes in outcomes and path estimates from prior levels of predictor variables. We estimated and compared four plausible models to determine the superior model. Model 1 had autoregressive effects estimated from all indicators at T1 to changes from T1 to T2. Model 2 included cross-lagged effects from burnout at T1 to changes in depression and anxiety symptoms from T1 to T2, as well as autoregressive effects to control the baseline levels. Model 3 included cross-lagged effects from depression and anxiety symptoms at T1 to changes in burnout from T1 to T2, as well as the autoregressive effects. In model 4, we estimated all previously mentioned effects. The models were estimated using the maximum likelihood estimation with robust standard errors to account for non-normality in some of the items. The model comparison was conducted using the Satorra-Bentler chi-square test.

**Results** All estimated models fit the data well. However, model 2 is superior compared to model 1 ( $\Delta\chi^2(2) = 19.739, p = .000$ ) and model 4 ( $\Delta\chi^2(2) = .352, p = .838$ ). Model 4 is superior to model 3 ( $\Delta\chi^2(2) = 17.328, p = .000$ ). Burnout at T1 predicts changes in depression symptoms from T1 to T2 (.174 (.065)  $p = .008$ ) as well as changes in anxiety symptoms from T1 to T2 (.289(.101)  $p = .004$ ). Models 3 and 4 did not show any significant cross-lagged effects from mental illness indicators to burnout. Our results suggest that burnout spills over to general mental health symptoms.

**Limitations** We do not have more time points available for our analysis. Hence, we can only provide preliminary evidence for the causal relations.

Conclusions – research and or practical implications Confirmatory factor analysis revealed that burnout is distinctive from general types of ill-being. Furthermore, we provided evidence for one-way spillover effects from burnout to both anxiety and depression symptoms. Our study suggests that it is vital to create and maintain working conditions that mitigate burnout since it also spills over to employees' general mental health symptoms. By separating work-related ill-being from general mental illness, we suggest that effective attempts of mitigating burnout primarily stem from the workplace and not from other life domains.

Relevance to the Congress Theme The rising prevalence of mental illness remains a looming threat to individuals' work ability. During these challenging times of post-pandemia and tensions in Europe, workplaces can support employees' general mental health by mitigating burnout at work.

Relevant UN SDGs Our study contributes to the good health and well-being -goals of the UN SDG as well as the decent work and economic growth goals. We provide a strong statement about workplaces that share responsibility for employees' general mental health development.

*Keywords: burnout, anxiety, depression*

### Paper 3

#### **Are burnout, boredom, work addiction, work engagement and job satisfaction equally important for outcomes? A Finnish two-year follow-up study**

Jari Hakanen & Janne Kaltainen | Finnish Institute of Occupational Health, Helsinki, Finland

**Research goals and why the work was worth doing** The aim of this two-year follow-up study was to investigate the relative contributions of five different states of employee well-being to changes in various health-related and work attitude-related outcomes. Often only one or two (e.g., burnout and engagement) states of employee-well-being are included in research models in work and organizational psychology. Therefore, little is known whether certain states of employee well-being are relatively more important for health and other outcomes compared to other states. This study aimed to examine the predictive power of negative (burnout, job boredom and work addiction) and positive (work engagement and job satisfaction) employee well-being relatively to each other for seven employee outcomes related to health and work attitudes in the general working population.

**Theoretical background** Conceptually, different states of employee well-being (their affective components) can be plotted into the Circumplex model of affect. In this model, two dimensions constitute affective well-being, namely pleasure (how one is feeling) and activation (mobilization of energy). Burnout and job boredom (negative low arousal), work addiction (negative high arousal), work engagement (positive high arousal) and job satisfaction (positive low arousal) appear in different quadrants in the model. Based on the Conservation of Resources (COR) theory) it could be hypothesized that resource threats (e.g., negative states of employee well-being) are more strongly related to various outcomes than resource gains (e.g., positive states of well-being).

**Methodology** A two-wave two-year follow-up study among a randomized working population sample in Finland was used. T1 data were collected at the end of 2019 and T2 data at the end of 2021. Altogether 446 employees responded to both surveys, were employed throughout the follow-up period and worked 10 hours per week at minimum. The five predictors at T1 were burnout (measured with BAT-23), job boredom, work addiction, work engagement, and job satisfaction. The health-related outcomes were depressive symptoms, life satisfaction, workability, and presenteeism, whereas work attitude-related outcomes were organizational identification, job insecurity and intentions to leave. Dominance analysis and change scores were used to study relative strength of predictors of T1-T2 changes in the outcomes.

**Results** The five predictors of employee well-being explained from 0.9% (life satisfaction) to 4.0% (presenteeism) of the changes in health-related outcomes and from 1.4% (organizational identification) to 3.2% (turnover intentions) of the changes in work attitude-variables over the two-year period. Burnout was the first or second most important predictor for 6 out of 7 outcomes and most important for changes in organizational identification and job insecurity. Thus, burnout seemed to be even more important for attitude-related than for health-related outcomes. Interestingly each of the five types of employee well-being was the strongest predictor of at least one of the outcomes: job boredom to (decrease in) life satisfaction, work addiction to (increase in) presenteeism and (decrease in) workability, work engagement to (decrease in) depressive symptoms and job satisfaction to (decrease in) turnover intentions.

**Limitations** Only the relative (based on direct, indirect, and total effects) contributions of different types of employee well-being were compared. For example, mediated models including working

conditions could have provided a more comprehensive understanding of the process why employee well-being may impact the outcomes.

Conclusions – research and or practical implications Burnout as measured with the Burnout Assessment Tool (BAT) seems to contribute most to the studied variables (particularly to changes in the work attitudes) during the follow-up period, which is consistent with COR-theory's assumption of the primacy of resource loss. These results suggest that mitigating burnout may be more beneficial for promoting employee health, workability, and work-related attitudes than mitigating work addiction, job boredom, or promoting work engagement or job satisfaction.

Relevance to the Congress Theme Employee wellbeing, including burnout, are highly crucial for sustainability of employees and organizations in the changing world of work. For example, according to World Economic Forum among top skills required in the future work-life are analytical skills, active learning, creativity, resilience and problem-solving – all skills that become possible only for employees that are motivated and feel well and energized at work.

Relevant UN SDGs 3 - Good health and well-being; 8 - Decent work and economic growth

*Keywords: Employee Well-being; Follow-up; Burnout Assessment Tool (BAT)*

## Paper 4

### Basic psychological needs, meaning in work and burnout: a three-wave study on their relationships and dynamics

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Research goals and why the work was worth doing. The fulfillment of psychological needs might reduce the risk of burnout by increasing functional coping behaviors, vitality, and energy. Meta-analytic findings showed moderate (for competence, relatedness) to strong (for autonomy) negative relations with burnout. However, burnout has been examined in this meta-analysis as an overall score of the Maslach Burnout Inventory, which is not consistent with theoretical assumptions of this instrument. Thus, the first goal of our study is to disentangle the relationships between need fulfillment and (core components of) burnout measured by the Burnout Assessment Tool. Meaning in work might prevent burnout as meaningless tasks require more energy to accomplish. Hence, a second goal is to unravel relationships between meaning, need fulfillment, and burnout. Since most of the prior research employed cross-sectional designs, we examine temporal dynamics in a longitudinal design.

Theoretical background. Self-determination theory proposes autonomy, competence, and relatedness as universal psychological needs. Psychological need fulfillment at work has been shown to be associated with several work-related antecedents (e.g., job resources, stressors) as well as beneficial outcomes (e.g., motivation, engagement). Further, meaning in work has been studied with a focus on satisfaction, engagement, or well-being, but relations to burnout and psychological need fulfillment remain unclear.

Design, methodology . We conducted a three-wave study in a German and Austrian workforce. Time lags between waves were set to 6 months. N = 781 employees completed questionnaires over a period of one year. Fulfillment of psychological needs was assessed by an adapted version of the Work-related Basic Need Satisfaction Questionnaire (9 items; Deci et al., 2001). Meaning in work was examined by the Work as Meaning Inventory (WAMI) distinguishing three components (i.e., positive meaning, meaning-making through work, greater good motivation). Burnout was measured by the Burnout Assessment Tool (BAT-23), a new validated instrument, distinguishing four core components of burnout (i.e., exhaustion, mental distance, cognitive and emotional impairment). Structural validity was tested with confirmatory factor analysis (CFA) and relations between constructs were examined through three-wave cross-lagged panel modeling.

Results obtained and expected. The proposed factor structures of three separate needs and four core components of burnout as well as a global burnout score could be supported. A two-factor solution of meaning in work distinguishing “personal” from “greater good” meaning fitted the data best. Moderate positive psychological need fulfillment and meaning in work and rather low burnout were reported. As expected, burnout, need fulfillment, and meaning remained highly stable over time. We found direct and reciprocal relations between the constructs. Burnout showed negative direct- and cross-lagged effects on competence and autonomy whereas relatedness and burnout did not affect each other. Fulfillment of each psychological need demonstrated positive lagged effects on greater good meaning, reversed effects appear less plausible. Personal meaning showed positive direct and reciprocal relations to competence and autonomy over time, whereas associations to relatedness are less likely. Finally, personal meaning was negatively (directly and reciprocally) related to burnout between T1 and T2 but not between T2 and T3. Further results on the relationships with

core components of burnout will be reported. More detailed results on relations between the burnout core components, need fulfillment, and meaning in work will be presented and discussed.

Limitations. Strong causal claims cannot be inferred as omitted third variables may have caused the true effects. Self-reports might be inflated by common method bias. The employee sample was representative for Austria and Germany in terms of age and gender, but not of industries or occupations. Job characteristics (e.g., job stressors) were excluded to reduced complexity but could be added in future research.

Conclusions. Fulfillment of psychological needs might prevent burnout by enabling self-determined work, promoting competence experiences, and cultivating social relationships at work. Personal meaning might be enhanced by communicating goals as well as individual contributions to these goals and to a greater good in the society. Meaning in work and burnout are reciprocally interrelated.

Relevance to SDG. Fulfillment of psychological needs and experiences of meaningful work are important factors to promote well-being and health as well as decent work. Burnout as a work-related disorder is an important indicator for the SDG Good Health and Well-Being.

Relevance to congress theme. Basic psychological need fulfillment and meaning are essentials of a “good life” and are important for eudaimonic well-being of employees at contemporary workplaces.

*Keywords: Psychological need fulfillment, meaning in work, burnout*

## Symposium S126

### The Great 8 Success Factors in the World of Work: Past, Present and Future

Rainer Kurz, HUCAMA Analytics

science\_practice

The comprehensive World of Work (WoW) model outlined by Kurz & Bartram (2002) covers how person and environment characteristics can be measured and how they interact to produce performance and wellbeing. At the heart of the model are the 'Great 8 Competencies' that emerged out of a series of validation studies relating verbal and numerical reasoning tests as well as personality scales to competencies. This symposium is concerned with the origin of the model, contemporary applications and redevelopment into 'Success Factors' for the future.

Paper 1 and 4 are based on a reconceptualisation as the 'Great 8 Success Factors' that span across aligned personality (predictor) and competency (criterion) hierarchies. New measures were designed from scratch and aligned to the Schwartz (1993) circumplex model of universal values. A 2\*2 theoretical model differentiates people and task orientation crossed with an innovative take on DeYoung's Stability and Plasticity meta-factors including higher-order scores rarely seen in operational practice. 15 Emotional Intelligence constructs were integrated triggering refinements of the original constructs in line with Woods & Hardy (2012).

What will be covered and why

1. Kurz & Mikhailov will present research where NEO IPIP facets are mapped on the Periodic Table of Personality (PToP) based on varimax rotated PCA components extracted from its facets. Furthermore, the Great 8 Competencies are mapped on the PToP with many expected but also some surprising results.

2. Smith, Jeffery-Smith & MacIver will present on the validity of the short Match 6.5 screening questionnaire mapped against the original Great 8 Competencies. When the Great 8 Competencies were first outlined by Kurz & Bartram (2002). Due to the asymptotic nature of scale validity increments due to additional items, the measure provides substantial levels of validity in spite of its brevity.

3. Desson & Cannon will present on the validities of Great 8 mappings based on Lumina Spark and Lumina Emotion assessments. Lumina Spark covers four of the Big 5 (excluding Neuroticism) by measuring both ends separately. Lumina Emotion adds one quality to each of the 8 Spark Aspects, and assesses 4 qualities each at either pole of the Emotional Stability-Neuroticism continuum. As this approach is diametrically opposed to the unipolar constructs and positive weight mapping typical for Great 8 research, it is a welcome exploration which could potentially pave the way for reverse scored facets in prediction systems.

4. Guarini & Vernazza will present on the development and validation of a mapping of HUCAMA FACTORS to the well-established Primary Colours of Leadership model. It provides an alternative to the Corporate Leadership model originally developed with the Great 8.

5. Moussa & Kurz will present on a study in multi-cultural Mauritius where predictors of the Great 8 were successfully validated across 221 managers. A sub-sample allowed exploration of the validity of ability test variables, composite predictors as well as predictors combined across personality and ability variables using three different methods. Sackett, Zhang, Berry & Lievens (2022) published an influential article reappraising the validity of many dispositional variables which knocked back slightly

General Mental Ability. It documents substantial validity for each of the Big 5 personality factors but neither their joint validity nor the validity of a personality composite. Validities of composites across personality and ability remain rare, and are usually at an overall performance level thus making this an important contribution building on Bartram (2005).

#### Relevance to the Congress Theme

As the world of work is changing, the fundamental personality and ability characteristics, which are well-understood, remain the same. Performance however is a more dynamic construct which is less well understood. The Great 8 Competencies have made inroads in science and practice. The present research offers updated perspectives and conceptualisation that refresh the model after 20 years of use to embrace current and future challenges in the world of work.

#### Research/Practical Implications

Research presented in this symposium showcases successful applications of the Great 8 Competencies and outlines the Great 8 Success Factors as a contemporary variation that straddles across personality, ability, and competency modalities.

#### Overall Conclusions

Performance at the workplace needs to be described in non-psychological terms to be readily understood by employees, managers and HR. Competencies provide a common language that can be applied across the employee life cycle. The Great 8 Competencies are now a well-established model of performance with clear linkages to personality and ability variables. In the light of two decades of science and practice a Success Factors variation of the model holds promise to provide a unifying framework across personality, ability, and competency constructs.

*Keywords: Personality, Ability, Competency*

## Paper 1

### Mapping NEO IPIP Facets and Great 8 Competencies on the Periodic Table of Personality

Rainer Kurz, HUCAMA Analytics; Nikita Mikhailov, PsyPub

#### Research goals and motivation

The goal of this research is to examine the statistical properties of a NEO IPIP variation, explore its suitability for mapping constructs to the Periodic Table of Personality (PToP) outlined by Woods & Anderson (2016) and to map a new measure designed to cover the Great 8 Competencies (Kurz & Bartram, 2002).

#### Theoretical background

Woods & Anderson (2016) mapped personality scale to the Periodic Table of Personality based on correlations with 5 orthogonal factors extracted from item level responses to the Trait Descriptive Adjectives (TDA) questionnaire developed by Goldberg (1992). Woods & Kurz (2016) found the PToP methodology viable even when TDA domain scores were used (when item level TDA was unavailable) and found PAPI 2 mappings to broadly correspond to the results of Woods & Anderson (2016). Kurz (2016) successfully deployed NEO Facet scores to create PToP mappings.

Kurz (2012) investigated the criterion-related validity of Big 5 Total scores based on NEO as an alternative to extracting the first unrotated principal component. After partialling out a Big 5 Total, Agreeableness correlated negatively with job performance whereas Achievement Striving and Assertiveness retained significant positive correlations thus corroborating the Great 8 Competencies.

Kurz (2020) outlined the Periodic Table of Personality and illustrated its characteristics by mapping scales of a new measure. However, the orthogonal solution extracted from NEO IPIP at item-level was somewhat unsatisfactory with Openness featuring loadings of some Conscientiousness, Need for Achievement and Assertiveness items.

It is expected that facet level extraction of five varimax rotated orthogonal components from NEO IPIP will provide a satisfactory approximation of PToP mappings. Demonstrating satisfactory psychometric qualities and mappings would open up new opportunities for mapping personality scales to the PToP where NEO IPIP (rather than TDA) has been used alongside.

#### Method

466 professionals and managers participated in the study as research volunteers. Many participants were completing part-time Psychology and Human Resources university courses alongside full-time employment. As a consequence the proportion of females (341) was substantially higher than males (125), and the median age 28. The sample covered a cross-section of organisational levels including President (1%), CEO (3%), Board Member (6%), Manager (7%), Supervisor/Team Leader (9%), Experienced Professional (32%), Entry-level Professional 25 (6%), Administrative (16%), Front Line / Support Staff (5%) and Blue Collar (15%).

They completed 300 items adapted from NEO IPIP using the 9 point accuracy rating scale featured in TDA and 80 personality items designated to cover the Big 5 personality factors and predict the Great 8 Competencies. Five principal components were extracted from the 30 NEO IPIP facets and varimax rotated to represent the Big 5 factors for PToP mapping. Great 8 Competencies were constructed with one item for each aspects of a factor (e.g. Generating Ideas and Exploring Possibilities for

Creating & Conceptualising), and a single word item deemed to be at the heart of the factor e.g. Creating.

## Results

The average Cronbach's Alpha internal consistency reliability of the 30 NEO IPIP construct was .79 which is comparable to the .81 average reported by Goldberg (1999). Reliabilities dropped below .70 for Liberalism (.60 instead of .86 previously) and Activity Level (.62 instead of .71 previously).

The first five components extracted from the 300 NEO IPIP items accounted for only 29% of the variance. Their counterparts extracted from 30 facets accounted for the 64% of the variance and following varimax rotation factor scores were saved that corresponded to the Big 5. With view to the PToP mapping process it was observed that most facets had their primary mapping with the factor allocated in the NEO model structure. However, Assertiveness was marginally stronger associated with the negative pole of Agreeableness than with Extraversion, and Emotionality was marginally stronger associated with Neuroticism than with Openness.

For the new measure of the Great 8 Competencies the mappings were largely as expected for the factors that are direct Big 5 counterparts. For Analysing and Influencing however, Openness and Extraversion were hypothesised by Kurz & Bartram (2002) to be the strongest correlate but they neither achieved primary nor secondary loadings.

Creating correlated most strongly with Openness (.46) followed by Emotional Stability (.25) whereas for Analysing the primary was Emotional Stability (.27) followed by secondary Conscientiousness (.24) followed closely by Openness (.23).

Structuring correlated strongly with Conscientiousness (.52) and marginally with Agreeableness (.13) whereas Striving correlated highest with Conscientiousness (.35) followed by Emotional Stability (.27).

Interacting correlated strongly with Extraversion (.41) and had Openness (.25) as a secondary mapping followed closely by Emotional Stability (.24). Influencing correlated most highly with Emotional Stability (.32) followed by Conscientiousness (.28) whereas Openness (.24) and Agreeableness (-.24) were tied and the correlation with Extraversion was the lowest (.18) which was entirely counter to expectations.

Coping had its Primary mapping with Emotional Stability (.36) followed by Openness (.29). Supporting had its primary mapping with Agreeableness (.40) followed by Extraversion (.25).

## Limitations

The current study demonstrates that NEO IPIP Facets can be used to map to the PToP. However as the results for Analysing and Influencing were very surprising, future studies should utilise TDA for mapping the Great 8 to enable comparisons.

## Research/Practical Implications

The results suggest that NEO IPIP has good reliability and that varimax rotated orthogonal components extracted from facets are a reasonable representation of the Big 5 personality factors. 8 factor scales modelled on the Great Eight Competencies had a distinct pattern of primary and secondary loadings broadly in line with their theoretical origin but with surprises for Analysing and Influencing.

*Keywords: Personality, Competency, NEO*

## Paper 2

### Short Behavioural Screening and the Great Eight

Jake Smith, Rab MacIver & Lauren Jeffery-Smith | Saville Assessment

#### Research goals and why the work was worth doing

The Great Eight competency framework was instrumental in the development of the Wave model, which underpins multiple behavioural assessments. By mapping to the Great Eight competencies using detailed predictor constructs, criterion-related validity from the individual construct level up to the overall assessment has been established across many Wave assessments. These assessments have a range of applications, with detailed constructs enabling reporting of individual scores to provide feedback to assessees.

However, in certain contexts, gaining rich detail for feedback is less of a concern. In job screening, considerations including providing candidates with a short assessment experience and facilitating recruiters with a single optimised behavioural score for efficient sifting hold more importance. The Match 6.5 assessment was developed from Wave using just 36 items to address these considerations. A far shorter assessment, it relies on flexibly combining broader scales to create a single behavioural fit score for measuring performance in a specific job role.

The following research goals were set to assess the effectiveness of Match 6.5 in measuring the Great Eight:

Understand how mapping to the Great Eight with higher order, broader scales compares to traditionally used detailed constructs

Assess the validity of Match 6.5 in predicting performance across the Great Eight

Assessment validity remains a vital concern for test publishers, recruiters and job applicants; establishing this for new assessments is a key requirement.

#### Theoretical background

##### Great Eight

The Great Eight competency framework (Kurz & Bartram, 2002) was developed to measure organisational effectiveness across eight areas of work performance.

##### Candidate Experience

Many candidates apply to more than one organisation at a time (The Must-Know Student Recruitment Trends for 2019 – Oleo and Universum). Respecting a candidate's time shown to be the third-biggest contributor to a positive interview or recruiting experience (40% of those surveyed) (Recruiting Daily Market Research, 2019).

##### Methodology

Great Eight predictor constructs were created using the twelve broad Wave section scales from the Match 6.5 assessment:

##### Analysing & Interpreting:

Evaluating Problems x 3

Creating & Conceptualising:

Creating Innovation x 2

Investigating Issues x 1

Interacting & Presenting:

Building Relationships x 2

Communicating Information x 1

Leading & Deciding:

Providing Leadership x 3

Supporting & Cooperating:

Giving Support x 3

Adapting & Coping:

Showing Resilience x 2

Adjusting to Change x 1

Organizing & Executing:

Processing Details x 2

Structuring Tasks x 1

Enterprising & Performing:

Driving Success x 3

Using a research sample, these Great Eight predictor constructs created from a longer Wave assessment were correlated with equivalent Great Eight constructs created from OPQ scales (originating from Bartram, 2005), to provide a measure of construct validity for the section level mapping against an established, independent framework.

The Great Eight predictor constructs created from Match 6.5 were then cross-validated against matched criteria measured through manager ratings of effectiveness using:

A research sample of N=308 individuals across multiple occupations with varying management responsibility

An operational sample of N=969 individual contributors and managers across multiple roles from a global chemicals manufacturer

Results obtained

Construct Validity

An average correlation of .64 (N=350) was observed between the Great Eight created from Wave sections and from OPQ scales. This provides construct validity evidence for the Great Eight predictor

competencies created from Wave sections. An average for unmatched correlations of -.01 demonstrates discriminant validity.

#### Criterion-related Validity

The mean average validity (i.e., the convergent validity) between the Match 6.5 predictors and matched criteria was .35 for the research sample and .41 for the operational sample.

Discriminant validity is demonstrated through comparing the unadjusted convergent validity figure (.18 and .21), with the mean average of non-matched predictor-criteria correlations (.03 and .03).

#### Limitations

This research considers theoretical validity for Match 6.5 based on an established, independent model. Yet an argument can be made that this approach is not fully representative, as in practice operational validity will vary based on the role context; Match 6.5 uses a particular configuration of sections to create a behavioural fit score for a specific job role.

Consequently, data borne from different local validation studies should provide a more accurate picture of operational validity.

#### Conclusions – research and or practical implications

The results support the construct validity of Wave in measuring the Great Eight competencies accurately and validly.

Having underlying construct validity is an important pillar supporting a behavioural tool's application in screening, enabling the combining and weighting of scales to produce flexible behavioural fit scores that forecast success in specific job roles. Further research is important in demonstrating the criterion-related operational validity of the resulting fit scores across different jobs.

#### Relevance to the Congress Theme

As the world of assessment evolves it is important to adapt to changes in the job market. Increasingly, there is a need for flexible, short assessments, with efficiency and speed key considerations for recruiters and candidates. It's also essential to retain focus on demonstrating the validity of new tools, and using well-established frameworks is critical to this.

*Keywords: Validity, Screening, Job Fit*

### **Paper 3**

#### **Validation of Lumina Spark and Emotion against the Great Eight Competencies**

Desson Stewart & Cannon Jonathan | Lumina Learning

##### Research goals and why the work was worth doing

The paper outlines research validating the combined personality model of Lumina Spark 24 and Lumina Emotion 16 against the Great Eight Competencies. Criterion validity of the two discrete models is presented, along with the incremental validity afforded by the combined model – Lumina Spark 40.

##### Measures

Lumina Spark 24 is a personality measure based on the Big Five model of personality with Jungian influences. It assesses four of the Big Five – Openness, Conscientiousness, Extraversion, and Agreeableness. The four factors are bifurcated into their opposite poles, with a total of 8 discrete factors being assessed. Each factor is further divided into 3 sub-factors each, with a total of 24 sub-factors. Each quality is assessed on 3 “personas”, reflecting the dynamic nature of personality. These personas aim to capture within-individual dynamics in personality with regards to preferences, everyday behaviours, and maladaptive manifestations of personality.

Lumina Emotion 16 is a measure of Neuroticism, the Big Five factor missing from Lumina Spark 24, along with 8 sub-factors of the 8 factors of Lumina Spark 24 which reflect emotional components of the aspects. As with the factors assessed in Lumina Spark 24, Neuroticism is also bifurcated into opposite poles, with each end divided into 4 sub-factors.

The Great Eight Competencies are competencies identified by Kurz and Bartram (2002) that represent an overarching framework of work-related competencies, designed to be a concise and generalisable competency framework by concentrating previous work on developing competency frameworks into 8 general factors of work performance; these were later adapted by Kurz (2003) in order to provide more applied titles to the competencies.

##### Method

In order to establish criterion validity of the measures, a standard methodology proposed by Bartram (2005) was used. This method involved the mapping of scale sub-factors to the Great Eight Competencies, which is then used to create composites of the sub-factors.

The Bartram (2005) methodology proposes that a composite would be comprised of 3 sub-factors, with a double weight for the top sub-factor, and a single weight for the 2 subsequent factors. In this study, an additional rule was set forth whereby the mappings of the Lumina Spark 40 sub-factors would include at least one sub-factor from each end of each factor-spectrum; this rule was implemented to satisfy the Jungian principle of valuing both ends of each spectrum equally. This rule was also loosely applied to the mappings of the 2 discrete models, but not strictly enforced.

Mapping of sub-factors to the Great Eight Competencies was informed by validity coefficients of the sub-factors against the competencies, where self-assessed sub-factor scores were assessed against externally-rated competency scores using Pearson correlations. For the purpose of this study, “effective” sub-factor scores (Underlying + Everyday) were used. The strength of validity coefficients

was used as the main criteria for the creation of sub-factor composites, further informed by expert judgement in order to maintain adherence to the aforementioned rules.

### Sample

375 professionals had self-rated on Lumina Spark 24, and had received external-ratings on the Great Eight Competencies. The mean age was 44.84 years, with 46.9% male and 53.1% female; of this sample, 307 had additionally self-rated on Lumina Emotion 16.

### Results

Based on the validity coefficients, composites were created by combining the three mapped sub-factors for each competency. These were then combined into aggregate scores which were assessed against externally-rated competency scores using Pearson correlations in order to assess the criterion-validity of each composite.

Validity coefficients of the composites created using Lumina Spark 24 sub-factors ranged from  $r = .20$  to  $r = .37$ ,  $p < .01$ ; for composites created from Lumina Emotion 16, the range was  $r = .28$  to  $r = .39$ ,  $p < .01$ ; and for the combined Lumina Spark 40 model,  $r = .34$  to  $r = .45$ ,  $p < .01$ . Mean validity coefficients across the eight competencies was  $r = .29$  for Lumina Spark 24,  $r = .33$  for Lumina Emotion 16, and  $r = .38$  for Lumina Spark 40.

### Discussion

The aim of the research presented in this paper was to provide evidence for the criterion validity of the Lumina Spark 24 and Lumina Emotion 16 models, through application of the methodology of Bartram (2005) against the Great Eight Competencies. Results found that through the mapping of sub-factors to the competencies and the creation of composites, both models were able to demonstrate robust criterion validity when assessed against the Great Eight competencies.

A further purpose of the research was to assess a criterion-centric justification for the merging of Lumina Spark 24 and Lumina Emotion 16 into a combined model – Lumina Spark 40. By applying the Bartram (2005) methodology to the combined model, results show evidence for incremental validity provided by the merging of the two models, with a high mean validity when compared to the two models separately, providing a robust argument for the combined Lumina Spark 40 model.

Finally, this research also provides evidence that even when valuing both ends of each Big Five spectrum, through having to incorporate at least one sub-factor from each end, robust criterion validity is still achievable, while contributing to the construct validity of the models through a high-fidelity approach.

### Limitations

A limitation of the research presented is the lack of criterion validity for sub-factors of low Conscientiousness in the Lumina Spark 24 model, whereby no sub-factors were able to be mapped to the criterion-variables. This, however, does provide more evidence for the combined model, as the low Conscientiousness sub-factor from Lumina Emotion 16 – ‘Follows Feelings’ was used in the predictive composite for the competency ‘Creating Concepts’, showing that through combining both models, robust criterion validity can be evidenced while also valuing all ends of all personality spectrums considered.

### Future Research

Future research should aim to cross-validate these findings across different samples in order to provide evidence for the generalisability of these findings, building on the robust evidence-base provided in the current research; this research should focus on the combined Lumina Spark 40 model as evidence presented in this paper suggests improved validity over and above the separate models.

*Keywords: Personality, Competency, Emotion*

## Paper 4

### Success Factors underpinning the Primary Colours of Leadership

Michele Guarini, HUCAMA GROUP; Ben Vernazza, Edgecumbe

#### Research goals and motivation

The goal of this research is to examine how a new model of Success Factors derived from the Great 8 Competencies (Kurz & Bartram, 2002) relates to the Primary Colours of Leadership model originally published by Pendleton & Furnham (2012).

#### Theoretical background

Judge, Bono, Ilies, & Gerhardt (2002) found high (adjusted) validities for the Big 5 personality factors in the prediction of leadership emergence and performance for Extraversion (.31), Conscientiousness (.28), Openness to Experience (.24) and Emotional Stability (.24) with a modest value for Agreeableness (.08) and a multiple correlation of .48.

Judge, Piccolo, & Ilies (2004) revisited under the headline of 'The Forgotten Ones? The Validity of Consideration and Initiating Structure in Leadership Research' the results of the Ohio Leadership Studies in the 1960s and found a mean observed correlation of .41 for Consideration and .24 for Initiating Structure.

Consideration could be viewed as People Leadership underpinned by Extraversion, Agreeableness and Emotional Stability and Initiating Structure as Task Leadership underpinned by Conscientiousness and Openness to Experience.

Kurz (2020) developed the Great 8 competencies into a Success Factors model with a People and a Task axis modelled on the work of Judge and colleagues. Building on the Schwarz (1993) universal values circumplex model as well as the meta-factors Alpha and Beta (Digman, 1997) that DeYoung, Peterson & Higgins (2001) renamed Stability and Plasticity, the model allocates factors to the poles of each axis. It thus forms an overarching model of potential and performance at the work place that integrates the leading personality assessment advances of the last four decades.

In their widely cited book, Pendleton & Furnham (2012) outlined 7 leadership tasks that are grouped into Strategic, Interpersonal and Operational Domains. These describe the core tasks leaders must perform in order to create the conditions for success e.g. Setting Strategic Direction, Building and Sustaining Relationships and Delivering Results etc. A 360 assessment as well as a sophisticated NEO report were developed which also covered Coping with Pressure. In the third edition of the book, Pendleton, Furnham & Cowell (2021) added the latter as an 8<sup>th</sup> leadership task.

In order to operationalise the model, a mapping was created to the Personality Factors (PF48) measure that was developed by Kurz (2020) to assess the dispositional aspects of the Great 8 Success Factors.

Broad People vs Task orientation themes featured explicitly in both models so that the term Leadership Functions, used by Bartram, Kurz & Baron (2003) for an OPQ based Leadership report, was adopted. Three Sub-Functions were developed to bridge between the 48 Facets in Personality Factors and the 8 Leadership Functions.

For the 'Coping with Pressure' Leadership Function the six Facets in the Resilience Factors were grouped into Showing Confidence, Demonstrating Resilience and Managing Emotions Sub-functions. For all other Functions a mix of Facets drawn from at least two Factors was used. For example, the first Leadership Function Setting Strategic Direction was sub-divided into:

Exploring Possibilities – mapped to Change Orientation and Opportunity Focus

Handling Complexity – mapped to Analysis and Complexity Orientation

Creating a Vision – mapped to Originality and Imagination

#### Method

The observed validity of the resultant mapping was calculated on a Personality Factors (PF48) validation study where participants also completed the structurally aligned Competency Factors (CF48) measure on which they were also rated by external reviewers.

113 professionals and managers completed Personality Factors (PF48) with 240 statements and Competency Factors (CF48) with 48 statements. Both used a 9 point 'accuracy' Likert rating scale as featured in the Trait Descriptive Adjectives (TDA) tool developed by Goldberg (1992).

Sub-Function, Function, Domain and overall Leadership Focus scores were calculated in SPSS for Personality Factors and Competency Factors (self-report ratings and reviewer ratings), and subsequently correlated.

#### Results

The average validity for Leadership Sub-Functions was .34 for reviewer ratings and .61 for self-ratings. The respective values for Leadership Functions were .45 and .74, and for Leadership Domains .49 and .79. The overall Leadership Focus score correlated .50 and .80 respectively.

The validities are more than twice the size of the .16 average for factors reported in the widely cited meta-analysis of Bartram (2005) where the methodology used the Great 8 as an organising framework linking hitherto entirely separate models of personality (OPQ versions) and competency (primarily IMC and PMC versions). In contrast the current study features measures that were a priori aligned based on a substantial study of 466 professionals and managers (Kurz, 2020). Ratings were provided solely by Boss raters, whereas the current study features primarily peer raters, who presumably can observe more accurately a wider range of behaviours. Finally, the ipsative nature of most of the OPQ versions used will have limited the validity coefficients as a fixed number of points was allocated across the various predictor scales. Based on multiple regression Bartram (2005) found overall observed validities around .30 whereas the present study found a value of .50 using parsimonious unit weights.

#### Limitations

The current study demonstrates that Personality Factors can be successfully mapped to the Primary Colours of Leadership model, but further studies should consider a, how Big 5 domains relate to the model and b, what outcomes relate to the model.

#### Research/Practical Implications

The results suggest outstanding levels of observed validity at the Leadership Sub-Function, Leadership Function, Leadership Domain and overall Leadership Focus levels. The broad study

sample suggest universal applicability not just for existing leaders but also for the identification of leadership potential.

The high correlations between personality and competency self-report data at all levels of the hierarchy supports the notion of Success Factors as constructs that straddle across personality and competency modalities covering dispositional predictors and behavioural criteria respectively.

Originality/Value

The study opens new opportunities for the application of the Primary Colours of Leadership model across the employee life cycle from recruitment through to selection to development interventions.

The convergence of the Primary Colours of Leadership model and the Success Factors model attests to the power of the underpinning theoretical models which is boosted further by their integration.

*Keywords: Personality, Competency, Leadership*

## Paper 5

### Predicting Competency from Personality and Ability Assessments: A Multicultural Case Study

Rainer Kurz, HUCAMA Analytics; Nailah Moussa, Nailah Moussa Consulting

#### Research goals and why the work was worth doing

In a pioneering meta-analysis Robertson & Kinder (1993) outlined how personality and ability variables predict 13 criterion areas. Kurz (1999) conducted follow-up research predicting 16 managerial competencies that culminated in the Great Eight Competencies (Kurz & Bartram, 2002) that are underpinned by the Big 5 personality factors, Need for Power, Need for Achievement and General Mental Ability. While Bartram's (2005) research paper demonstrated that personality scales correlate with all Great Eight Competencies, ability correlated higher than personality only on Analysing/Interpreting but did not at all correlate with Supporting/Cooperating and Enterprising/Performing. The seminal research puts forward a lesser role to ability in predicting overall performance while cumulating research (e.g. Hunter & Hunter, 1984) positioned ability test as the single best predictor of training and performance. Sackett, Zhang, Berry & Lievens (2022) corrected downwards ability validities and covered Big 5 personality factors but neither a personality composite nor composites across personality and ability. This research seeks to explore the validity of personality and ability variables in a cross-cultural context and establish their relative value and combined validities applying the advancements made in I/O Psychology in research years.

The following research goals were set in proposing a new method of using personality and ability in predicting workplace performance:

Understand the roles that personality and ability assessment play in predicting managerial performance using the Great Eight as the organising framework.

Validate existing Great 8 algorithms with a multicultural group.

Define valid algorithms for the culturally specific sample in light of the data and the Great 8 Success Factors proposed by Kurz (2022).

Explore the validity of various methods of combined scoring of personality and ability assessment in predicting performance at work by using The Great Eight Competency as the organising framework for both the predictor and the criterion sides.

#### Theoretical background

This research explores how to combine personality and ability in predicting performance at work.

Using ability as a selection predictor measure presents the problem of adverse impact on certain groups of employees and in order to address this issue, we need to create ability measures that minimise cultural bias. Kurz (2022) proposed the use of the Ability Factors assessment consisting of Diagrammatic Reasoning, Number Series and Spatial Reasoning test where all 60 items are language free. The question arises what observed validity such a composite can achieve and whether a verbal test would increment validity in a culturally diverse sample.

The Great Eight competencies (Kurz & Bartram, 2002) were developed as an overarching model to account for the validity patterns of personality and ability variables forming an extension and alternative to the Big 5 model.

Recent research by Sackett, Zhang & Lievens (2022) highlights the central role that ability plays in predicting performance, and the predictive validity of the Big 5 personality factors on work performance but fails to quantify their combined validity.

This research seeks to apply a priori specified Great 8 algorithms and explore alternative in the light of the Great 8 Success Factors model proposed by Kurz (2022). In the Success Factors model a 3:1 personality:ability weighting is proposed for Supporting and Interacting factors, a 1:3 weighting for Investigating and Achieving factors, and equal weighting for the remaining four factors.

## Methodology

The research was conducted with N= 221 professionals and managers across multiple occupations in Mauritius. All completed a personality questionnaire and a competency questionnaire and had at least one external reviewer completing the same competency questionnaire. A subsample of 49 (denoted P-A-C) had also completed 9 tests covering six content areas.

Great Eight construct variables for the personality predictor and competency criterion measures were created using the Project Epsom mapping of Saville, Kurz & MacIver (2009).

Alternative Great Eight construct variables for the personality predictor and competency criterion measures were created in the light of the Success Factor model (Kurz, 2022) and the culturally diverse data set which consisted of the P-A-C sample of N=49 and the P-C sample of N=172 with the total research sample consisting of N= 221 managers across multiple occupations in Mauritius - a multicultural and multilingual island.

Ability test validities were calculated for each content area and integrated into an entirely non-verbal ability composite (denoted DNS) based on diagrammatic, numerical and spatial tests, and a GMA composite (denoted DNSV)

Personality and ability variables were combined with a, Regression Weights used by Bartram (2005), b, Unit Weights and c, Integer Weights guided by Kurz (2022), and correlated with competency performance criteria based on the average of boss, peer and subordinate ratings of effectiveness.

## Results obtained

### Criterion-related Validity

The personality factors validities were calculated for the Great 8 Competencies (Kurz & Bartram, 2002) and the culturally adjusted Great 8 Success Factors (Kurz, 2022) for the P-A-C sample (N=49), the P-C sample (N=172) and the total sample (N=221).

The original algorithms achieved an average observed (i.e. uncorrected) validity of .13 which is slightly lower than the value of .16 found in Bartram (2005). Adjustments made to the algorithms in the light of the Success Factors model and the P-A-C data increased observed validity from .12 to .18 and in the P-C group from .14 to .16 with an average observed validity of .16 across the full sample.

In terms of ability variables, the highest observed validity was found for spatial (.41), followed by diagrammatic (.33), numerical (.28), checking (.15), verbal (.15) and mechanical (.06).

The non-verbal DNS ability composite (diagrammatic, numerical, and spatial) had a reliability of .78 and an observed validity of .40 whereas values for DNSV (with verbal added) were .82 and .36 respectively.

Z-scores were calculated for the personality composites of the Great Eight Success Factors and non-verbal ability composite DNS, and combined using three methods:

Beta Weights from Bartram (2005)

Unit Weights

Integer Weights based on Kurz (2022)

On the P-A-C sample of N=49 applying the regression weights of Bartram (2005) achieved the lowest combined validity (.31) followed by the unit weight method (.39) with the highest validity (.41) for the integer weight method.

Limitations

This research is based on a Mauritian sample of 221 managers with personality and performance criterion data. However only 49 had ability data. The localised personality algorithms improved validity for the P-A-C group by 50% and also somewhat for the cross-validation P-C group. The applicability for western samples should be explored in the light of the revised Success Factors model. In order to confirm the combined assessments of personality and ability and the integer weight scoring in predicting performance, this study should be replicated in different, larger samples across organisational levels.

Conclusions – research and or practical implications

The results support the use of The Great Eight as a generic model of performance at work across cultures with substantial validity improvements through modelling the Success Factors variation on multicultural data. The proposed approach to measure ability with non-verbal items optimises predictive power for selection and development and is likely to reduce the adverse impact that would be introduced through a verbal component. Finally, the new advancement in scoring personality and ability as composite using integer weights based on their relative validity could enhance prediction of performance.

*Keywords: Personality, Ability, Competency*

## Symposium S100

### Improving the safety training: literature reviewing, engaging the participants, developing models

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science\_practice

What will be covered and why. There were 3355 fatal accidents at work in the EU in 2020 (Eurostat, 2022). Efficient norms and organizational processes are not sufficient to assure occupational well-being. Human error is one of the primary causes of failure in a variety of working contexts, such as chemical and petrochemical (Kariuki & Löwe, 2007), marine (Ren et al., 2008), and aviation sectors (Sexton et al., 2000). In this regard, training is a tool that can improve the impact of HF and expand Safety in the workplace, but the waited results are not always reached (Ricci et al., 2016).

So the symposium wants to present some evidence of research and experiences that can help in the complex tasks of projecting and carrying out effective training courses on Safety.

The first study by Priolo and colleagues describes a systematic review of risk perception and safety behaviors, with the perspective of improving safety training on situational awareness too. The results underline the issues of the definition of risk perception, its measures, and the relationship with safety behaviors. A more comprehensive analysis of risk perception in the workplace, with its cognitive and emotional dimensions, can develop efficient training to increase Safety.

The second research, by Mariani and colleagues, studies, with a two waves design, the role of training engagement and motivation to learn on the actual transfer of training in relation to a course of non-technical skills for Safety. The results suggest some practical ways to improve safety training interventions. So, understanding how to increase the involvement of participants in safety training has significant repercussions both from a research and intervention point of view.

The third study, by Ricci and Nucci, presents a safety training model named SIM-t (Safety Integrated Model-training) and its evaluation based on longitudinal research design: the results showed that the average safety performance at the end of the training was significantly better than the initial level. The SIM-t and its evaluation methodology are useful suggestions for prevention in the safety field.

The fourth study, by Panari and colleagues, focuses on the factors, such as knowledge and Safety culture, that can influence safe individual performance after training. The result underlines that the knowledge of the rules, regulations, procedures, and roles of the prevention system and unsafe behaviors, as developed in safety training, are critical for safety performance.

Finally, the fifth study of Bracco develops an accident investigation model and related tools which have the characteristics of effectively representing accident dynamics and of providing trainers and safety managers with a metaphor that can be shared across the whole organization, for promoting safety culture.

Relevance to the Congress Theme . The symposium focuses on a central and urgent topic of sustainability as Safety and is born on the basis of the need to gain a better understanding of how we can improve occupational health and safety training. The results of this symposium are relevant not only to change the „world of safety training” but to at least UN SDGs, by the work-related injuries prevention, as Good health and well-being, Decent work and economic growth, and Industry and Innovation and Infrastructure.

Research/Practical Implications . The symposium suggests future keys to developing competencies through training programs in the occupational health field. The theoretical and practical implications regard the constructs of risk perception with respect to Safety: how we can monitor it in the workplace and how we can improve situational awareness. How the training engagement can be used to enhance the intention to training transfer and how integrated safety training methods can improve individual safety performance. Finally, the symposium contributions tend to explain the importance of the training to enhance knowledge of the rules, regulations, procedures, and roles of the prevention system.

Overall conclusions. Many companies are increasing the frequency and content of health and safety training programs (ISTAT, 2020); however, the effectiveness of safety training courses can vary widely (Ricci et al., 2016). In this scenario, it is crucial to work on different aspects of training to improve it. The symposium, with specific focuses on constructs of training programs (as risk perception), participant motivation (as engagement), model of training (as SIM-t), and safety performance (as compliance), can suggest ways for better understanding and effectiveness of safety training processes.

*Keywords: safety, training, effectiveness*

## Paper 1

### **Risk perception in high-risk sectors: are we addressing it properly? A systematic literature review informing the development of safety training inter**

Michela Vignoli, Department of Psychology and Cognitive Science, University of Trento, Italy; Karina Nielsen, Sheffield University Management School, University of Sheffield, United Kingdom; Giulia Priolo, Department of Psychology and Cognitive Science, University of Trento, Italy. Department of Psychology and Behavioural Sciences, Aarhus University, Denmark

**Research goals.** Safety at work is a key concern in today's workplace. Associations between risk perception and safety behaviours have been established in several sectors, but results are mixed, and a broad understanding of this association is lacking. Nevertheless, better understanding this relationship and its determinant is paramount from both a theoretical and practical levels, for instance in terms of the creating of more effective training in which risks are discussed not only from an engineering perspective, but also from a psychological one. Using three different theoretical frameworks combined, we aim to explore a) how risk perception is defined; b) whether risk perception is associated with safety behaviours and c) which role contextual factors (e.g., safety climate) play in this association.

**Theoretical background.** Risk perception has been defined as "a person's subjective judgment or appraisal of risk" (Slovic, 1987; p. 8) and it refers to a complex and multi-dimensional construct composed by three main aspects: probability, the severity of consequences and emotions (Siegrist & Árvai, 2020; Slovic et al., 2002, 2004). According to Christian's (2009) integrative model of workplace safety (2009), risk perception is associated with two different types of behaviours: safety participation and safety compliance. In order to better understand this association, the IGLO model developed by Nielsen and colleagues (2018) has been used.

**Design/Methodology.** Using the PRISMA method, we conducted a comprehensive literature search looking for peer-reviewed papers published in the last 20 years only in English, having "risk perception" and/or "safety behaviour" in the title, keyword or abstract. Eligibility criteria also referred to; being the participants first-line workers employed in high-risk sectors for physical risk (e.g., construction).

**Results.** Our search resulted in 92 papers. Results show that most of the studies selected have been conducted in the construction sector and in Asia. Only one-third of the papers include a definition of risk perception. Moreover, we found that the majority of the papers mostly measured only the probability dimension of risk perception, and only a small amount of papers correctly investigated the three dimensions of the construct (probability, severity of consequences, and emotions). Concerning the relationship between risk perception and safety behaviours, the analysis held mixed results since both positive and negative associations, as well as null effects, were detected. The variety and inconsistency of the methods and conceptualization used to assess risk perception might explain these findings and make the interpretation of the association between the two constructs very complex. Moreover, we found that most of the safety behaviours have been investigated in terms of compliance (and not participation). Considering the IGLO model, results showed that the most investigated factors related to risk perception are the individual ones (e.g. knowledge, demographics) and the organizational ones (e.g. safety climate, training).

Limitations. Due to the difficulty to retrieve relevant information (especially on the association between risk perception and behaviours), we focused only on quantitative studies and not qualitative ones. Moreover, we focused only on high-risk front-line workers, thus our results might not be generalisable to supervisors or workers employed in low-risk sectors.

Conclusions. Most studies focused on the cognitive dimension of risk perception while failing to consider its emotional one. This narrow conceptualization of risk perception might explain the mixed results. Moreover, a crucial effect of contextual factors such as safety climate was detected. Guidelines for a more comprehensive assessment of risk perception in the workplace are outlined for future studies. This study contributes to the risk perception and safety literature by clarifying the construct of risk perception and the relationship between risk perception and safety behaviours. As a practical implication, the results of this study could enhance how risk perception is managed in organisations, as a better understanding of the role of risk perception, in both its cognitive and emotional dimensions, in shaping safety behaviours is pivotal to developing efficient training on non-technical skills able to increase safety and decrease injuries and fatalities.

Relevance to the Congress Theme: The world of work is rapidly changing and there still are important issues related to the safety and health of workers that are urgent and cannot wait to be addressed and solved to enhance the quality of the working conditions for all workers.

Relevant UN SDGs: Results of this study are relevant to at least three UN SDGs: Good health and well-being; Decent work and economic growth and Industry; Innovation and Infrastructure.

*Keywords: risk perception, safety behaviours, high-risk workers*

## Paper 2

### **Engage in Safety, Stay Safe! – Evidence for the impact of Safety Training Engagement and Motivation on the Transfer of Training**

Marco Giovanni Mariani, Department of Psychology "Renzo Canestrari", University of Bologna, Italy; Dina Guglielmi, Department of Education Studies "Giovanni Maria Bertin", University of Bologna, Italy; Michela Vignoli, Department of Psychology and Cognitive Science, University of Trento, Italy; Gerardo Petruzzello, Department of Psychology "Renzo Canestrari", University of Bologna, Italy

**Research goal.** This study aims at testing the relationships between Safety Training Engagement (STE), Motivation towards training, intention to transfer and real transfer of training, among Italian workers in the chemical industry. Testing such relationships is a valuable addition to the literature. Indeed, it draws on the call to further address and articulate psychological factors enhancing the effectiveness of the training methods. In a practical sense, our results suggest ways to design and carry out safety training interventions.

**Theoretical background.** STE is understood as a combination of two psychological states pertaining to safety training, namely dedication (meaningfulness and enthusiasm) and absorption (focus and concentration on the training tasks). This study addresses the mediation mechanisms through which STE determines the actual transfer of the knowledge and skills acquired during safety training in real work activities. In line with the previous research, it could be argued that being engaged represents a starting point for motivation to apply what is learnt during a training programme, because trainees may see this application as a means to protect themselves (autonomous motivation) and that it bodes well for better performance and recognition (controlled motivation). In turn, we expect motivation to inform the intention to transfer, in line with a consistent body of literature. Eventually, as the intention is a close predictor of behaviours, we also expect that it predicts the actual transfer of training. We combined these hypothesised relationships in a serial mediation model, where STE predicts the actual transfer indirectly through the mediation of Motivation (autonomous and controlled) and intention to transfer.

**Methodology.** We adopted a two-wave research design, recruiting employees from a large chemical company in the north of Italy. STE, Motivation (autonomous and controlled) and intention to transfer were collected at the end of a training section of a broader safety training program (Wave 1). Actual transfer was measured after three weeks (Wave 2). Participants have assured confidentiality and acknowledged the right to participate upon informed consent and withdraw at any time. The final sample comprised 125 participants with a mean age of 42.40 years ( $SD = 11.90$ ), mostly Men (90%).

**Results.** We tested two serial mediation models (one for each form of motivation) with the SPSS macro Process software. The results confirmed our serial mediation hypothesis. Although small, the effects found confirm the cognitive process linking STE and transfer.

**Limitations.** This study has some limitations; two are the mains. In our opinion, first, the samples involved only workers of chemical plants that attended courses on non-technical skills. Such homogeneous samples may have some drawbacks in terms of external validity. The second is that we have measured the actual transfer based on only worker perceptions and not considered a different assessor.

**Conclusions - Research and practical implications.** The evidence confirms the serial mediation model where STE predicts the actual transfer indirectly through the mediation of Motivation (autonomous

and controlled) and intention to transfer. The research suggests future keys to developing effective training programs in the occupational health field. The main theoretical and practical implications regard the constructs of Safety Training Engagement: how we can monitor it and how the training engagement can be used to enhance the training transfer.

Relevance to the Congress Theme. The research focuses on strategies for improving Safety through training. So we are at the center of the urgent topic of sustainability.

Relevant UN SDGs. The results of this symposium focus on UN SDGs as Good health and well-being, Decent work and economic growth, and Industry and Innovation and Infrastructure.

*Keywords: safety, training, engagement*

### Paper 3

#### **Safety Integrated Model-training (SIM-t) and its evaluation: A safety training proposal for mechanical companies**

Federico Ricci, Department of Biomedical, Metabolic and Neural Sciences, University of Modena and Reggio Emilia, Italy; Massimo Nucci, Department of General Psychology, University of Padova, Italy

**Research goals.** In the EU, the number of occupational accidents is still too high, with serious social and economic consequences. We have devised an intervention called Safety Integrated Model-training (SIM-t) with the aim of unifying the most effective training methods for adults in a single proposal. Beyond presenting the SIM-t, this research aims to contribute to this knowledge through evaluation of the effects of an intervention delivered with the SIM-t method for workers at mechanical companies.

**Theoretical background.** The SIM-t is a training methodology designed according to a constructivist approach, with reference to Kolb's (1984) experiential learning model. That method traces the acquisition of new knowledge, skills, and attitudes to four modalities: concrete experience, reflective observation, abstract conceptualization, and active experimentation. The framework of reference offered by experiential learning is necessary for designing in an appropriate and integrated training pathway that combines the main principles of andragogy: examples, videos, a participative approach, and reinforcement in daily practice.

**Design/Methodology.** SIM-t involves the use of ad hoc audiovisual materials, a participatory approach, and regular and lasting reinforcement in daily practice. The training intervention is divided into several sessions over several weeks. For its evaluation, we conducted a longitudinal study (September 2017–April 2018), with the participation of workers ( $n = 185$ ) from mechanical companies in northern Italy.

**Results.** Overall, the participants' average safety performance at the end of the training was significantly better than the initial level. In particular, knowledge showed a significant improvement and a substantial effect size ( $F = 455.3$ ;  $p < 0.001$ ;  $\eta^2 G = 0.49$ ). Similarly, the behaviours showed a significant growth pattern and an adequate effect size ( $F = 108.5$ ;  $p < 0.001$ ;  $\eta^2 G = 0.32$ ). The contents that emerged from the study suggest extending this training intervention and the evaluation of its effectiveness to different contexts.

**Limitations.** Given the nature of the ecological study, the training and data collection involved a convenience sample of companies that cannot be considered representative. However, bearing in mind the necessary caution in generalizing the results, all the workers employed in the chosen departments participated in the longitudinal study.

**Conclusions.** The results of this study confirm the importance of delivering training according to actual needs of participants, via the use of effective methods for adult learning. The SIM-t methodology aligns with these principles exactly and allows us to achieve favourable lasting outcomes regarding knowledge improvement, implementation of safe behaviours, and an increase in safety performance.

**Relevance to the Congress Theme:** The future is now! For safety training means that those interested in delivering effective training, with the intention of designing safer systems, should think not only about quantity but also quality. Training interventions that focus on content (the object of

the training) are destined to fail if they do not shift their attention toward the best methods (how to do the training).

Relevant UN SDGs: Results of this study are relevant to at least three UN SDGs: Good health and well-being; Decent work and economic growth; Industry, Innovation and Infrastructure.

*Keywords: safety behaviours, safety training, training evaluation*

## Paper 4

### **Factors influencing Safety Performance: the impact of Knowledge and Safety culture on Safety Compliance after a training**

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**Research goals.** This work aimed to examine the precursors of safety compliance whilst focusing on organizational factors (the management's safety climate, as well as colleagues' safety climate) and individual factors (safety knowledge and attitude). In particular, we tested different models to measure the impact of the above four precursors on safety compliance, both individually (H1) and in combination (each precursor was tested added to each other, without hypothesizing their interaction, H2) or in interaction with each other (H3), so as to identify the most predictive factors of safe behaviour.

**Theoretical background.** The literature about the effectiveness of safety training showed results that are not entirely clear and this is often due to the use of objective indicators, such as injuries and accidents, referring to a concept of safety as the absence of negative events (Robson et al., 2012). Quite the opposite, the Safety-II perspective (Hollnagel et al., 2015) assumes that, while accidents clearly indicate the absence of safety, a lack of accidents cannot necessarily be used to infer a low probability of harm. In this framework, safety compliance can contribute to the implementation of adaptive safety performance for the organization (Griffin and Neal, 2000). Literature focused on antecedents of safety compliance underlined the importance of safety knowledge (Christian et al., 2009) and attitude (Clarke et al., 2006), on an individual level, and studies on the effectiveness of safety training are now clearly focused on assessing the changes concerning knowledge and attitudes after safety training has been conducted (Robson et al., 2012; Ricci et al., 2016). Furthermore, a recent systematic review (Kalteh et al., 2021) concluded that increasing the level of safety climate and safety culture could be effective in reducing incidents and improving safety performance indicators

**Design/Methodology** A sample of mechanical Italian workers ( $n = 109$ ) was involved in a safety training intervention. Before and after safety training, intervention data concerning the four precursors affecting safety-related behaviours, measured through observed objective behaviours, were collected. A model class of competing general linear models was built to determine the best model for predicting safety-related behaviours. Akaike's information criterion corrected was used as an indicator of incremental fit to estimate the residual variance of the model corrected for the number of predictors. Models with an Akaike's weight approximately equal to 10% of the weight of the best model were included in the confidence set.

**Results.** The results showed that knowledge combined with the management safety climate, not in interaction, effectively predicts safety compliance ( $R^2 = 0.283$ ,  $R^2_{adj} = 0.269$ ;  $F [2,106] = 20.76$ ,  $p < 0.001$ ). This model had the best Akaike's weight ( $= 0.524$ ).

Particularly, the knowledge of the rules, regulations, procedures, and roles of the prevention system and unsafe behaviours defines what each worker must know to be able to act safely and these elements are critical to safety performance. Furthermore, management's safety climate contributed to the workers' safe behaviour, demonstrating that the workers' perception that safety was indeed a

priority of the company management, increasing the positive effect of knowledge on the production of safety compliance.

Limitations. The study involved a non-representative convenience sample, and the choice of measures depended on the agreement with the companies involved, with the cultural level of the participants, and with their familiarity with social research.

Conclusion. Crucial implications concern the effectiveness of active teaching methods, and the importance of the involvement of the management in giving relevance and constructing a safety culture. Firstly, the intervention could help to effectively link cognitive processes, behaviour, external environment, and measurable results, facilitating learning by action. Secondly, this research emphasised the importance of continuous training. Finally, this study showed the prominent role of supervisors and top managers in giving further relevance through their actions to the need to respect the company's rules and procedures. Increased managerial safety commitment, could directly motivate workers to contribute to safety.

Relevance to the Congress Theme. This study places emphasis on the theme of workers' safety and health considering that despite the largest decreases in incidence rates of fatal and non-fatal accidents, in the last years there are still too many events that cause serious or irreparable damage to workers.

Relevant UN SDGs. The results of this study are relevant to at least three UN SDGs: Good health and well-being; Decent work and economic growth and Industry; Industry, Innovation and Infrastructure.

*Keywords: safety compliance, safety training, safety climate*

## Paper 5

### The safety bowl. An accident investigation model for fostering safety culture

Fabrizio Bracco, Department of Education Science, University of Genoa, Italy

#### Research goal

This research aims at the development of an accident investigation model and a related tools which have the characteristics of effectively representing accident dynamics, of being easy to implement for safety managers and accident investigators, and of providing trainers and safety managers with a metaphor that can be shared across the whole organization, for promoting safety culture.

#### Theoretical background

Accident causation models could be accurate in representing the dynamics of accidents (accuracy) and easy to use for safety managers and accident investigators (usability). However, in addition to accuracy and usability, a good accident causation model should also allow for the shareability of analysis across the organization, as the culture of safety is primarily based on a common view of system dynamics. The safety bowl model is proposed, which aims to provide a depiction of complex interactions between the elements of a system and a clear metaphor, easy to understand and share with workers in safety training programs. The model, inspired by the principles of resilience engineering, enables shareability because it graphically represents abstract and complex concepts like “emergent property”, “systemic approach”, and “functional resonance”. For the sake of accuracy and usability, the model is accompanied by a tool for collecting data concerning the various elements of the system and their interactions (the safety bowl checklist) and a tool for mapping these interactions (the safety bowl grid).

#### Methodology

Opinions on the model were collected by safety experts in various sociotechnical systems (N=19) via online questionnaire and investigated:

The knowledge and frequency of use of some of the main accident investigation models (root cause analysis, fault tree, Ishikawa model, FMEA/FMECA, Bow Tie, Swiss Cheese, Accimap, STAMP/CAST, FRAM) ranging from traditional, simplistic, and easy-to-use models, to sophisticated and less easy to adopt models.

The perceived accuracy, usability, and shareability of the safety bowl model

The ratings ranged from -2 (worse than the other methods) to + 2 (better than the other methods). A final open-ended question was posed to get free comments on the model.

#### Results

The results demonstrated that the safety managers and trainers do not know the most recent and sophisticated models (e.g., Accimap, STAMP/CAST, FRAM), and when they know these models, they do not use them. These models are very accurate in analysing accidents but, as expected, they are perceived as being difficult to adopt. The most known and used model is the fault tree model, followed by the Swiss Cheese. Again, the participants seem to prefer simpler (and simplistic) models.

Concerning the opinion about the safety bowl model, all the ratings were positive (mean score: 1,1). This means that the safety bowl has been rated better than the other models concerning the three properties of accuracy, usability, and shareability.

#### Limitations

This is a pilot study conducted with a small sample. The sample size was due to the small number of practitioners who already knew and adopted the safety bowl model. Future research should involve a wider sample with mixed methods (e.g., interviews, and field observations).

#### Research and practical implications

Shareability does not seem to be the core property of many accident causation models, revealing how the development of these methods have been driven mainly by the views and needs of sophisticated scholars (tending towards the accuracy of analysis) and practice-oriented safety managers (tending towards the usability of the tool). The safety bowl model aims at balancing the three characteristics of accuracy, usability and shareability. Safety is an emergent property of a system where the most flexible elements are the people operating within and around it. If they can share a common perspective on a system's dynamics and can understand how accidents occurred in the past, they can learn from experience and foster resilience.

#### Relevance to the Congress Theme

The future is now: the complexity of accidents in socio-technical systems can be tackled thanks to effective and accurate models, but these models must leave the ivory tower of scientific journals and academic domains, otherwise practitioners will continue to use simpler and more simplistic models for accident investigations. In addition, if we want safety to become a common ground among all the members of the organization, a simple and shareable metaphor for representing safety issues is needed.

#### Relevant UN SDGs

This study provides results that are relevant to at least three UN SDGs: Good health and well-being; Decent work and economic growth and Industry; Innovation and Infrastructure.

*Keywords: Accident causation model, resilience, accuracy, usability, shareability*

## **Symposium S112**

### **Safety culture and safety performance (II)**

Francisco J. Gracia & Mario Martínez-Córcoles | IDOCAL. University of Valencia

science\_practice

What will be covered and why (including the contribution of any discussant)

Safety culture and safety performance have been considerably studied over the last two decades, as they are main triggers of safety outcomes. However, despite the existing numerous studies, safety culture and safety performance are still somewhat controversial, complex, and ambiguous concepts that need further theoretical and empirical elaboration. This Symposium aims to 1) dig deeper into the appropriateness of current assessment methods of nuclear safety culture and propose new directions, and 2) analyze other key antecedents of safety performance (e.g. leadership, safety climate, etc.).

More specifically, Schöbel analyzes the safety culture assessment methods proposed in the nuclear industry nowadays. Martínez-Córcoles tests the validity of the Harmonized Safety Culture Model designed by the International Atomic Energy Agency, and Clarke proposes a novel conceptual model of safety culture for the UK nuclear industry. Besides, Seitkanova tests the mechanisms through which empowering leadership impacts on the ability to anticipate and contain unexpected events in air traffic control, and Jackson explores the group and individual-level antecedents of safety performance in heavy mobile plant drivers.

Relevance to the Congress Theme

Safety accidents lead to undesired social, environmental and economic consequences. Further research on enhancing organizations' safety capability is crucial to prevent accidents and to achieve more adaptive and sustainable operations.

Research/Practical Implications

This Symposium provides novel contributions to the field of safety culture and safety performance in organizations. Particularly, it will contribute to existing research on 1) examining, reflecting, and re-formulating new ways of measuring safety culture in high-risk organizations, and 2) exploring additional antecedents and influential mechanisms of safety performance.

Furthermore, this Symposium will cover critical areas of safety in organizations, and will give insights on how to measure safety culture and why, what other aspects (besides safety culture) should be considered to improve safety performance, etc. Therefore, agencies, regulators, and organizations pursuing safety performance could be benefited from the Symposium contributions

Overall conclusions

The main conclusions of the present Symposium are the following:

Assessment of safety culture might have repercussions on safety outcomes. Therefore, current assessments are reviewed, analyzed, tested, and re-formulated.

Empowering leaders impact on the organization's safety capability. The mechanisms by means of which they do so are highlighted.

Group and individual-level antecedents influence safety performance. These (cross-level) relationships are explored.

*Keywords: Safety culture; Safety performance; Safety management*

## Paper 1

### The 5-Safety Performance Questionnaire (5-SPQ): Theoretical model and empirical validation.

Francisco J. Gracia, IDOCAL-University of Valencia (Spain); Alena Mezentseva, University of Valencia (Spain); Inmaculada Silla & Mario Martínez-Córcoles | IDOCAL-University of Valencia (Spain)

#### Research goals and why the work was worth doing

In this paper, we propose a new model of safety performance and develop and validate an instrument for its operationalization, the five-safety performance questionnaire (5-SPQ). Safety performance refers to employees' behaviors related to safety. As a meta-analysis revealed, the relevance of safety performance is due to the fact that it is the main antecedent of safety outcomes (Christian et al., 2009). Through their behaviors, employees contribute to safety outcomes. Hence the relevance of a more complete understanding of what safety performance involves and the different ways the employees can contribute to safety outcomes through their behaviors.

#### Theoretical background

The most acknowledged model of safety performance distinguishes between safety compliance and safety participation, or intra and extra-role behaviors related to safety (Neal & Griffin, 2006). Another proposal includes a third dimension of safety performance, risky behaviors or counterproductive behaviors related to safety (Martínez-Córcoles et al., 2013). Van Dyne et al. (1995) distinguish between affiliative and challenging extra-role behaviors, and other authors have identified different behaviors under the umbrella of safety citizenship behaviors (Curcuruto and Griffin, 2018). Finally, Holnagell (2014) in his Safety-II paradigm speaks of the importance of employees "adapting" their behavior to guarantee safety. Our proposal is based on these previous contributions of literature and include five dimensions for safety performance: intra-role safety behaviors, affiliative extra-role safety behaviors, risky behaviors, challenging extra-role safety behaviors, and adaptative safety behaviors.

#### Methodology

555 employees from a nuclear power plant answered to our questionnaire.

#### Results

Reliability values were satisfactory for the five subscales: intra-role safety behaviors ( $\alpha = .75$ ;  $\rho = .76$ ), affiliative extra-role safety behaviors ( $\alpha = .82$ ;  $\rho = .83$ ), risky behaviors ( $\alpha = .87$ ;  $\rho = .87$ ), challenging extra-role safety behaviors ( $\alpha = .89$ ;  $\rho = .89$ ), and adaptative safety behaviors ( $\alpha = .81$ ;  $\rho = .82$ ).

Regarding validity we obtained some evidence based on internal structure. Confirmatory factor analysis revealed that the goodness-of-fit of the proposed five-factor model fit the data adequately ( $\chi^2 = 262.312$ ,  $df = 160$ ,  $p < .001$ ;  $RMSEA = .035$ ;  $NNFI = .995$ ;  $CFI = .995$ ). By contrast, the one factor solution provided a poorer fit to the data ( $\chi^2 = 2332.949$ ,  $df = 170$ ,  $p < .01$ ;  $RMSEA = .154$ ;  $NNFI = .891$ ;  $CFI = .903$ ). Moreover, differences between the fit of the five- and one-factor models were relevant from a practical point of view ( $\Delta NNFI = .104$ ,  $\Delta CFI = .092$  and  $\Delta RMSEA = .119$ ). Thus, the five-factor model proposed by the authors was empirically supported. All factor loadings were statistically significant ( $p < .01$ ) and high enough according to the standards ( $> .60$ ). Average factor loadings were .84, ranging from .62 to .95, thus supporting convergent validity. All correlation coefficients among

the five dimensions of the questionnaire are high, but did not exceed the accepted criterion, thus supporting factor discrimination. All of them show significant and positive correlations among them, ranging from .26 to .65, but significant and negative correlations with risky behaviours, ranging from -.17 to -.42. These correlations show that the five dimensions represent highly interrelated components of safety performance.

Furthermore, we obtained some validity evidence based on relationships with external variables. Pearson correlations between each of the five dimensions of the 5-SPQ and safety culture, organizational safety climate and team safety climate were calculated. All correlation coefficients are statistically significant ( $p < .01$ ) and exhibit the correct sign. Safety culture, organizational safety climate, and team safety climate were negatively related to risky behaviors and positively with the other four dimensions of safety performance.

#### Conclusions – research and or practical implications

This study advances scientific knowledge through the proposal of a new model of safety performance that includes five different dimensions. Furthermore, it develops a scale for its operationalization and provides empirical evidence of validity. This instrument can be used in high-risk industries to detect those behaviors that should be reinforced and improved to enhance employees' contributions to safety outcomes.

#### Limitations

Although the nuclear power sector is well suited to test a safety performance measure, we do not know if our results can be generalized to other industries.

#### Relevance to the Congress Theme

A constantly changing work environment poses a great threat and challenge for all those organizations that cannot afford to fail and where safety is critical (eg nuclear energy sector). In this context, extra-role safety related behaviors and adaptive safety behaviors acquires higher relevance to achieve excellent safety outcomes.

#### Relevant UN SDGs

Our study contributes to the following UN SDGs: 3, 7, 11 and 13.

*Keywords: safety performance, theoretical model, scale development*

## Paper 2

### **The Role of Empowering Leadership, Safety Culture and Safety Climate in the Prediction of Mindful Organizing in an Air Traffic Management Company**

Francisco J. Gracia, Mario Martínez-Córcoles & Inmaculada Silla | IDOCAL-University of Valencia (Spain); Alena Mezentseva, University of Valencia (Spain)

#### Research goals and why the work was worth doing

The purpose of this study was to add to our understanding of the conditions necessary to develop mindful organising in high-reliability organisations (HROs). Namely, we explored a moderated-mediation model of antecedents of mindful organising (MO) in an Air Traffic Management company. The model evaluated whether safety climate mediates the relationship between empowering leadership and MO and whether safety culture moderates the effect of empowering leadership on safety climate. The concept of MO summarises the key features of HRO, which allow them to anticipate and quickly recover from unexpected events (Renecle et al., 2020). Because failures in this type of organisation can cost hundreds of people's lives, studying factors of their sustained performance is crucial for maintaining safe and flawless operations.

#### Theoretical background

The central concept of our study is MO, as it was coined and developed in Weick's work (1999). It encompasses behaviours, reactions, and norms that appear in the actions and interactions of HROs members and result in almost faultless operation. Such reliability in performance is possible due to five interrelated processes that create the basis of mindful infrastructure: preoccupation with failure/error, reluctance to simplify interpretations, sensitivity to operations, commitment to resilience, and deference to expertise (Vogus & Sutcliffe, 2012; Weick et al., 1999; Weick & Sutcliffe, 2015).

Research explores antecedents of MO and connects it to other safety variables. Renecle and colleagues (2020) showed that MO is related to safety culture and climate, but it only partially overlaps with these concepts. Further research discovered that group safety climate leads to MO, and MO mediates the relationship between safety climate and employees' behaviours related to safety (Renecle et al., 2021). It also has been found that MO mediates the relationship between empowering leadership and safety behaviour (Callari et al., 2019). Mindful organising theory and existing empirical findings create the background for the present investigation.

#### Methodology

73 employees from an Air Traffic Management company answered our questionnaire.

#### Results

First, we tested a simple mediation model with a safety climate as a mediator between empowering leadership and MO. The regression analysis results indicated that the model explains 62.0% of the total variance of the dependent variable ( $R^2 = .62$ ,  $p < .001$ ). The direct effect of empowering leadership on MO was significantly different from zero ( $c' = .31$ ,  $p < .01$ ), providing evidence that empowering leadership is positively related to MO. Empowering leadership was positively associated with safety climate ( $a = .57$ ,  $p < .001$ ), and safety climate was positively related to MO when controlling for empowering leadership ( $b = .51$ ,  $p < .001$ ). Finally, the bias-corrected bootstrap

confidence interval for the indirect effect ( $ab = .29$ ) was above zero (95% confidence interval = .03–.63), indicating that our findings supported the hypothesis about the mediating role of safety climate.

Next, the moderated mediation model was tested to provide evidence supporting the moderating role of safety culture. The bias-corrected bootstrap confidence interval for the index of moderated mediation included 0 (95% confidence interval = -.15–.04), which indicated that the research findings testified against moderated mediation.

To summarise, the results showed that a strong safety climate was a significant predictor of MO. Moreover, empowering leadership influenced MO indirectly through a positive effect on the safety climate in a work unit. However, the moderating role of safety culture still needs to be confirmed.

#### Limitations

The study sample is relatively small and comprises employees from only one ATC company. It limited the complexity of the model we could test and the generalisation of the results.

#### Conclusions – research and or practical implications

The present research continues the research line on mindful organising and examines antecedents of mindful organising in the new organisational context of air traffic management. From a practical point of view, research findings help build a safe environment in high-hazard organisations by providing recommendations on changing HR and managerial practices to improve collective mindfulness and sustainable operation.

#### Relevance to the Congress Theme

Mindful organising is one of the conditions of sustainable performance under hazardous and unpredictable settings, so investigating its antecedents and outcomes is highly important. The results can help organisations function in a constantly changing world.

#### Relevant UN SDGs

Our study contributes to the following UN SDGs: 3 and 8.

*Keywords: mindful organizing, empowering leadership, safety culture*

## Paper 3

### Investigating the role of technology in telephone triage safety performance

Jill Poots, Jim Morgan & Matteo Curcuruto | Leeds Beckett University (UK)

Research goals and why the work was worth doing:

Telephone triage services (which assess patients' symptoms via telephone) serve as an entry point to the healthcare system in many countries. These systems have been described as 'complex sociotechnical systems' due to a heightened reliance on technology and onus on callers to report symptoms accurately, relative to face-to-face care. Despite widespread adoption and use, telephone triage services have been implicated in patient death and malpractice claims (Ernesäter et al., 2014; Rees et al., 2017), and research investigating their safety is lacking (Lake et al., 2017). During the COVID-19 pandemic, telephone triage was adopted rapidly to help curb its spread, by offering an alternative to face-to-face healthcare and the use of these services is set to remain at a high level post-pandemic. It therefore seems paramount to understand the myriad of factors affecting the safety of telephone triage. This study aims to investigate the role of telephone triage technology on safety performance.

#### Theoretical Background

Since 2000, there has been a call to understand the many interacting factors across entire healthcare systems which can affect healthcare safety performance, to improve patient outcomes (Donaldson et al., 2000; Holden et al., 2013). Previous research suggests Computer Decision Support Systems (CDSS) – decision-making software commonly used in telephone triage – can cause communication issues which may lead to unintended and undesirable safety consequences for patients, such as failure to disclose underlying illnesses or misunderstanding worsening advice, which could result in harm to patients (Morgan & Muskett, 2020; Murdoch et al., 2015). Additionally, usability issues can increase cognitive burden (Tariq et al., 2017), create 'hidden labour' for users (Murdoch et al., 2015) and increase the likelihood of human error and adverse events. An earlier interview study by the current authors exploring risks to patients in a telephone triage system found 'workarounds' – whereby workers deviate from designed protocols to complete tasks – are readily used by telephone triage professionals to counter usability issues. It is unclear how these adaptive behaviours may affect safety performance so further study is warranted.

#### Approach

There are problems with using interview findings to investigate usability of technology since they may be susceptible to bias (Tariq et al., 2017). Research methods such as naturalistic observations may enhance the ecological validity of technology research (Kushniruk et al., 2013). This study aims to replicate and extend research by Tariq et al. (2017) which used Nielsen's ten usability heuristics (1994) to understand how the design of a CDSS may affect safety performance in a similar telephone triage setting. Three observers will apply ten usability heuristics to a CDSS used by both non-clinical staff providing telephone triage in one contact centre in England during normal working hours over a two-day period. Workaround details will also be noted. Frequencies will be counted and severities will be estimated in line with the heuristic evaluation technique.

#### Results

A pilot study aiming to test the suitability of the usability heuristics noted violations across all ten usability heuristics, most frequently, 'visibility of system status' and 'mismatch between the system and the real world'. Many workarounds were noted e.g. the use of external websites where insufficient details are provided by callers/patients, and deviations in the language used by telephone triage professionals to help callers' understanding. Final results will be available at the Congress.

#### Limitations

Not all telephone triage systems utilise CDSS, meaning the findings may not be generalisable to all triage settings. Observations will take place during office hours. Workarounds may differ during out-of-hours due to differences in service availability.

#### Conclusions

Findings will inform recommendations for improvements to the design of software and patient safety. This study will be used to inform the design of a contributory factors framework for telephone triage to improve incident investigation and organisational learning.

#### Relevance to Congress Themes

This safety performance research is relevant to the congress theme as healthcare professionals' work recently and rapidly moved away from face to face care to remote care, with little understanding of the implications for safety.

#### Relevance to UN SDGs

UN SDG 3 – Good Health and Wellbeing. Most notably, concerns have been raised over the suitability of telephone triage for children following adverse events (Rees et al., 2017) and SDG 3.1 calls for improvements to preventable deaths in young children.

*Keywords: safety performance, patient safety culture, patient safety outcomes*

## Paper 4

### System-Intelligent Human Factors for Promoting Safety in the Chemical Industry

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#### Aim

This study aims to create knowhow for proactive safety management in the chemical industry. The chemical industry is a typically complex sociotechnical system in which humans, technology, and organizations are constantly intertwined. This systemic interaction has already been studied and the HF approach applied in other safety-critical industries such as the nuclear and transport industries. Several accidents in the chemical industry, including that in Bhopal in 1984, have shown how critical the human contribution is to safety. Several organizational factors, work characteristics, and performance of teams and individuals affect the success of production and the safety of processes. However, we do not currently know whether the HF approach has been implemented in the safety management practices of chemical industry workplaces.

#### Theoretical background

We use Systemic Human Factors (HF) and Systems Intelligence (SI) to evaluate the current state and areas in need of development through HF implementation in the chemical industry. In previous studies, the HF Tool has efficiently improved safety thinking and procedures by considering human contribution in a holistic, participative, positive, and solution-based manner. However, the use of the HF Tool has not yet been researched in the chemical industry nor combined with other lines of research. SI describes human experience and interaction within a system. It also describes succeeding in systems, and SI-metrics have been found to work well as indicators of learning organization and well-being at work. In this study, we combine HF and SI into a synergized framework called 'System Intelligent HF (SIHF)'.

The current phase in safety research calls for adaptive measures to improve safety in complex, dynamic circumstances by deliberating the role of human variability in a mindful manner. Safety management and HF approaches have evolved from being individual-, risk- and error-prone to being more systemic, proactive, and success-based. The focus is on improving the enablers of resilient performance from anticipation to recovery, analysis, and on learning from everyday operations. However, we have a wealth of knowledge on HF, but availability of means to tackle HF issues in the reality of all workplace levels is far from ideal. Earlier studies have shown that in other safety-critical fields, HF has been successfully implemented by utilizing a holistic, solution-based, and participative HF approach with practical models. In practice, this means several years of stepwise development processes, during which the actors themselves become the subjects of change and learn measures to implement HF in safety practices. HF activities take place before accidents or incidents happen and require understanding and competence to facilitate resilient performance from the bottom up, not through top-down actions and compliance targets. Thus, we need more conceptual and practical power to understand how the people themselves see the system from the inside, and how they feel about their work and safety. We aim for this by combining the SI framework and the HF approach (SIHF), highlighting the subjective experience and reflecting on the skills essential for improving safety in organizations.

#### Methodology

Four companies are participating in the study, representing four different chemical industry sectors: oil and gas, paint manufacturing, tall oil refining, and plastics and rubber. We conduct interviews (n=36), 12 workshops, and analyze 89 documents to assess the current state of SIHF in the studied companies. In 2022 we have already developed and conducted a survey with ten items (n=210). SIHF models and practical tools for preventive safety management will be developed on the basis of the collected data.

### Results

The preliminary results of the survey and interviews show that the HF concept is still narrowly understood, which indicates a clear need to expand the concept and competence related to it. The HF Tool for chemical industry purposes will be renewed using SI, and an SIHF model will be produced to help supervisors and managers lead safety culture. The results will be finalized in 2023–2024.

### Limitations

This variety of chemical industry companies provides a good basis for our research. However, it is important to carefully consider how the results are disseminated to ensure that they are widely available and applicable in the multifaceted field of chemical industry.

### Relevance to Congress Theme

This study utilizes knowledge of work and organizational psychology and creates new safety culture theory and practice for industry and academia.

### Relevant UN SDGs

Our SDGs are safety, health, and well-being. We believe that our study findings will facilitate workplaces' future climate actions.

*Keywords: safety management, human factor, safety performance*

## **Symposium S066**

### **The future under construction**

Taina Eriksson, University of Turku

science\_practice

#### State of the art

Even though the construction industry includes a lot of traditional manual labor, work is changing also there. Mobile digital tools - systems, apps and platforms used with mobile devices - are becoming an integral part of everyday operations on the construction site. Digital technologies have been part of site managers' job for some years already. Mobile technologies and the effects of their use reach increasingly also the employees in site managers' teams. Thus far, the change has been somewhat superficial, and the underlying processes and structures have not yet been affected.

Construction industry is characterized by a strong focus on projects, each done with a unique combination of partners. The actors in a project are tightly connected to each other due to the interdependence between different tasks. On the other hand, site managers have a lot of freedom in deciding how exactly their project is carried out to achieve the desired outcome.

All of the aforementioned characteristics have important implications on the digital transformation starting to take a shape in the industry.

#### Novel insights

The complexities of digitalization, which is a prerequisite for digital transformation, are not well understood in the systemic, project-based context of construction. The presentations combine academic and practitioner knowledge to create impactful insight into the development of work and the role of people and technology in these developments.

The symposium focuses on small and medium-sized enterprises (SMEs), since they are an important part of European economies and tend to be more agile than large corporations. In addition, SMEs have less legacy load in terms of digital tools.

#### Theoretical and managerial contributions

The presentations contribute to the academic discussion on the implications of the digitalization of work. The contribution stems on one hand from the conceptualization of the employee attitudes and experiences through self-determination theory (Deci & Ryan). This provides new knowledge on the areas of importance for employee motivation in the digitalizing work which has traditionally been characterized by craftsmanship.

On the other hand, the symposium adds to the understanding of employee surveillance as a dimension of the use of mobile technologies. The use of mobile technologies has numerous benefits as they for instance offer real-time visibility to the progress on the site or hints on the well-being of the employee. However, there are also numerous potential threats and the symposium raises the ethical aspects into the discussion.

Finally, the symposium adds to academic research at the intersection of digitalization and professional pride in a setting where emotions are typically not discussed and hence not routinely acknowledged. It is important that professional pride is examined in different contexts, and on multiple levels of analysis.

The symposium presents and discusses findings mainly from qualitative empirical research among SMEs in the construction industry. Also quantitative survey data is used to grasp the attitudes towards technology.

From a managerial perspective, the research findings offer perspectives into the management of digital transformation. There is a lot of literature on the most advanced technological tools and their applications in construction. Nonetheless, the adoption of advanced technologies lags far behind. Particularly the SMEs are only beginning to adopt mobile solutions to be used on-site. Thus, there is a need to understand better the realities of mobile technology adoption in the construction context, both the inhibiting and advancing factors.

Relevance to the congress themes

Digitalization is typically treated as a technological process, but we argue for the importance of the human aspect. The symposium looks into the adoption and use of technology as fundamentally human-oriented processes and hence brings an important lens to the discussion of the use of mobile technologies in construction work.

*Keywords: technology, construction industry, digitalization*

## Paper 1

### Technology, attitudes & changing work

Titiana Ertiö, Aino Saaristo, University of Turku

#### Background & Goals

The goal of the research was to gauge construction workers' attitudes towards the use of technology at work. It is well established that intention to use a particular technology is dependent on both skills and motivation; however, the topic of motivation has been tackled rather generically whereas in this study we focus on using technologies at work in the construction industry.

#### Design & Methodology

We surveyed construction workers to understand their attitudes related to using technology at work. In the survey, the affinity for technology interaction (ATI) and techno-work engagement scale (TechnoWES) both measured on 9 items each were used to understand how attitudes toward the advent of technology in the workplace unfold. The investment of effort and time construction workers set aside to familiarize themselves with new technology speaks to their motivation and interest to pursue their use in their daily activities. We triangulate data with interviews conducted with 31 site-managers from two medium-sized Finnish construction companies. The semi-structured interviews covered themes of e.g. well-being and technology-use at work.

#### Results

The initial interview results reveal site-managers' motivations to use technology in their work and perceptions of their usefulness - some interviewees recognized how technology had made their work easier whereas for others, technology was a source of frustration or indifference. In addition, the interviews reveal different degrees of concerns about technology and how it is used.

To date, preliminary results from the survey show that more than one third of respondents are content with knowing the basic functionalities of mobile technologies, while about 30% are very enthusiastic about using mobile technologies at work.

Together, the qualitative and quantitative evidence gathered this far suggests that attitudes towards the use of technology in the construction industry are rather intricate, exhibiting the complexities and sometimes contradictions of what perceived benefits these technologies might bring.

#### Relevance & Limitations

Our study contributes to the changing nature of work, particularly manual labour, in the context of accelerated digitalization. We anticipate that in the future, it will be less relevant to know how to use a particular digital tool but rather to own digital meta-skills that allow to adapt previous knowledge to new (digital) contexts. Managers can help construction workers gain interest and build basic skills which can be then expanded upon.

Finland is a particularly interesting case-study setting as it consistently tops different rankings in digitalisation. In 2022, Finland ranked 1st in the Digital Economy and Society Index and 2nd in the UN E-government survey. We recognize, this is also a limitation of the study in terms of sample size and representativeness.

*Keywords: technology, attitudes, construction industry*

## Paper 2

### Mobile digital tools, employee surveillance & ethical questions

Juho Vaiste, University of Turku

#### Research goals & theoretical approach

The construction industry is increasingly applying smartphone applications in its reporting and management tasks. While the digitalization of construction sites offers excellent opportunities, it is crucial to consider the ethical risks and challenges which might arise from such applications. A primary ethical consideration focuses on how these applications enable a powerful platform for employee surveillance. This article examines this ethical risk: How easy and feasible is it to enable advanced tracking of employees – both technically and managerially?

The ethical risk of employee surveillance arises from tracking and analyzing an employee's movements and acts. Although a smartphone application would be considered only to ease reporting, find relevant information, and communicate the progress of job tasks while operating at a construction site, a technical and actual capability to track and follow an employee is always present. The applications examined in this research potentially fulfill at least three of the surveillance targets defined by the European Union's report *Electronic Monitoring and Surveillance in the Workplace* (Ball, 2021).

The management and organization literature has raised an emergent discussion of workplace surveillance. For example, Manley & Williams (2022) critically assess the effects of broadening surveillance: they analyze enhanced visibility, increasing regulation and control within an organization, and interpreting inaccessible data results. Though employee tracking and analytics may sound useful and might indeed introduce good use cases, implementing those kinds of methods must always meet "reasonable expectations" of privacy considerations, as formulated by Doberstein et al. (2022). The concern over amplifying workplace surveillance is not only an academic worry, but also lately recognized by BBC (2022) and *The Harvard Business Review* (2022).

The research builds on three research questions: Does a smartphone application technically possess the capability to track an employee? How feasible would it be managerially to implement these capabilities into practice? What kind of gatekeepers are there to protect employees from these capabilities? In addition to the underlying ethical debates, the research aims to contribute to research questions from a managerial perspective. All three questions represent topical and potentially tricky puzzles that a modern leader involved in technology implementation should be able to answer in depth. By answering these three questions with practical and concrete sense, the research clings to the heated debate in the ethics of technology and artificial intelligence: how to make ethical principles and guidelines worthy (Munn, 2022).

#### Methodology

The methodological approach of the research is an impact assessment based on the extended framework of the PAPA model (Vermanen et al., 2021). The PAPA model (Mason, 1986) is a traditional approach to considering ethical question points related to information technology, formulating examination around privacy, accuracy, property and accessibility. The extended PAPA model adds security, motivation and autonomy to the consideration. In addition to existing literature

and ethical argumentation, the impact assessment is supported by an interview-based case study, approaching research questions from the perspective of a technology vendor.

#### Preliminary results & contributions

The expected result of the study is a concrete assessment of which level tracking and analytics capabilities are acceptable and feasible in the mobile management application of construction industry. The results will be available in March 2023. The major limitation of the research is the perpetual nature of all three: ethics, impact assessment of technology – and justified limits of organizational surveillance (see e.g., Iedema & Rhodes, 2010).

#### Relevancy

The construction industry has been recognized as a field that could have nearly the most unexploited benefits of digitalization, but the effects of this transformation are still understudied.

*Keywords: technology, surveillance, construction industry*

### Paper 3

#### **Professional pride in site managers' work in construction industry amid digital transformation – A qualitative study**

Anni Paalumäki, Taina Eriksson & Juho Vaiste | University of Turku

##### Research goals & theoretical approach

This study explores experiences and meanings of professional pride in site managers' work in construction industry. We ask: 1) how is professional pride involved in site managers work and their interactions with each other, with their designated workers, their supervisors, and sub-contractors? 2) How does professional pride come into play when new digital technologies are introduced to the construction site?

Our basic assumption is that construction is an emotionally-charged environment (see e.g. Lindebaum & Fielden, 2010). Construction is characterized as a complex system with high uncertainty and unpredictability, as well as operational interdependence of various sub-systems, technologies, trades and professionals to take coordinated local action (Dubois & Gadde, 2002). Moreover, in recent years technological advancement, digitalization and automation have challenged the traditional ways of working, and there is a push towards even more rapid transformation for the coming years to improve productivity, quality and sustainability. All this constitutes a work environment with high demands of temporal strains, occupational stress and psychological burden, resulting in the display of various emotions and emotional interactions between construction professionals as well as the need to regulate emotions appropriately.

Pride at work in general is referred to as a positive affect related to being responsible of achieving socially or personally valued good or virtuous outcomes in one's work or profession (e.g. Ritzenhöfer et al. 2019). Our attention here lies mainly on pride as a group level phenomenon (see De Hooge & Van Osch 2021 for review). Thus, we focus on affects related to the social group which people identify themselves with. As De Hooge and Van Osch (2021) point out, group level pride is related to the degree a person is identified with the group, shares the affect with the group and contributes to the collective maintenance and regulation of the affect in question.

##### Methodology

This presentation is based on thematic analysis of 12 qualitative interviews with 31 site managers in 2 small and medium-sized construction companies in 7 construction sites around Finland.

##### Preliminary results & contributions

Site managers described their work as something done in all possible conditions from freezing cold to extreme heat. Moreover, they pointed out several factors causing work-related strain, such as dealing with delays and uncertainties due to the lack or poor quality of information and overall reliance on the progress of other professionals' work to be able to complete one's own.

Yet at the same time, the site managers expressed their content and even pride towards their work and profession. They described themselves as a group of professionals in contrast to "those who have once built a children's playhouse and considered themselves as masters of construction afterwards." In that way construction work is comparable to any other profession, they point out. Professional pride is about doing your best and being able to participate in the completion of the

building together with your colleagues. In addition, distinction was made between “old” and “new” ways of leading the people. Managers in charge took pride in leading the workers by “soft” ways, by walking around, talking to people and listening to their worries, with humor and encouraging everyone to participate coffee breaks and lunches in contrast to yelling and using fear for control.

However, the use of new digital applications and particularly extensive monitoring of work was often experienced as unnecessarily control of work. From the perspective of professional pride, new technology was regarded as means to question their professional skills and the quality of their work, even their integrity as professionals. Digital applications used in quality measurements were considered as an additional burden to their actual “real” construction work. This was the case particularly with older site managers, often lacking skills to use the new technology. In contrast, it seems, that to some younger tech-savvy site managers their knowledge of the new technology gave a possibility to help others, thus giving new importance to their role in their work community.

From a practical perspective we argue that understanding the role of professional pride can help SMEs and their management to plan and introduce appropriate ways to bring new technology to construction work. The results can help to deal with negative consequences of technological stress by different support initiatives and interventions.

As a limitation of the qualitative study, we are not able to generalize the findings to all SMEs. In addition, construction in Finland as a work context limits generalization to other nations in Europe and elsewhere.

*Keywords: pride, technology, emotions, construction industry*

## Symposium S088

### **Hybrid Work: Between Flexibility and Isolation – How to reap the benefits of working from home and working from the office?**

Franziska Fastje, University of Groningen; Ann Sophie Lauterbach, University of Konstanz, Germany; Alejandro Hermida Carrillo, LMU Munich School of Management, Germany, Human Capital Management Institute

science

#### Theme and Relevance of the Symposium

Hybrid work, the practice of splitting work time between working from home (WFH) and working from the office (WFO), is emerging as the dominant work format worldwide (Wigert, 2022). In the offshoots of the Covid-19 pandemic, more and more companies decide to transition from remote work to hybrid work – out of necessity or the need to reunite their workforce. Despite the widespread consensus that hybrid work is here to stay, scholars and practitioners are debating whether hybrid work can reap the benefits of both WFH (i.e., increased flexibility) and WFO (i.e., reduced feelings of isolation) or if it is doomed to lead to the complete opposite. To provide preliminary insights, this symposium considers three main aspects that may foster or hinder the effectiveness of hybrid work:

Individual-other congruence in work-from-home intensity

Workspace design

The home environment and segmentation preferences

Relevance to the Congress Theme

The Covid-19 pandemic has undoubtedly changed our working lives and the way in which we think and operate. Although forced remote work during the Covid-19 pandemic largely disrupted how we work (de Vries et al., 2021), it also made us rethink the effectiveness and suitability of traditional work arrangements. Given the many benefits of WFH on the individual (e.g., better work-life balance, Franken et al., 2021) and organizational level (e.g., improved operational cost-effectiveness, ILO, 2020), most employees and organizations want to continue WFH 2-3 days a week (Bloom, 2021). Nevertheless, the past 2 years also exposed us to two major drawbacks of WFH: Feelings of isolation and work-home conflict (ILO, 2020; Leroy et al., 2021). Given its novelty, scholars and practitioners have to cumulatively assess (a) How much of the traditional and forced remote work settings are desirable in the future and (b) What changes are needed and/or essential to turn hybrid work into a success story. These questions align nicely with the conference theme “The Future is Now: The Changing World of Work”.

Research/Practical Implications

Cumulatively, these symposiums’ contributions provide a starting point for how individual-and department-level factors (i.e., WFH intensities, segmentation preference) affect the effectiveness of hybrid work arrangements and how workspaces can be designed to help build a culture of healthy interaction during office days.

Overall Conclusions

With our symposium, we offer insights into some preliminary findings relating to how the work and home environment impact the shape and effectiveness of hybrid work. More specifically, the first contribution advances our understanding of how knowledge workers' social contexts shape the impact of WFH on their perception of social isolation. The second contribution provides insights into designing office workspace to foster a culture of healthy human interaction. Lastly, the third contribution examines employees' private lives to shed light on why some individuals struggled while others thrived amidst forced remote work and what we can learn from this regarding WFH-WFO preferences moving forward.

*Keywords: Hybrid work; Workplace relationships; Work-Family Interaction*

## Paper 1

### Reconceptualizing Working From Home: The Impact of Individual-Other Congruence on Social Isolation

Franziska Fastje, University of Groningen

#### Research Goal

The COVID-19 pandemic facilitated working from home (WFH) across a large portion of the workforce, leading to fundamental changes in how knowledge workers interact and connect. We propose that a better understanding of today's WFH arrangements requires careful consideration of the WFH behaviors in an individual's larger social context (i.e., workgroup). Specifically, we examine the complex interplay between individuals' and others' WFH intensity in predicting knowledge workers' perceived social isolation and emotional exhaustion at work. Our findings highlight the importance of examining knowledge workers' own WFH intensity and that of others in their workgroup and add to the debate about whether previous findings are generalizable to contemporary WFH arrangements.

#### Theoretical Background

Existing studies assumed that higher WFH intensities put knowledge workers at risk of feeling disconnected from others at the workplace (i.e., "out-of-sight, out-of-mind"; Sewell & Taskin, 2015, p. 1508) and deprived of social resources (e.g., informal talk, support; Cooper & Kurland, 2002; Golden et al., 2008). However, it remains unclear how specific levels of WFH intensity relate to social isolation and its downstream consequences (e.g., emotional exhaustion; Sahai et al., 2021). Building on recent studies, knowledge workers tend to vary in their WFH intensity levels (e.g., between 0-60 hours/week; cf. Barrero et al., 2021), which creates large uncertainties around "who will be in, and who won't, on any particular day" (Parker, 2020, p.2). Indeed, it may be more difficult nowadays to establish predictable and meaningful work relationships at moderate WFH intensities (e.g., 20 hours/week) in comparison to very high WFH intensities where advances in the quality and availability of virtual communication tools may help to prevent isolation (Parker & Grote, 2022; Standaert et al., 2022). Following, we argue for a curvilinear relationship between WFH intensity and social isolation.

Additionally, the shift towards WFH has fundamentally changed focal workers' social context by changing the WFH intensity of others in their direct environment. While a sizable amount of literature has explored WFH intensity as a salient antecedent of isolation, we know little about how individual and other department members' WFH intensities interact in eliciting isolation. However, the WFH intensities of other group members may critically shape a knowledge worker's experience of social isolation because it shapes peoples' availability for meaningful interactions and social support (Cooper & Kurland, 2002; Pyöriä, 2011). Therefore, we argue for a shift from a purely individual-level focus to considering WFH configurations that specify how a knowledge worker's WFH intensity and the WFH intensity of the other workgroup members jointly predict isolation.

Drawing from conservation of resources theory (COR; Hobfoll, et al., 1989), we argue that social isolation is lowest when a knowledge worker and others in the group adopt higher or lower WFH intensities (i.e., mainly virtual or mainly in-person scenarios). In contrast, we expect social isolation to be highest when the focal worker and the other group members adopt moderate WFH intensities – a more hybrid work setting. Our theorizing contradicts the emerging belief that flexibly splitting time

between WFH and the WFO combines the “best of both worlds” (e.g., Choudhury et al., 2022, p. 16) and suggests that more hybrid WFH scenarios deplete knowledge workers of important social resources. Building on research showing that social isolation is related to emotional exhaustion (Bentein et al., 2017; Bentley et al., 2016), we further predict that a focal worker’s WFH intensity will also indirectly relate to emotional exhaustion, depending on others’ WFH intensity.

### Methodology

To test our propositions, we build on a longitudinal dataset of 2,413 knowledge workers nested in 95 units within a large research-focused organization in the Netherlands. Data collection at Time 1 took place when government-mandated COVID-19-related restrictions eased in mid-2021, thus granting knowledge workers in our sample to choose when and how often to WFH freely. As such, variation in WFH intensities was relatively common within our sample, offering an ideal setting to study how individual knowledge workers’ WFH intensities. The Time 2 survey was administered in the fall of 2022, mainly to examine how contemporary WFH arrangements affected knowledge workers’ long-term well-being (i.e., emotional exhaustion). To examine the joint and indirect effect of an individual’s own and other group members’ WFH intensity on social isolation and emotional exhaustion, we used multilevel polynomial regression and response surface analyses (Edwards, 2002; Edwards & Cable, 2009).

### Preliminary Results

The results from our multilevel polynomial regression and response surface analyses indicate support for a curvilinear congruence effect, implying that work settings where one’s own and others’ WFH intensity are both lower or higher, respectively (i.e., mainly virtual or mainly in-person) are associated with lower perceptions of social isolation. In contrast, when a knowledge worker and other group members worked from home to a moderate extent (i.e., more hybrid scenarios), feelings of social isolation were significantly higher. Finally, we found that individual-other WFH intensities indirectly and positively affected emotional exhaustion, as mediated by social isolation.

### Conclusion

Although past research has already investigated how WFH relates to feelings of isolation (for an overview, see Gajendran & Harrison, 2007), we identified two shortcomings of past WFH research: (a) individual-focused conceptualization of WFH and (b) ignorance of the WFH intensity of others in close social proximity to a focal worker. To alleviate these shortcomings, we collected data from individuals nested in work groups and used multilevel polynomial regression analysis to better understand different WFH configurations among work group members and individuals’ experiences of social isolation and emotional exhaustion. Findings suggest that mainly virtual or mainly in-person settings result in lower perceptions of social isolation, while more hybrid scenarios may lead to higher feelings of social isolation. We hope that our theory and results motivate scholars to explore further how knowledge workers’ social contexts shape the impact of WFH on their work outcomes.

*Keywords: Working From Home; Conservation of Resources Theory, Social Isolation, Emotional Exhaustion.*

## Paper 2

### Coming Back to the Office – What is Needed for a Culture of Healthy Interaction and Cohesion?

Ann Sophie Lauterbach, University of Konstanz, Future of Work Lab

#### Research Goal

During the wind-down of the Covid-19 pandemic, many companies decide to gradually bring their office staff back into the existing office buildings (Farre, 2021). A disconnect between employers' offers and employees' needs is more profound than most employers believe. A spike in attrition and disengagement due to the lack of interaction and a feeling of belonging may be imminent (Smet et al., 2021; Sull et al., 2022). Office space design plays a crucial role in positive collaboration and connection, but many traditional offices dedicate more than two-thirds of their space to individual, heads-down workspaces (Wineman & Barnes, 2018). We have to rethink these office layouts when it comes to hybrid workspace. What new designs help provide flexibility and collaboration? This mixed-methods study explores whether we can achieve a culture of interaction and cohesion by offering adequate physical workspace for hybrid work.

#### Theoretical Background

Spatial hybridity changes the nature of work, organization, and management across domestic and organizational space (Halford, 2005). A hybrid workspace can be defined as individuals working at home and engaging in embodied organizational space wherein the office workspace acts as a meeting hub for the dispersed team (Halford, 2005; Hosemann, 2021). Previous studies have shown that physical proximity and visibility influence information sharing (e.g., Appel-Meulenbroek et al., 2016; Coradi et al., 2015), trust (e.g., Wohlers & Hertel, 2018), and social relations (e.g., Brennan et al., 2002; Oldham & Brass, 1979). Cellular offices (i.e., private rooms enclosed by walls) are well suited to promote undisturbed and private working, allowing employees to concentrate on their tasks. However, they do not support communication and interaction among colleagues (Allen & Gerstberger, 1973; Kaarlela-Tuomaala et al., 2009). Hybrid workspaces come with new challenges, as employees might experience their time spent at the office now more relationship-focused than before. Therefore, we argue that more physical workspace dedicated to formal and informal interaction might improve the feeling of cohesion and healthy interaction among employees.

#### Methodology

We investigated interaction and psychological well-being-related variables among 120 white-collar workers within two groups with a baseline survey and measurements after 10 and 20 months. The two groups were explicitly selected based on comparable tasks in cooperation with the company to ensure a high degree of comparability. After working remotely over the last two years, the treatment group moved into a new workspace while the control group returned to the previous conventional office building. The new campus includes modern activity-based spaces, flexible desks, and informal meeting rooms. Physical meetings, personal and creative exchange, and team building are the focus of the new campus. In comparison, the conventional office consists primarily of one- to two-person cell offices with few rooms for interaction. The data is collected in three waves: During remote work setting in June 2021, in the hybrid work environment in April 2022, and one year later, continuing in the hybrid format. In addition, we gain qualitative insights by examining open questions at the end of each survey.

## Preliminary Results

Preliminary results show that the treatment and control groups differ in their experience of peer interaction. The treatment group in the innovative campus reports more inspiration from and interaction with their colleagues than their peers in the control group. The results also showed better self-reported psychological well-being due to interaction among colleagues – more substantial in the treatment than in the control group. Transitioning from remote to hybrid work led to less conflict among team members in both groups and more cohesion in the treatment group. Employees' answers to the open survey questions indicated that they value informal interaction and appreciative communication in meetings, e.g., by being open-minded and approachable, grabbing lunch or coffee together, or encouraging and praising colleagues in on-site and online meetings.

## Conclusion

In sum, this working paper explores whether we can achieve a culture of healthy interaction by offering adequate physical workspace for hybrid work. Our results indicate that an office layout that prioritizes formal and informal meeting spaces might help to build a culture of healthy interaction. Therefore, it provides us with insights on how to design hybrid workspaces. Combined with the practical need to examine the shift to hybrid work, our research approach substantially contributes by combining the research strings of the built workplace design and organizational psychology.

*Keywords: Hybrid Work; Workspace Design; Healthy Interaction*

### Paper 3

## Alone Together – A Family Systems Approach to Home Boundaries and Loneliness During Remote Work

Alejandro Hermida Carrillo, LMU Munich School of Management

### Research Goal

Individual attitudes, personalities, and values interact with those of their co-workers and managers in a systemic way to explain well-being and performance at work (Kristof-Brown et al., 2005). But what happens when work takes place in one's own living room, far away from the office? We propose that interactions within the family system become critical to predicting individual outcomes. Specifically, (in)congruence among employee and romantic partner attitudes plays a critical role in understanding experiences of work-to-home conflict (WHC) and loneliness, especially when working from home (WFH). We provide insights useful for individuals choosing their preferred WFH deals in the new world of hybrid work.

### Theoretical Background

While some individuals prefer to keep the psychological boundaries between the work and home domains permeable (i.e., to integrate), at the other side of the continuum lie people who erect thick walls to separate these domains (i.e., to segment; Ashforth et al., 2000). These segmentation preferences do not act in isolation to explain individual outcomes but are activated by the work environment. For example, Rothbard et al. (2005) found that integrators (vs. segmentors) respond with lower job satisfaction when offered flextime, a segmenting policy, and higher job satisfaction as a response to onsite childcare, an integrating policy. Yet, although boundaries are proposed to be co-created by individuals and close others (Kreiner et al., 2009), both the role of romantic partners in boundary construction as well as the consequences of these boundary dynamics have received scarce scholar attention.

The system view to families proposes that attitudes, emotions, and inclinations of romantic couples interact to create "a living, growing, super-personality" (Smith & Hamon, 2012, p.152). Consequently, it is the boundary configuration of the couple, and not the preferences of the individual partners, that determines how members react to outside stressors (Olson, 2000). Building on boundary theory (Kreiner et al., 2009), we posit that home boundary systems are co-constructed through the level of congruence (fit) in segmentation preferences among romantic couples. First, we hypothesize that misfit in preferences increases individual experiences of WHC. Then, following balance and family systems theories, we predict that fit is not equally beneficial across the whole continuum; the more individuals and their partners agree on segmentation (vs. integration), the more rigid the boundaries of the home system, and the higher the experience of WHC of individual dyad members. We forecast that both effects (fit and misfit) should be most pronounced for dyad members working at high levels of WFH intensity. We finally expect that, when individuals experience WHC, they remain trapped in their work roles, incapable of connecting with their loved ones. Thus, the individual experience of WHC stemming from the interplay of boundary configurations and WFH intensity will result in heightened experiences of loneliness for both the individuals and their partners.

### Methodology and Results

In study 1, we test our theoretical model on a unique dataset of dual-earner couples living in Munich, Germany, acquired through a two-step random procedure in two waves. Wave 1 ( N = 170 dyads; May - June, 2020) measured WFH intensity and WHC, and wave 2 ( N = 107 dyads; July - August, 2020) loneliness at home. Using dyadic response surface analysis (Schönbrodt et al., 2018), we find that fit in integration (vs. integration) relates to lower WHC at high WFH intensity, and that incongruence is harmful for males but surprisingly beneficial for females. WHC mediates the effects of boundary configurations in individual loneliness at home. In study 2, we use a higher-powered sample of dual-earner couples ( N = 1,561 dyads; 2019) to replicate our effects of employee WHC on employee loneliness and to test the crossover effects on partners' loneliness. We find strong evidence for both effects.

### Conclusion

Prompted by the onset of the COVID-19 pandemic, millions of workers were pushed to work from home regardless of their preferences. Why some suffered from the new conditions while some thrived has been a puzzling question for researchers and organizations alike. The findings of this study indicate that part of the answer might lie in the joint work of attitudes and emotions of romantic couples. Our findings showed that incongruence differentially affected females and males, leaving more questions than answers. A robust WHC and loneliness-decreasing pattern emerged for members of couples who agree on integration rather than segmentation, especially at high WFH intensity. Individuals are advised to reflect on the environment at home when choosing their preferred WFH deals. Insights from this study are relevant for a future in which "...a lot of companies will no longer have [office] space to return to." (Herd, 2021).

*Keywords: Remote Work; Work-to-home Conflict; Loneliness*

## Symposium S081

### HYBRID WORKING: CURRENT ISSUES AND EMERGING CHALLENGES FOR WORK AND ORGANISATIONAL PSYCHOLOGISTS

Juliette Stéphan, CRTD-LISE/CEET, CNAM, Paris; Marc-Éric BOBILLIER CHAUMON, CRTD, CNAM Paris; Corinne Gaudart, LISE/CEET, CNAM Paris; Pauline Crouzat, CRTD, CNAM, Paris

science\_practice

Modern organisations offer an increasingly unpredictable work environments that challenge work collectives and established organisational routines. By suddenly bringing a great number of employees to experience remote working, the Covid-19 pandemic further accelerated this trend (Rigotti & al., 2021). Today, there seem to be an agreement among, both academics and practitioners on the “transformative potential” of the Covid19 crisis on work and workplaces. The pandemic brought forward fundamental changes on the way we live and work that the public media refer to as “the new normal”. Critical in such a complex environment is our ability as Work and Organisational Psychologists, to elaborate on these practices and engage a dialogue on work and work-related issues (for instance health, wellness, policies, design, management) with the practitioners in the field.

This symposium gathers academics and practitioners in Work and Organisational Psychology and intends to open up a stimulating theoretical, methodological and empirical discussion on what consultants, management and employees refer to as hybrid workplaces or hybrid working . In many organisations, these latter terms appear to cover a combination of in-office and remote days of work that is agreed upon by the employer, the employees and the employees’ representatives of an organisation. They also increasingly include the implementation of activity-based offices, that is to say workplaces with non-attributed desks, an extensive set of office design to support different kinds of activities such as collaboration, innovation, concentration and so on (Ianeva & al, 2017).

Whether it is an activity-based office or a formal telecommuting agreement, these flexible work arrangements raise important issues for management, employees and work psychologists. While indeed there is a significant amount of research in work and organizational psychology on remote work practices (Van Zoonen & Sivunen, 2021), existing knowledge can be questioned in the context of pandemic restrictions and even more, in the post-pandemic “new normal”. Furthermore, from a practical point of view, mandatory work from home and virtual teams during the crises gave rise to team-level experimentations that need to be elaborated on a collective and organisational level.

Each of the contributions of our symposium highlight different aspects of hybrid working and bring forward the lessons learned from the crisis. They also emphasize on a paradox: hybrid work requires the production and/or the re-negotiation of existing rules and procedures in order to coordinate multi-located work while promoting autonomy and flexibility. In the same vein, as remote mediated work (RMW) distributes work in space and time, it also contributes to the sociospatial invisibility of work. The additional need of coordination comes with another requirement, that of producing the indicators needed to “see” work (Leigh Star & Strauss, 1999).

What are the psychosocial impacts of the shift towards these new remote mediated work arrangements? How hybrid work practices – as a complex organizational, sociomaterial and psychological phenomenon - impede on building common corporate culture, workplace integration and teamwork?

Activity-based offices are another growing trend in today’s hybrid workplaces as companies are acknowledging multi-location work and are therefore reducing office space. How are activity-based

workplaces to be designed in order to support (rather than hinder) work activities? How to trigger and maintain an activity-centered design process that takes into account employees' activities?

Addressing these issues is expected provide the ground for a stimulating and meaningful dialogue on hybrid working as well as to bring forward a better understanding of the way Work and Organisational Psychologists, both academics and practitioners, navigate the post-pandemic "new normal".

*Keywords: Hybrid working, work and organisational psychology, flexibility*

## Paper 1

### HYBRID WORKING, WORK COLLECTIVES AND CORPORATE CULTURE: THE CASE OF A TELECOMMUNICATION COMPANY

Maria Ianeva, Marc-Éric Bobillier-Chaumon, Emmanuel Poussard, Bénédicte Leygues | CRTD, CNAM Paris

#### Research objectives

Over the past three years, the Covid-19 crisis has sped up workplace transformations. During the crisis, companies were forced to redesign their organizational processes and to rapidly implement digital technologies in order to keep up the good work. For many organisations, the post-pandemic “new normal” included redefining and extending telework agreements as well as implementing new flexible working policies (Ianeva & al., 2021). It also triggered numerous questions such as: What does hybrid working actually mean in practice? How does it bear upon corporate culture, work collectives or workplace learning? What are the lessons learnt from the crisis? What processes, practices, tools are worth continuing and developing?

#### Our research project

Our contribution draws upon a one-year collaborative research project initiated in September 2022 by a telecommunication company’s internal “think tank” which aims to deliver insights on strategic work-related issues through the collaboration with research teams. It includes both management and employees’ representatives as well as external experts.

The main objective of the project is to address post-pandemic hybrid work practices. While these practices became rather widespread within the company during the Covid-19 crisis, their implementation and consequences were not elaborated by the management and the employees. The institute’s governing body of representatives and experts felt that there was a lack of awareness and understanding of the potentials risks and pitfalls of hybrid working. In particular, there was a growing concern on how hybrid work practices – as a complex organizational, sociomaterial and psychological phenomenon - impede on building common corporate culture, workplace integration and teamwork.

#### Theoretical background

The research proposal that we have submitted to the organisation is built upon both situated (Suchman, 1987; Lave, 1988) and transformative approaches of work and cognition (Clot, 1999; Bobillier-Chaumon & al., 2018). As such, we bring forward two different perspectives on fieldwork (Schein, 1976): a clinical and an ethnographic perspective. Both these perspectives highlight different features of the organizational dynamics, changing work practices and processes. The clinical or transformative perspective on fieldwork relies on careful analysis of the way organisational members and the clinician relate to each other. The ethnographic or ecological perspective emphasize the need to understand activities as they unfold in context. In the case of this research project, we consider ourselves involved in a short-term or “focused” ethnography (Knoblauch, 2005; Pink & Morgan, 2013) that is characterized by short-term field visits as well as in the gathering and analysis of artefacts and documents in use in the field.

#### Design/Methodology/Approach/Intervention

The initial stage of the project involves an interview survey with management and employees of the company (N=30) as well as field observations. The second stage includes 4 to 6 meetings with two different groups of practitioners (a group of managers and a group of employees that have a similar work position and fulfill the same tasks). Participants of both of these groups will be recruited on a voluntary basis.

#### Expected results and contribution to the symposium

Results are expected to be available in the beginning of 2023. This study results from a “science-practice” collaborative project and provides a valuable empirical contribution to the “Hybrid working: current issues and emerging challenges for WOP” symposium.

#### Limitations and future work

The clinical and ethnographic perspectives on fieldwork build on different assumptions and mind-set. Therefore, their articulation needs to be managed and carefully arranged in practice and that in an uncertain and changing corporate environment.

*Keywords: Hybrid working, clinic of activity, work collective*

## Paper 2

### **PRESCRIPTION OF THE FLEXIBILITY OF HYBRID WORK, PSYCHOSOCIAL ISSUES OF OVER-COMMITMENT TO WORK?**

Nadia Barville-Deromas, GRePS Laboratory, Lyon 2 University

#### Research objectives and challenges of the work carried out

Aware of the link between quality of work and performance for health, an energy purchase and resale company is implementing, in 2019, a new collective organization of work based on a collective reflection around hybrid work. The stated objective is to develop work processes that take professional needs into account while integrating flexibility and productivity criteria. Professionals got involved in this participatory project. The Covid situation has shaken up the schedule by imposing forced telework and the implementation of hybrid working methods without any real prior elaboration. How did professionals take up this new organization of work? What were the effects on individual and collective activity?

#### Theoretical frame

Hybrid working brings together different working methods that combine remote working (institutionalized or nomadic teleworking), on site or at home, synchronously or asynchronously, using communication technologies (Barville, 2020; Bobillier-Chaumon, 2021; Vayre, 2019). The modification of temporal markers (now or later) and geographical markers (here or elsewhere, with family, on professional site or on the move) induce flexibility at all levels for professionals to carry out their work: organizational flexibility (working in different projects), time flexibility (knowing how to work at different times depending on professional and personal constraints and possible connections), interactional flexibility (knowing how to manage exchanges with different people, on different communication tools, concerning different projects), professional flexibility (knowing how to articulate one's professional practice with colleagues who are not in the same profession), organizational flexibility (integrating changes to regular processes or organizations) (Barville, 2020). Flexibility is also personal (doing part of the work in the family sphere) and social (taking into account health or other hazards and reshaping practices in the situation). The literature reports an increase in the workload during this transitional health crisis management period.

#### Approach/intervention/methodology

From a clinical and situated approach to uses (Bobillier Chaumon, 2013) resulting from the contributions of Vygotsky's clinical psychology, we seek to understand the effect of a prescription for hybrid work on activity. The individual, collective, professional and organizational dimensions of the activity are appreciated to provide a detailed reading of the psychosocial issues.

The qualitative method combines 13 semi-structured video interviews (1.5 hours) involving 3 men, 10 women, 1 top manager, 3 middle manager, 8 employees, 1 service provider. The objective is to understand the effects of remote work. 2 face-to-face collective interviews of 3 hours recorded (discussion of work constraints). Thematic analysis was performed using NVIVO software.

#### Results obtained or expected

Managing multiple news feeds (What'sApp, Team, emails, calendars) takes up all day. The activity is reconfigured to give a very important part to the management of the poor quality of the information

transmitted: " At work there is a good word and if we do not use the good word, we do not pass the same thing ".

The fact of no longer being together in a common space removes informal and affective information which proves to be fundamental for regulating individual activity (knowing whether the choices made are coherent) and collective activity (knowing how to act and help each other collectively) : " You don't know where the people are if they are available you dare less to look for interaction. There is Teams, there is WhatsApp but it's not the same" . An important part of the activity consists of strategies for analysing digital traces and emotional availability to build future collaborations.

Collective regulations, prescribed and standardized by necessity (collective regulatory daily meetings, rituals of conviviality such as "e-café", meetings for sharing emotions at the start of the day, meetings for technical regulations and meeting objectives, meeting of projects, management meetings) we maintained a good level of conviviality. On the other hand, the professional arbitrations, usually discussed at the collective level have been postponed to the top management level, which weakens the collaborative dynamics and the feeling of belonging: "W e don't have the time to devote to wanting to share".

#### Limits

Situated study not allowing a generalization of the results

Conclusions - practical and theoretical contributions

The highly situated nature of the approach makes it possible to better understand the dimensions of the activity impacted by this change in the organization of work and to grasp the possible positive and negative effects on health.

Relevance to the theme of the congress

Provide a situated reading of the effects of the prescription of flexibility inherent in hybrid work

*Keywords: prescription, flexibility, hybrid work*

### Paper 3

#### **TOWARDS SUPPORTING THE DESIGN OF ACTIVITY-BASED WORK ENVIRONMENTS: LESSONS FROM A RESEARCH-INDUSTRY COLLABORATION**

Chiara Lai, Colliers International France R&D / CRTD, CNAM Paris; Maria Ianeva, CRTD, CNAM Paris; Audrey Abitan, Colliers International France R&D; Marc-Éric Bobillier-Chaumon, CRTD, CNAM Paris

##### Research objectives

This research is the result of a three-year industrial research agreement with the Research and Development (R&D) department of a real estate consulting company. This company designs and implements new flexible workspaces (flex office, activity-based workspaces (ABW)) for their clients. Spatial arrangements such as activity-based workspaces enable companies to cope with an increasingly uncertain economic environment and to meet the growing demand in hybrid working. In this context, many organisations implement new work organisation methods that are expected to support the autonomy and flexibility of workers as well as the re-articulation of the spatio-temporal boundaries of work. Thus, the designers of these workspaces aim at conceiving a spatial artefact which will have a certain impact on the work practices of its users. Flexible offices are supposed to engage the employees of a given company in the transformation of their practices to meet new organisational requirements (collaboration, knowledge-sharing, innovation and so on).

Our collaboration with design professionals aimed at engaging and accompanying them in the elaboration of the relationship between workspaces and work activity. How are activity-based workplaces to be designed in order to support (rather than hinder) work activities? How to trigger and maintain an activity-centered design process that takes into account employees' activities? This partnership resulted in the co-design of a design workshop for simulating the activity of future users, based on the recontextualisation of work practices and their rearticulation in a new spatial context.

##### Theoretical background

Our objective is to focus on the relation between space and activity, in order to understand how workspace is constructed by the subjects through their practices. The situated cognition approach (Lave, 1988) connects the organisation of human action with the artefactual environment in which it takes place. This approach brings to the fore how practices are constructed through everyday action. Central to this understanding of practices as ongoing achievement is the distinction between the arena, the spatial environment in which workers act, and the setting, which refers to the reorganisation of this environment by the subject's activity. It is through this work of reorganisation of the arena that we can grasp the way in which individuals manage to transform what is "given" or incorporated into their environment into resources for action.

Our previous work on the appropriation processes of activity-based workplaces (Lai et al., 2021) reveals how subjects navigate flexible and hybrid workplaces and what meaning and functionalities they give to workspaces in practice. Results clearly showed that what makes workplaces great places to work is not so much a matter of functional design or additional services but offering to employees means and occasions to individually and collectively redesign their work environment. This requires a careful analysis and a deep understanding of work practices as they occur.

##### Methodological approach

Following our theoretical framework, we mobilised the simulation process (Van Belleghem, 2020) to put a group of designers to work on the central question of the relationship between space and activity, thanks to the design of a workshop that they could then deploy during design projects. We mobilised a group composed of each design profession (two Workspace Consultants, a Change Management Consultant and an Architect), as well as two internal researchers around a series of seven co-construction workshops lasting an average of 2.5 hours.

Five of these sessions were recorded, and their partial transcription is in progress.

#### Presentation of results

The main result of this approach is a workshop "arrangement" which can be used by designers with future users. We note that this tool and the reflection that led to its conception guided the designers towards a better understanding of the relationship between space and activity in the reconstruction and development of work situations by the workers. The designers apprehended the spatial object in a moving and developmental dimension, better able to guide them in the design and in the making and argumentation of certain architectural choices.

#### Limitations of the study and future directions

This workshop was tested by the consultants with 2 clients in June 2022 and has been only recently included to the consultancy company offers to clients (September 2022). We expect to have more data on the actual deployment of this tool with clients by the end of the year. This will help us better understand its impact on future users and their appropriation of their space.

#### Relevance to the conference theme

Our study explores how workplaces are impacted by post-pandemic flexible and hybrid working. In particular, we focus on the design process of work environments that effectively support these new work practices. We argue that design should be anchored in the situated activity of the users/professionals.

*Keywords: Activity-based work environments, real estate consultancy, situated cognition*

## Paper 4

### THE ROLE OF RECOGNITION IN THE ACCEPTANCE OF NEW REMOTE MEDIATED WORK

Juliette Stéphan, (CRTD-LISE/CEET, CNAM, Paris); Marc-Éric Bobillier-Chaumon (CRTD, CNAM, Paris);  
Corinne Gaudart (LISE/CEET, CNAM Paris)

#### Research objective and issues

The introduction of technological artefacts in professional environments has led to the emergence of new organisational devices - such as telework, nomadic work, itinerant work (Craipeau & Marot, 1983; Taskin, 2003; Vayre, 2019) - allowing for a flexibilisation of work times and spaces. The Covid 19 global pandemic had a considerable impact on the way people practice and experience remote working. During the past three years, remote work arrangements gradually became a common feature of today's hybrid workplaces .

The research work undertaken aims to analyse in detail the psychosocial impacts of the shift towards these new remote mediated work arrangements. In order to study these transformations, we rely on the case of professionals who had to suddenly submit to the telework system in response to the exceptional measures put in place during the covid-19 pandemic. The health crisis situation illustrates the rapid, unexpected and unpredictable changes that can characterise the professional world today. The study of its consequences offers an opportunity to design new arrangements to anticipate and cope with future developments (Fischer, Lundin & Lindbergn, 2020). Our attention is focused more particularly on the issues at stake in these transformations in terms of occupational health and, in particular, the recognition of work, the pillar of professional identity (Dejours, 1993).

#### Theoretical framework

Today, work activity is marked by a multiplicity of places and temporalities (Vayre & Vonthron, 2019) made possible by the introduction of technologies: we speak of remote mediated work (RMW). These technological tools lead to a transformation of the professional's action and to a modification of his or her relationship with the object of his or her work (Rabardel, 1995). In parallel with technological changes, the question of recognition at and through work is emerging within the digitalised organisations that are being transformed (Andonova & Vacher, 2009, Bigi & al., 2015). Recognition is a "constructive and dynamic reaction" that has a dual character:

- (i) in the possibility of recognising oneself in one's work and finding meaning in it (Clot, 2008)
- (ii) through the recognition of others through judgements (Dejours, 1993)

Like contemporary work, recognition at a distance is mediated by technological tools. The means of recognising oneself and being recognised through work are therefore closely linked to the use of technologies and evolve according to them.

#### Approach/intervention/methodology

The research field is the French subsidiary of an international company that designs, manufactures and distributes audio-visual equipment for professionals. Before March 2020, the work of these marketing and international trade professionals was characterised by a high degree of mobility around the world (nomadic and mobile workers). They experienced the sudden switch to teleworking as a restriction of their possibilities of action. The aim of our ex-post study of these changes was to understand the psychosocial impact of the sudden transition to a new RMW arrangement.

The qualitative method in this research field includes five semi-structured interviews and three group interviews. We wanted to organise the collective reflections around three axes: organisational changes, new professional practices and the impact on recognition. These areas were the subject of three collective interviews. In this case, activity simulation methods (Bobillier Chaumon, Rouat, Laneyrie and Cuvillier, 2018) were used, such as the organisational frieze, the technical object method or the projective method.

#### Results obtained or expected

All the material has not yet been fully exploited. From the data processing already carried out we were able to observe that:

- In this particular configuration of mediated remote work, recognition is exercised as meta-labour, i.e. work on work that consists of additional tasks in order to better coordinate and be better recognised in work systems that tend to become more invisible, fragmented and individualised. This is known as "recognition activity".

- the appropriation of the new telework system is undermined when the managerial line alone designs and dictates the "good conduct" to be observed in its use. In order to promote the appropriation of this new work organisation by professionals, it seems necessary that the transition be designed in such a way that workers find meaning in it. Recognition "by others" (Dejours, 1993) in remote work also, and above all, requires recognition of the appropriation of the devices by the professionals.

#### Limitation

Qualitative approach situated in an unprecedented context of health crisis

#### Conclusion

This study allows us to study recognition as a condition for the acceptance of new organisational measures.

#### Relevance to the conference theme

Study of the psychosocial impact of new hybrid work arrangements.

*Keywords: recognition, remote mediated work, clinic of work*

## Symposium S119

### From Acronym to Action: Advancements in DEI Measurement and Methods

Rebecca Harmata

science\_practice

Workplace diversity has become an undeniable fact, leading to an exponential rise of organizational diversity, equity, and inclusion (DEI) initiatives. Indeed, Culture Amp's 2022 Workplace DEI Report revealed that 81% of organizations surveyed are already implementing DEI initiatives. Not only are organizations continuing to develop DEI initiatives, they are also responding to the changing workforce demography by including identity groups beyond traditional mandatory reporting groups, such as neurodiversity and political orientation (CITATION). Despite the increased focus on understanding the experiences of employees with diverse backgrounds and lived experiences, organizations are ill-equipped to develop action-oriented strategies due to lack of resources regarding data collection, action-oriented DEI measures, and accountability (Corrigan, 2022). Indeed, the emphasis on DEI scorecards within organizations presents an unsustainable effort to manage organizational DEI. Some even argue that the scorecard approach inhibits structural change by providing the organization with a superficial scaffold rather than a systems approach to integrating DEI throughout the organization (Melaku & Winkler, 2022). Organizations must shift from a frequency and descriptive approach to DEI to understanding the employee experiences. As such, the goal of this symposium is to bring together four papers that highlight new organizational measures that not only capture the employee perspective through behavioral and self-report methods, but also are tailored toward accountability and action. The present symposium corresponds to the conference theme, *The Future is Now: The Changing World of Work*, by presenting four new measures to empower organizations to address the increase need to create evidence-based solutions to the changing workforce demography.

In the first paper, Jordan and Deal discuss the development and use of a new scale, DEI Elevated that not only expands the definition of organizational diversity from traditional reporting groups (e.g., race, ethnicity, age) to include political and religious diversity, neurodiversity, and disability status, but also emphasizes the importance of employee perspectives of organizational DEI initiatives. Specifically, the DEI Elevated measure consists of seven categories: Diversity, workplace injustices, safety, inclusion, supportive culture, policy, and DEI training. These categories were specifically developed to practically measure employee perspectives of DEI practices and organizational culture, as employee perceptions inform organizations about the impact of DEI practices on employee experiences.

In the second paper, Harmata and colleagues argue that an identity agnostic microaggressions measure would help mitigate organizational issues regarding tokenism, employee privacy, and intersectionality. As legislation and organizational policies continue to ban explicit discrimination (e.g., CROWN Act), interpersonal discrimination is becoming more subtle and discreet. Indeed, research has shown that microaggressions are just as harmful as overt forms of discrimination (Jones et al., 2013), yet organizations are ill-equipped to measure and act upon such instances due to the siloed nature of current microaggression measures. Building upon employee perceptions and an extended definition of workplace diversity, Harmata and colleagues present novel work regarding the development of an identity agnostic microaggressions at work measure.

Next, Feitosa, Khoobchandani and Davis address an important gap in DEI literature and measurement by presenting a complete validation study of an original scale, the Measure of Equity in the

Workplace (MEW). Feitosa and colleagues identified three key dimensions within organizational equity: Recognizing Inequity, Actively Dismantling, and Leading to Absence of Differences. The MEW empowers organizations to measure perceptions of equity in the workplace in a way that promotes accountability and action.

Finally, Kim moves beyond self-report measures of employee experience and developed a situational judgement test (SJT) to better understand microaggressions against East Asian Americans (EEA). Specifically, Kim aims to identify the attitudes of those who perpetrate discriminatory behaviors for the purpose of developing behavioral interventions. Using 35 scenarios on a sample of 400 participants, a three-factor solution was identified: Challenging, Ambivalent, and Reinforcing ( $\alpha = .92 - .95$ ).

Together, these papers highlight practical and meaningful measures to incorporate into current organizational DEI strategies for the purpose of understanding the employee experience and developing actionable DEI solutions. These measures will not only promote peace, justice, and strong institutions by reducing workplace inequalities, but also sustainably increase the overall health and wellbeing of employees.

*Keywords: Employee Perspective, Diversity Equity and Inclusion, Scale Development*

## Paper 1

### The Development and Use of DEI Elevated

Caroline Deal, University of South Florida; Cassidy Jordan, University of Tulsa

#### Introduction

##### Theoretical background and Purpose

As diversity, equity, and inclusion (DEI) rises to the forefront of organizational goals, so too should the measurement of effective DEI initiatives (Romansky et al., 2021). Organizations must promote policies and practices that support its diverse workforce to maintain their competitive edge (Downey et al., 2015). Historically, DEI include some of the most difficult metrics to measure in an organization (Romansky et al., 2021). Although DEI policies and diverse representation provide some information regarding the prominence of DEI initiatives, there is a disconnect between organizational and employee perceptions regarding DEI. As such, Workforce Lifecycle Analytics developed a measure to assess employee experiences and perspectives of DEI practices and policies within their organization.

Employee perceptions are vital to any type of organizational change, as they inform leaders of potential successes and failures in new or existing policy. Romansky et al. (2021) stated that employee feedback serves as the most salient method for measuring inclusion. Additionally, Katsaros et al. (2014) identified several moderators of employee perceptions, including but not limited to, organizational commitment, job satisfaction, and autonomy. While it is not in the scope of this paper to explore the factors relating to employee perceptions, these key moderators are critical to understanding why certain DEI initiatives may be effective for employees.

Although organizational diversity has primarily targeted gender and race, calls for expanding the social categories included within DEI initiatives can be seen in both academia and industry. For example, Cletus et al. (2018) defined diversity to not only include additional social categories such as sexual orientation, political and religious beliefs, but also disability and lifestyle choices. Clouder et al. (2020) included neurodiversity, which refers to different behavioral and learning functions and traits. As such, the current measure included neurodiversity, as well as racial, ethnic, religious, sexual, and political diversity.

##### Scale Development

##### Content Validation

First, various words associated with diversity, equity, and inclusion (i.e., acceptance, belonging, inclusion, justice, representation, etc.) were identified. Then, subject matter experts (N = 2) sorted the words into various clusters, separating those with different nuances from those that were essentially synonyms (i.e., cluster types included diversity, workplace injustices, inclusion, supportive culture, and justice/equity). Next, 11 current DEI surveys were reviewed to determine areas that could have been missed and re-evaluate current clusters. Other I-O psychologists to review the items and determine any potential changes.

Originally, the survey consisted of 6 categories with 54 items total. Throughout the content validation, 7 categories were ultimately included at this stage: diversity, workplace injustices, safety, inclusion, supportive culture, policy, and DEI training. A total of 94 items measured these categories, and each main category included 3-5 subcategories.

## Refining the Scale

The next stage of scale development was to refine the items. The first step was to edit or delete any double-barreled items. Once double-barreled items were eliminated, the scale developers did a detailed review of the remaining items and attempted to identify which items fit the categories and their definitions the best. The scale developers flagged items that did not fit in the intended category and proposed edits. Some items were removed as the scale developers did not feel that they were measuring employee perceptions or the overall DEI culture. Definitions were edited to better capture the constructs. Additionally, other scales measuring DEI were reviewed again to determine if gaps existed; items were written as needed. A gap regarding involvement with community DEI activities was identified. Multiple items were added during the refinement process to target community involvement which was meant to target the organization's involvement with DEI initiatives in the community. Content validation was addressed through the conceptual analysis of matching items to their intended category and definition, but the scale required further validation efforts.

## Validation Efforts

After the refinement process was completed and the scale developers agreed on the scale, they moved on to validation efforts. The first stage of validating the scale was a sorting task. The task created included 113 items as well as the main category names and their definitions. The sorting task was sent out to the scale developers, as well as colleagues (with experience in item sorting). Once the results were received, the responses were combined and summed. The cut-off for retainable items was set at four, as that was two-thirds of the six sorters. Many items that did not make the sort were due to definition overlap. The category definitions were further refined to be more specific to the construct; additionally, items were edited to fit their intended categories better, and new items were added as well. After refinement, the scale was left with six main categories and 157 items. Further validation efforts will include administering a pilot survey. Currently the data collection process has not started but is expected to start in the year 2023. Data from the pilot study will be used to run item analyses to further refine the scale and assess the structural validity.

## Practical Implications

By measuring employees' perspectives of DEI practices and organizational culture, the implementing organization can get a better idea of how their employees feel about current DEI efforts and reconcile those practices that are not effective. This survey gives employees the opportunity to use their voice which could increase many positive organizational outcomes. Additionally, by capturing multiple domains of diversity, results can encompass more than the practices surrounding DEI in terms of race/ethnicity and give all employees an opportunity to feel included and valued.

## Limitations

The main limitation of our survey up to date is that we are limited in terms of establishing validity. Although efforts are still in progress, it does limit our ability to promote a valid DEI measurement instrument until proper validity is established. Further, we have identified construct overlap during the validation process that must be addressed to ensure clear construct measurement.

## Conclusion

Not only do DEI practices benefit the valued employees — they benefit the implementing organization as well. The implementation of DEI practices can result in a variety of positive organizational outcomes such as “increased profitability, creativity, flexibility, successful adjustment to fluctuations in the market, and overall individual and organizational growth” (Thomas & Ely, 1996).

It is our hope that this survey will give organizations the information needed to identify and implement meaningful DEI practices that contribute to positive employee perceptions, as well as enhance their overall organizational culture so that employees can have a more positive experience at work.

*Keywords: scale development, employee perceptions, organizational culture*

## Paper 2

### Developing a Microaggressions at Work Scale: An Identity Agnostic Approach

Rebecca Harmata; Arturia Melson-Silimon; Jorge Lumbreras; Hannah Marriaga

#### Project Purpose

With the exponential increase of organizational diversity, equity, and inclusion (DEI) initiatives, a need exists to accurately measure DEI-related employee experiences in an actionable manner. Although organizations are well-equipped to measure overt forms of interpersonal discrimination such as racism and sexism via annual climate surveys, rarely do these surveys include measures to quantify the rate of subtle discrimination, such as microaggressions. Despite the subtle nature of microaggressions, microaggressions have been found to be as harmful as overt forms of discrimination (Jones et al., 2013). As such, the purpose of the present project is to develop a validated scale of identity-agnostic microaggressions at work that not only educates key organizational stakeholders, but also provides pathways for effective interventions.

#### Theoretical Rationale

Microaggressions are defined as daily verbal, nonverbal, or environmental slights, regardless of intentionality, and can manifest in several forms, including micro-assaults (i.e., intentional explicit derogatory remarks and/or behaviors), micro-insults (i.e., unintentional subtle derogatory remarks and/or behaviors), and micro-invalidations (i.e., ostracizing remarks and/or behaviors; Sue et al., 2007). The microaggression literature initially focused on covert racism directed toward people of color (Pierce, 1970; Sue et al., 2007). Since then, microaggressions have been expanded to not only describe the experiences of people of color, but also the experiences of disabled people (Conover et al., 2017), in addition to sexual (e.g., Galupo & Resnick, 2016), gender (e.g., Owens et al., 2010) and religious (e.g., Pagano, 2015) minorities.

Despite the progress in delineating microaggressions of specific communities, the siloed nature of current microaggression measures is impractical for organizational use. The low representation of marginalized identity groups and issues regarding disclosure directly implicate the privacy of identity holders and risk tokenizing already marginalized identities. In addition, approaching microaggressions through an identity siloed lens fails to consider the intersectionality of identities.

Not only do microaggressions at work contribute to increased perceptions of a hostile work environment (Galupo & Resnick, 2016), evidence suggests that microaggressions also negatively impact the psychological well-being of individuals. Specifically, experiencing microaggressions result in psychological distress (Livingston, 2017) and depression (Fattoracci et al., 2021). In addition, research on workplace incivility suggests workplace deviant behaviors also impact bystanders by increasing perceptions of interactional injustice (Andersson & Pearson, 1999).

#### Research Methodology

##### Item Generation

A literature search was conducted to review existing microaggression scales, resulting in an initial list of 33 unique microaggression measures, 132 unique themes, and 836 microaggression items. Microaggression scales were retained if the items referred to an individual's personal experience (e.g., frequency, magnitude) with microaggressions. Translated microaggression scales (e.g., Spanish

translation of the Racial Microaggressions Scale; S-RMAS) and microaggression scales measuring an individual's endorsement of microaggressions (e.g., Acceptability of Racial Microaggressions Scale) were excluded. The remaining 126 identity specific themes were coded by subject matter experts (SME; N = 4) into 15 identity agnostic themes and definitions based on Williams et al. (2020). Then, SMEs conducted a redundancy coding procedure to eliminate duplicate items and generated additional items for themes with few unique items (e.g., Myth of Meritocracy, Avoidance).

#### Proposed Content Validation

A total of 30 SME's will be surveyed for face and content validity of the initial identity agnostic microaggressions at work list for relevance to the overall theme and the workplace. Participants will be recruited via convenience sampling through listservs (e.g., APAEMGS) and networking with research lab contacts. Participants will report tenure in their respective field (e.g., social psychology; industrial organizational psychology) and length of time engaging with the microaggression literature. Participants will be entered into a raffle pool for the chance to receive one of two \$30 gift cards.

#### Proposed Structural Validation

Based on Guadagnoli and Velicer's (1988) recommendation for appropriate sample sizes for exploratory factor analyses (EFA), a total of 350 full-time working adults with diverse categorical identities within the United States will be recruited via Prolific to complete a 20-minute Qualtrics survey. Participants will be compensated based on Prolific's recommendation of \$8/hour, resulting in \$2.67 per 20-minute survey, totaling \$934.5.

#### Proposed Analytic Procedures

An exploratory factor analysis (EFA) will be conducted using the R (2021) package lavaan (Rosseel, 2012) to investigate the structural integrity of the identity agnostic microaggressions at work measure.

*Keywords: Microaggressions, scale development, employee experience*

### Paper 3

#### **A Measure of Equity in the Workplace (MEW): Scale Development and Validation**

Jennifer Feitosa; Nishka Khoobchandani; Alicia Davis

There has been substantial research that highlights how companies with increased equity, diversity, and inclusion (EDI) produce greater financial returns – companies who actively spearhead these strategies are 35% more likely to achieve above-average returns and have their business performance increase by 31% (Hunt, 2015). Recently, a more intentional focus on organizational social justice pushed organizations to re-evaluate their missions, create policies and procedures focused on respecting differences and treating others with dignity, and more importantly include accountability for equity in the workplace.

Developing an equitable environment can increase happiness, belonging, productivity, and more (Mousa, 2020). Additionally, when employees perceive the workplace as equitable, they will be more likely to remain engaged and less likely to show burnout signs (Sharma & Sharma, 2015). Even with the current organizational interest and the accumulating evidence of its importance, equity's conceptualization and measurement remain nebulous. Currently, equity work has evolved to go beyond a comparison of input and output (Adams, 1965) to actually identifying the barriers and properly dismantling them (Hagman, 2021). To respond to these societal pressures, we follow Hinkin's (1998) steps to define equity and develop a Measure of Equity in the Workplace (MEW) that represents a more robust conceptualization. Ultimately, the goal is to have a multi-item, self-report scale that is concise, assesses different types of equity, and is versatile enough to be applied across settings.

#### Method and Results

Table 1 shows details of the studies and samples used for the development and validation of the MEW. First, in the item development phase, we draw from Hagman's (2021) definition of (1) acknowledging the (both visible and invisible) barriers to success that some may face and (2) working to dismantle such barriers; and complement them with a third dimension that is actually (3) achieving the absence of avoidable or remediable differences. With this in mind, we developed 45 items after consulting other measures (e.g., Keleher, 2014; Mousa et al., 2020) and came up with our own set of items. Our DEI subject matter experts (SMEs) were asked the extent to which they agree that each specific item was conceptually consistent with the above definition. After reviewing the quantitative results as well as the qualitative information (e.g., organizations' reported data was more related to diversity than equity), items were eliminated and new items were generated, resulting in 30 items.

In the content adequacy phase, these 30 items divided across the three dimensions of equity went through extensive scrutiny. Naïve participants and workers alike rejected the idea that these items were part of a three-dimensional construct; but only two out of the 31 items were properly categorized in Study 2, and the three-dimensional model had a very poor fit in Study 3 (RMSEA=.056 [.051-.060], TLI=.17, CFI=.24). This study shed some light regarding convergence and discriminant validity results (Table 2 for details). Next, we consulted another set of experts in Study 4 to review the items, which then were edited accordingly to a total of 21 items.

During phase III, the dimensionality was further clarified by showing that participants were really unable to classify any of the items into the dimensions (Study 5). Furthermore, another sample rated

all 21 revised items as meeting the criteria regarding whether they captured the definition of equity in Study 6. We then picked the 10 items with the highest agreement, see Table 3 for the final items.

Lastly, participants read a vignette describing a workplace with low, medium, or high levels of equity and rated the workplace on the ten, which then was further reduced to four final items (MEW-S). In the final nomological network phase, we show that the one-factor model shows a good fit (Table 4), it shows statistically significant differences when the equity in the context shifts ( $F(2,304) = 533.42$ ,  $p < .001$ ,  $\eta^2 = .79$ ; Figure 1), and is related to criteria such as performance,  $r(305) = .49$ , and turnover,  $r(305) = -.83$ , as expected (Table 5).

#### Discussion and Conclusion

We have built evidence for the four-item MEW with concise, valid, and reliable properties. Additionally, precisely establishing equity's conceptual realm in relation to other constructs such as justice, diversity, and equality is key as attention to EDI continues to grow in the workplace. To strengthen these remarks, the next steps include performing cross-validation, multigroup comparisons, and field samples. Overall, MEW can quickly inform perceptions of organizational climate related to their commitment to equity.

*Keywords: Equity, scale development, organizational accountability*

## Paper 4

### **Measuring Prejudice: The Development and Validation of the East Asian American Situational Judgment Test**

Emily Kim, Virginia Tech

**Research Goals :** In 2020, there was an escalation of bias, xenophobia, racism, and violence against the Asian American community, especially due to COVID-19. The goal of this study was to develop and validate a scale to improve our measurement of prejudice, particularly against East Asian Americans (EAAs).

**Background :** Many racial bias measures for Asian Americans and other races are designed to evaluate perceived discrimination and are only directed towards members of their respective minority groups. While understanding the perspectives of those who experience prejudice are valid, it is equally important to identify the attitudes of those who perpetrate discriminatory behaviors to better combat these issues.

Although theoretical understanding of bias has improved, psychometric measurement scales and methods of assessments have continued to rely almost exclusively on self-reports of cognitions and affective reactions to a target group. This study uses a situational judgment test (SJT) to measure prejudice towards EAAs based on behavioral expectations.

SJTs are assessments composed of brief scenarios and a fixed set of responses where respondents are asked to imagine they are in a certain situation and indicate the likelihood of engaging in each response. The underlying logic for using SJTs is based on the behavioral component of the tripartite model of attitudes (Bagozzi et al., 1979). Shifting focus to behavioral-based measurement strategies provides the benefit of potentially reducing social desirability responding (Kanning & Kuhne, 2006), as well as improving predictions of behavioral outcomes compared to cognitive/affective scales (Peus et al., 2013; Teng et al., 2020).

**Methods :** The initial item pool for the EAA-SJT consisted of 35 scenarios depicting microaggressive situations directed towards EAAs. The structure of the response options primarily draws from the results of the Diversity Engagement Test II (DivETII; Sturdivant et al., 2017). The DivETII identified three emergent factors: Challenging (likely to engage or confront those who commit microaggressions), Ambivalence (likely to shift focus away from the microaggression), and Reinforcement (likely to support or rationalize the microaggression). In the development of the EAA-SJT, the Challenging and Ambivalent dimensions remained the same, but the Reinforcing dimension was bifurcated into Negative Reinforcing (NR) and to Positive Reinforcing (PR) dimensions. NR response options were designed to reflect behaviors that reinforced the negative aspects of anti-EAA bias and PR response options were designed to reflect faux complimentary behaviors that are likely to be viewed as offensive by EAAs.

Participants were asked to complete a 20-minute survey consisting of an informed consent form, demographic questionnaire, and five measures: EAA-SJT, Asian American Stereotypes Scale (AAS), Marlowe-Crowne Social Desirability Scale (MCSD), and two locally developed criterion measures, the East Asian Cultural Knowledge Test (CKT) and the Asian American Microaggression Behavior Checklist (MBC).

Results : Data were collected from 400 participants through the Qualtrics market research panel. Participants were 49% female, 57% White, and had average age of 52.5 ( SD =17.9). After iterative exploratory factor analyses for the EAA-SJT, results supported a three-factor solution composed of Challenging, Ambivalent, and Reinforcing, with PR and NR not emerging as separate factors. Convergent validity was assessed with the AAS with moderate, significant correlations. Discriminant validity was assessed with the MCSD, and social desirability response bias was not found to be a meaningful problem for the EAA-SJT. Criterion-related validity was assessed by regressing the CKT and MBC on EAA-SJT scores; results indicated that Reinforcing was the only dimension that significantly predicted both measures (CKT:  $t(396) = -5.26, p < .001, \text{partial } \eta^2 = .07$ ; MBC:  $t(396) = 6.02, p < .001, \text{partial } \eta^2 = .08$ ). Reinforcing scores also provided significant incremental variance over AAS scores for both the CKT and MBC.

Discussion : Overall, these results suggest that the initial evidence for the EAA-SJT is promising. The use of behavioral-based measurement strategies may provide benefits in reducing social desirability bias in responding and improving predictions of behavioral outcomes over more commonly used cognitive/affective measures. However, results are limited due to the initial exploratory stage of this research. Confirmatory factor analyses and subsequent validation strategies must be conducted to truly identify the benefit of this measurement.

Later results may have varying workplace implications such as predicting performance in diversity programs and expanding our understanding of microaggression response profiles.

Relevance : As the world continues down a path of increasing globalization, it is increasingly important to address DEI in the workplace. With a better understanding of bias and prejudice through improved measurement strategies, we can work toward the UN SDG goal of reducing inequality at work.

*Keywords: Situational Judgement Test, scale development, microaggressions*

## **Symposium S120**

### **Adapting Assessment Centres for Virtual Delivery – Experience and Best Practice**

Baron Helen, Independent

The arrival of Covid-19 disrupted many processes in organisations and assessment processes were no exception. Assessment centres, by their nature, involve the interaction of quite a large group of people, many of whom have never met before, exactly the kind of scenario likely to spread the virus. Employers were faced with the need to find ways of assessing candidates that did not require face-to-face encounters. This practical symposium reviews the experiences of a number of psychologists whose role included the design and delivery of assessment centres, how they responded to this challenge and what they learned from the process. The organisations are all in the public sector from both the UK and Ireland. These organisations typically faced increasing demands as a result of the virus and therefore were under substantial pressure to not just maintain their assessments for selection purposes, but often to increase their productivity. The papers discuss topics such as different approaches to redesigning exercises, assessor training and support, security and remote invigilation as well as the impact on candidates of using a virtual delivery. While there are challenges in working in the virtual environment, many of the innovations introduced out of necessity were received very positively and some are likely to be maintained even when face to face assessment becomes possible again. Others needed some reworking before they were deemed effective. The final paper provides an overview of guidelines designed to support effective design and delivery of virtual assessments providing a framework for evaluating the practical solutions these organisations found.

*Keywords: Assessment Centre, Virtual, Standards, Selection*

## **Paper 1**

### **Redesigning Exercises for Remote Delivery**

Gray Aine, An Garda Síochána; Lyons Aoife, Public Appointments Service

The Public Appointments Service (PAS) is the centralised recruiter for the Civil and Public Service in Ireland. PAS recruits for a wide range of Public Sector roles, with applications of up to 30,000 candidates for some of our large volume general service roles.

When, due to Covid, a nationwide lockdown was announced, PAS had to explore how recruitment could carry on in a context where candidate travel to our Dublin Office for Assessment Centres was impossible. A number of criteria were applied to determine the best course of action:

Urgency of filling the posts – many of our roles are critical particularly due to Covid;

Impact of changes on the validity of the assessment process;

Impact of changes on candidates and their ability to perform to a high standard;

Ability of Assessors to assess using new techniques and technology;

Impact of changes on cost, timescales and staff resources required;

Security of test materials;

In addition, a key consideration was to avoid simply replicating what we were doing in-person online, but rather to revisit each of our processes to determine how best to assess the required competencies remotely.

This paper will review 2 specific assessments used by PAS as part of promotion to Inspector and Sergeant in the Irish police service (An Garda Síochána). The Irish police service is a national one and has a staff complement of approximately 17,000 and a budget of approximately €2bn.

#### **Inspector Briefing Exercise**

The first exercise that was adapted for on-line delivery was an analysis presentation exercise used for Inspector roles. In delivering this type of exercise previously, candidates would have been supervised reviewing a detailed brief and asked to present it to assessors. It would have been very challenging to maintain the security of the brief and very resource intensive to adopt this approach remotely.

Following a review of the competencies and the potential assessment options, an alternative approach was developed. This involved streamlining the volume of content given to candidates and the development of a series of parallel exercises to be used on different days. In addition, a sample exercise (of similar length) was developed to familiarise candidates with the approach and to maximise the perceived fairness of the process.

In determining whether this new model is better than the existing one, there are a number of areas where there is evidence to support the ongoing use of this model, in particular the very positive candidate and assessor feedback. Compared to the previous approach, more evidence on the competencies came from the question and answer session which followed the initial response of the candidate to the assessment material so it felt like a more dynamic engagement than the previous more formal presentation. Assessors particularly commented on how each candidate brought something unique and different to the exercise based on their previous experience. Ongoing

monitoring is required to ensure this approach continues to work, e.g. no evidence of collaboration in preparing the presentation and ongoing review of the performance of the successful candidates.

#### Sergeant Online Tests

The second assessment process adapted as a result of the pandemic was on-line multiple choice critical reasoning tests and a bespoke situational judgement exercise used at the first stage of the Sergeant promotion process. Typically, 1,500 to 3,000 candidates apply for promotion at this level.

This is a very high stakes process so in order to safeguard the security of the material it was decided that live remote invigilation was the optimum approach. An alternative approach would have been to use a “record and review” approach to invigilation which involves the testing session being recorded and a sample of the completed tests being reviewed later by invigilators. The live invigilation was used because issues can be addressed as they arise and it was more credible for the applicant population. Because of the security concerns, it was decided that the ideal ratio of invigilators to candidates was one invigilator to five candidates.

In summary, the key learning for PAS was how quickly we could change our assessment models in light of the new situation. While we have made changes and improvements to many of our initial approaches, in particular related to scoring, the flexibility and need to innovate quickly gave us the courage to try new things. There are areas where further data is required to fully understand the potential longer-term implications of the changes made during the pandemic, but on balance, we feel the new approaches we used are improvements on previous practices and will continue in the future.

*Keywords: Assessment & Recruitment, Public Sector, Remote Invigilation*

## Paper 2

### Improving consistency in assessor scoring for an online assessment process

Louise Meade, Matthew Humphries & Howard Clemence | College of Policing

The College of Policing were asked to rapidly design and implement an online assessment process to allow police recruitment to continue regardless of the significant restrictions imposed by the COVID-19 pandemic. Both historical assessments and assessor training had previously been delivered face to face. One facet of this project was to design and deliver online assessor training to 600+ assessors in a limited period of time to a high standard. An initial assessor package was put in place to support roll out of the online assessment process which was aligned with best practice and contemporary research. Once the process was live evidence was collated which identified opportunities to enhance consistency in assessor performance and overall reliability of the assessment process. The evidence base consisted of an inter-rater reliability study, speaking to psychologists, quality assurance team and assessors to identify areas to develop. It was identified that the below areas could be developed:

Further practice materials – including benchmark content

Further clarity on how to use a behavioural anchored rating scale to rate individual behavioural indicators and overall exercise marks

Preference for increased interaction with trainer

Further develop a quality assurance performance management framework to highlight inconsistencies in assessor performance which further training can help address.

Evaluation evidence identified additional training and guidance that could be developed. These included:

Information leaflet – highlighting areas that could quickly be addressed and generate immediate results

Skills Development Workshop - provided a platform to cover areas of performance that needed addressing whilst allowing assessors to interact with the organisation and ask questions on the process/training

Additional benchmark training – assessors identified as underperforming in the quality assurance performance management framework are supplied with additional benchmark training. This provides the assessors with further practice aimed at increasing consistency of their scoring.

In order to keep a direct communication between the organisation and assessors, drop in webinars are being carried out each month to help answer queries and address any issues which may be attributing to assessor performance.

Aligned with the British Psychological Society standards assessor performance is continually monitored through a quality assurance process, the recent results since the additional training had been introduced highlight an increase in consistency of assessor scoring across three online exercises.

Overall conclusions from this project were that the online assessment process has been effective for high volume recruitment with promising outcomes for minority ethnic candidates. Another conclusion is that e-learning training is most effective when a range of support tools are put in place. By providing delegates with training through different mediums this can help facilitate for a wider

variety of learning styles. Limited practice can affect performance, therefore optimising benchmarking content is important to help aid consistent performance and provide a good understanding of the assessment rating criteria. Important to continuously monitor performance and address any trends or inconsistencies found.

*Keywords: Assessor Consistency, Online Assessment, COVID Response*

## Paper 3

### Responding to the Pandemic - Delivering Virtual Assessment: Civil Service Fast Stream and Emerging Talent

Phil Wilson, Sonia Pawson | Cabinet Office

#### 1. Goals

This paper outlines the transition from a face to face graduate Assessment Centre (AC) and Final Selection Board, in a public sector context, to a virtual delivery format. This conversion was driven, above all, by Covid-19 restrictions and the need to shape a user friendly but compelling alternative assessment. The AC design involved replacing an existing iPad tablet-based app, that was run face to face, with a fully virtual experience - administered remotely.

The shortlisting stages of the graduate assessment process, prior to the AC stage, had been online for a number of years, comprising online tests, work based scenarios and a video interview. The virtual AC app was therefore a continuation of an online candidate experience.

The assessment design was also shaped by a number of strategic objectives:

Identifying candidates with the highest potential for future senior leadership.

Strengthening the flow of diverse talent into the pipeline for senior leadership roles that reflects UK society.

Providing fast, flexible, and more modern, graduate assessments.

Offering an engaging and positive candidate experience using multimedia elements.

Improving scheme retention.

A digital agency was secured to support the AC update. This agency had originally been commissioned to create the previous iPad app, which they were then contracted to adapt for virtual provision.

#### 2. Theoretical background

The assessment process was developed by occupational psychologists, according to best practice and aligned with the UK's British Psychological Society's Standards on Assessment Centres (2015), the International Taskforce on Assessment Centre Guidance (1989), and the International Test Commission's (2005) International Guidelines on Computer-Based and Internet Delivered Testing.

#### 3. Method

The assessment process itself comprised:

A leadership roleplay exercise conducted with a 'colleague' (played by the assessor) – with information presented via the app, and with the discussion on Google Meets.

A group stakeholder exercise within a fictitious scenario – again presented via the app, with the discussion on Google Meets.

A written analysis exercise, presented on the app, requiring the generation of ideas around an initiative – with the response recorded on a computer by the candidate.

A Final Selection Board virtual interview, following the AC.

The creation of the virtual app involved a series of digital and non-digital user trials to learn about candidate experience and build quick prototypes to test hypotheses. Web analytics and other data was used to enhance understanding of any emerging user/accessibility issues.

The assessment experience – supported by a fully trained operational team - was evolved in a number of ways, by providing:

The capacity to easily activate exercises for candidates in an accessible way.

A virtual candidate common room, allowing real time updates and support during the process.

An easy to use tutorial for candidates; a preview of exercises; exercise instructions and password access.

Ability to browse exercise items with easy navigation; a note and highlight facility; an FAQ Help screen; capacity to lock exercises and allow candidates to offer feedback about their exercise experience, including incorporation of reasonable adjustments.

#### 4. Results

The virtual assessment was delivered to 3,449 candidates. In developing the app, user (candidate) testing offered positive metrics:

Leadership Exercise:

‘I found the app easy to use overall in the exercise’: 91% positive.

‘I preferred doing the exercise on the app compared to paper version’: 82% positive

Group Exercise:

‘I found the app easy to use overall in the exercise’: 89% positive.

‘I preferred doing the exercise on the app compared to paper version’: 83% positive

Written Exercise:

‘I found the app easy to use overall in the exercise’: 91% positive.

‘I preferred doing the exercise on the app compared to paper version’: 82% positive

Candidate satisfaction data during the live virtual process was also positive:

Leadership Exercise: 91%

Group Exercise: 87.6%.

Written Exercise: 90%

Assessor testimonial included: ‘It was really impressive how arrangements were made so effectively to support online assessments’.

In addition, diversity outcomes exceeded previous year metrics, including for the Final Selection Board (Commercial Fast Stream):

Female: 45% (4% increase on 2020)

Ethnic minority: 28.2% (120% increase)

Lower socio-economic background: 6.7% (34% increase)

Disability: 27.8% (63% increase)

## 5. Conclusions

The case study provides an example of a successful transition of a volume assessment centre process to a virtual delivery format. Candidate reaction and diversity outcomes were positive. Future assessment plans will build on this experience, with new, even more diversity focused content, utilising similar virtual architecture.

*Keywords: Virtual, Online, Multimedia, Assessment centre*

## Paper 4

### The BPS Guidelines on the Design & Delivery of Virtual Assessment Centres

Baron Helen, Independent; Choi Max, Quest Partnership; Eyre Charlie, Workspheres Ltd; Thomas Natalia, Shell

In 2015, the British Psychological Society (BPS) released its Standard for the Design and Delivery of Assessment Centres (British Psychological Society, 2015). Drawing heavily on the Assessment Centre literature as well as the insights of highly experienced practitioners, the Standard has been subsequently used internationally as a means of supporting practitioners in both the preparation and implementation of assessment centres. While the original standard made some reference to virtual delivery, its primary focus was on the face-to-face delivery of assessment centres. The extensive and unexpected changes to global working patterns which resulted from the Covid pandemic in 2020 required many organisations to rapidly review and adapt their delivery models for assessment centres. Against this backdrop, the BPS Assessment Standards working group recognised that practitioners were often having to attempt this transition with limited guidance or models for how this might be implemented.

While existing literature provides some useful advice on the practicalities of incorporating technology into assessment centres (e.g. Guidelines and Ethical Considerations for Assessment Center Operations, 2015), it was felt that further detail would be advantageous for practitioners seeking to make the switch to full virtual / online delivery.

The presenters drew together key themes within the guidance through their own practitioner experience of transferring online assessment centres to online format, and also through consultation with practitioners across the UK with recent experience in this area. The broad themes around which the guidelines are structured relate to design issues, technical issues, exercises, assessors, participants, validity and fairness. The guidelines are due to be made freely available to practitioners through the BPS website.

The paper provides an overview of the new guidelines, and how they can be used by practitioners. This will be linked to the specific practical experiences of virtual assessment centre delivery cited by other presenters within this symposium.

The guidelines are intended for all practitioners planning to deliver Assessment Centres in virtual formats, and particularly those who are switching from face-to-face to virtual format. The presenters will provide an overview of the guidelines, explain how they relate to the 2015 BPS Standard for the Design and Delivery of Assessment Centres, and how they might be used across a range of assessment and development centre applications. They will also be relevant to converting other assessment processes, such as stand-alone interviews, for virtual delivery

The guidelines offer an additional resource for practitioners and academics focussing specifically on the factors to be considered when implementing a virtual assessment centre. This will complement the extensive guidance provided by the standard.

*Keywords: Assessment Centre, Virtual, Standards*

## **Symposium S116**

### **Vales-based HRM in times of multi emergencies**

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science\_practice

What will be covered and why?

The United Nations Sustainable Development Goals are imperative due to environmental, social, and economic emergencies leading to dangerous social tension. Everyone is challenged to participate in pursuing those goals, regardless of the role he or she has within society. As collective agents (with social structures and processes), organisations also have a relevant role in pursuing those goals. The symposium focuses on Human Resources Management (HRM) practices and policies to meet some of the values behind the United Nations' sustainable development goals.

The first paper reports empirical knowledge about the relationship between several personal and work-related demands/resources and psychophysiological recovery in Spain and Portugal. Therefore, it is related to workers' well-being and decent work.

The second paper proposes a framework to guide values-based interventions in the work, organizational and personnel psychology (WOPP) field. In the current multi-emergencies times, values can be a stable compass to guide the practice in this field. That framework is also an instrument to implement, monitor and evaluate such interventions.

The third paper using documentary analysis of 40 reports made by adherent organizations to the United Nations Global Compact (UNGC), identifies types of actions related to HRM practices through the lens of decent work. Those actions are framed in a typology that characterizes different ways of meeting the values behind the UNGC.

The fourth paper frames HRM and employment relationships in the wider society and proposes several statements and guidelines for research and practice based on literature reviews. Those statements and guidelines try to prevent or fix the low quality of employment relationships, making it possible to design interventions within the scope of HRM beyond its internal organizational impacts.

Finally, we will present a general framework of understanding, joining together the several contributions of the individual papers.

It is increasingly essential to include universal human values in the policy and practice of HRM since every agent, both collective and individual, has a role in redesigning it. Responding to emergencies requires all social agents to play their role in that endeavour. Some ideas come from practice, and others from theory and previous research. We include here those ideas, statements, and guidelines in a general framework of understanding. That framework is helpful for new research and practitioners to guide that kind of innovation in HRM.

Overall conclusions

The relevance of approaching HRM beyond the internal organizational impacts is a response to the call that comes from current times' social, economic, and environmental emergencies. The universal values expressed in Decent Work's concept, and in the UNGC, is a good choice confirmed here. An

essential endeavour to pursue is to innovate by joining together workers' well-being, decent work, and effective human resources management.

#### Relevance to the Congress theme

The innovative approaches in HRM and decent work presented in this Symposium meet the challenging, demanding and changing times we live in, particularly in the labour context.

#### Research/Practical Implications

The approaches, frameworks and perspectives presented in the Symposium suit well the required standards to guide HRM practitioners in their innovations, and researchers in developing new measures and further research approaches. The inclusion of guiding values, decent work, and the consideration of societal impacts of HRM policies and practices are remarkable.

*Keywords: Values-based Human Resources Management, Decent work, Employment relationships*

## Paper 1

### **The work-life-flow of Spanish and Portuguese employees: Preferences, sleep, recovery, and influencing factors**

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Research goals and why the work was worth doing:

The main research goal was to obtain and to cross-culturally compare empirical knowledge about the relationship between various personal and work-related demands/resources and psychophysiological recovery in Spain and Portugal.

Increased remote work and new (inter-)national regulations during the ongoing COVID-19 pandemic show the growing importance of the work-nonwork interface, work-life flow (WLF), and its relation to wellbeing. The forced integration of the work and nonwork areas means increasingly blurred boundaries between both areas. This calls for a more holistic view of employee well-being across the entire work-life system, including work, nonwork, recovery and sleep. As for the nonwork area and the work-nonwork interface (WNWI) as the linking pin between the two broad domains, more research is needed to uncover underlying mechanisms. Specifically, more empirical research is needed for WNWI-preferences, emotional experiences, and how they relate to crucial recovery experiences, e.g., psychological detachment and sleep.

Theoretical background:

The concept of WLF means a re-conceptualization effort of the rather traditional concept of work-life balance. A positive psychology approach that does not neglect potential incompatibility issues but also focuses on enriching resource-based processes seems needed. WLF integrates the elements of flow, boundary, and resource-demands based theories (Czakert et al., 2022).

The WNWI can be referred to as 'the interaction of employee work experiences and [nonwork] lives' (Allen, 2012, p. 1163), where spillover effects can happen in various forms. In other words, behaviours and affects from the work domain could easily transmit to the life domain and vice versa. For example, work-related stressors could affect more easily important recovery experiences and the whole process across the WNWI and well-being, and vice versa.

Following boundary theory, people vary in preferences for segmenting or integrating aspects of work and home (Ashforth et al., 2000). Yet, less is known about how distributed this variation actually is or if a majority of people prefer segmentation or integration rather in general.

Although with the recent advent of emotion research, recovery research and research of the WNWI, the nonwork domain was also integrated into employee wellbeing research, more research needs to be done cross-culturally to understand related influencing factors at organizational and personal levels.

#### Design/Methodology/Approach/Intervention :

The cross-sectional online survey named "Study on Work-Life-Flow" including a multi-scale battery of established scales, was distributed via snowballing sampling in Portugal ( n = 590) and Spain ( n = 1536) in 2022. The study is part of the Erasmus+-funded Strategic Partnership Project "Excellence based profiling to identify and apply tools and trainings for a better and sustainable Work-Life-Flow" (Project Number: 2020-1-ES01-KA203-083282). The project has been approved by the Institutional Review Board (IRB00003099) and the IRB of the University of Coimbra, "Ethics and Deontology Committee of Research in Psychology" (CEDI/FPCEUC: 53-7-21-08-2021).

#### Results obtained:

The big majority of our two samples preferred to separate work from nonwork and vice versa and can be categorized as segmenters (Spain = 61.9%; Portugal = 63.8%). In contrast, only few participants can be categorized as integrators (Spain = 9%; Portugal = 8.1%) which prefer to combine roles in both domains.

Perceived sleep quality, psychological detachment, and frequency of related experienced emotions such as feelings of exhaustion, recovery, and burnout all correlated significantly with perceived organizational culture, perceived leadership, and perceived emotion regulation and optimism. Correlation coefficients were similar for Spain and Portugal.

#### Limitations:

1) The cross-sectional design precludes causal inferences. Future research should use intensive longitudinal data to depict real-world phenomena. 2) We relied on self-perception measures only, which are subject to common method bias and do not measure organizational behaviour itself. Future studies should apply a multi-method design, including observer ratings for work conditions or objective measures such as email traffic outside working hours.

#### Research/Practical Implications:

Theoretically, we propose WLF as an integrated concept across the WNW and highlight the importance of recovery and emotions for employee wellbeing, especially in hyperconnected work-life systems. Practically, this implies to reflect on mental health policies and interventions regarding their impact on nonwork-based recovery.

#### Relevance to the Congress Theme:

The future is now. Contribution . Informing Human Resources for training and organizational development.

#### Relevant UN SDGs:

UN SDGs 3 and 8 reflect the interface, growing relevance and attention to employee wellbeing.

*Keywords: work-life-flow, cross cultural, work-related demands and resources*

## Paper 2

### Values-based interventions: Designing and undertaking interventions in turbulent times

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#### Research goals:

Organizations worldwide entered an emergency model during the multi-emergence times, thoroughly transforming the labour market. This study proposes a framework to design and evaluate interventions to improve the real and effective translation of values into practice.

#### Theoretical background:

The COVID-19 pandemic changed the nature of the world of work and consequently has unhinged the workers' lives across the globe. From the perspective of people at work, this ongoing pandemic has posed unprecedented challenges to organisations. Other emergencies have arisen, such as climate and environmental extreme changes, social tension and conflict escalating and economic poverty of so many people. In seeking solutions, values can offer a stable compass that helps people in general and decision-makers, in particular, to deal with overwhelming times.

The concept of decent work (DW) is a values-oriented concept that expresses this concern based on four fundamental values: freedom, equity, security and human dignity. Thus, DW offers, in the field of work, organizational and personnel psychology, an approach that contributes to overcoming the overwhelming demands of the current labour field.

#### Design/Methodology /Approach/Intervention:

By reviewing the existing literature on WOPP interventions, we propose a framework to design and guide values-based interventions suitable to deal with the current turbulent times.

#### Results:

A framework is presented suitable to guide values-based WOPP interventions design and implement, monitor and evaluate such interventions.

#### Limitations:

The intention of offering a transcultural framework was not tested yet, and some cultural specificities can hamper its applicability worldwide.

#### Research/Practical Implications:

Offering a framework for values-based interventions, we stimulate research and practice. Practitioners can apply the framework to their professional practice, Researchers can evaluate values-based interventions, and cross-cultural comparisons can be undertaken as much as the framework was applied worldwide.

#### Originality/Value:

To our knowledge, no prior study proposed a values-based framework for WOPP interventions. Such a framework is worth to be adopted to innovate work-related conditions, contents and contexts.

Relevance to the Congress Theme:

It is relevant to make available useful conceptual tools that can be applied to innovate in work-related interventions.

Relevant UN SDGs:

The United Nations Sustainable Development Goal number 8 expresses decent work, and economic growth is at the core of the framework presented in this presentation.

*Keywords: Values-based intervention, Organizational-change management, Framework*

### Paper 3

#### **The integration of Decent Work concept in HRM: a documentary analysis of United Nations Global Compact annual reports of Portuguese organizations**

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#### Theoretical background:

We assisted in the last two decades to the emergence of Corporate Social Responsibility initiatives by organizations. Business organizations want to communicate their active role in pursuing societal overall goals and contributing to sustainable economic growth. How are they incorporating these concerns in actions targeted at their employees? How can Human Resource Management (HRM) research orient practitioners' work in designing and implementing HR practices and systems that incorporate these goals? In the field of work, organizational and personnel psychology, one might find various studies covering the relationship of HRM with organizational performance, productivity, employee commitment and work motivation, as well as the role played by ethical leaders and the integration of human rights concerns in HRM. Corporate sustainable initiatives such as the United Nations Global Compact (UNGC) can guide and support organizations to consider the long-term impacts of their activities by focusing on socially responsible actions. Since 2016, in addition to the protection of labour and human rights universal principles, the UNGC also asks their members to guide their actions in alignment with SDGs, being the eighth Goal, "Decent Work and Economic Growth".

As a comprehensive concept, decent work (DW) has been studied by various scholars in the area of work, organizational and personnel psychology. The DW integrates the four strategic objectives of the International Labour Organization (ILO): the promotion of rights at work; employment; social protection; and social dialogue, providing a worldwide common language to integrate the discussion about labour rights and conditions.

#### Research goals:

The main objective of our study was to analyse, describe, and characterize to what extent HRM of the organizations enrolled in UNGC incorporates the concept of DW, leading to a typology of progressive maturity.

#### Design/Methodology /Approach/Intervention:

Through a documentary analysis of 40 annual reports of Portuguese organizations enrolled in the UNGC, we characterized their HRM practices considering the concept of Decent Work. Qualitative content analysis and cluster analysis based on coding similarity were performed using Nvivo.

#### Results:

The adhesion of companies to UNGC expresses an intention however, the translation of the intention into HRM practices is a step-by-step process. One output of this research is the design of a maturity typology of adhesion to the UNGC. Furthermore, we present several conceptual

propositions focused on the role played by HRM policy and practices and DW in the company and society.

Research/Practical Implications:

The UNGC, the world's largest corporate sustainability initiative, aims to improve responsible practices in organizations in alignment with labour and human rights principles, promoting decent work for all. The field of HRM in the last decades has addressed not only its impacts on organizational outcomes but also ethical issues and other fundamental values at work, as it is underlined in the DW concept. This research reflects HRM's concerns with employees' well-being and conditions. It may support the design of future research and interventions leading to more responsible and ethical HRM practices.

Limitations:

As a study based on a documentary qualitative analysis, further empirical investigation, namely using a multi-source assessment of DW dimensions and HRM practices, can enlarge this field of knowledge.

Originality/Value:

To our knowledge, this is the first study discussing the relationships between HRM and the Decent Work concept in the context of UNGC.

Relevance to the Congress Theme:

The knowledge of the practices adopted by organizations in attempting to pursue the values expressed in the UNGC can be helpful in innovative initiatives to be undertaken by corporations in the future. Furthermore, the maturity typology can be an excellent guiding compass that helps organizations in those interventions.

Relevant UN SDGs:

The United Nations Sustainable Development Goal number 8 combines decent work and economic growth, being the most related to the paper's content.

*Keywords: Decent Work, Human Resources practices, United Nations Global Compact*

## Paper 4

### Work and organizational psychology and changes in the employment relationship

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Research goals and why the work was worth doing:

Some main interactions between psychological science and business practice occur within human resource management (HRM) systems. As the objectives, orientations and methods of HRM systems change, so must change the objectives, orientations and methods of work and organizational psychologists if they are to continue giving relevant input into these organizational processes.

Because some of these changes may negatively affect the quality of the employment relationship and the psychological well-being of employees, the question arises of how work and organizational psychologists can deal with these changes. This research aims to clarify HRM practices that can take into account and obviate the negative effects of these changes in the employment relationship.

Theoretical background

The financial crisis of 2008 brought to the fore the negative consequences of corporate-level decisions on the quality of life in general, and at work, of ordinary citizens. The impacts of this crisis on the employment relationship were profound, persisting even as national economies recover: unemployment and its consequences on the intrinsic value of human resources; the incidence of precarious work and its consequences for work motivation and engagement; and the financialization of the employment relationship predated but were heightened in the financial crisis aftermath. The economic and social crisis, as well as the forced experiments in remote and other alternative forms of work resulting from the COVID-19 pandemic, will likely maintain and reinforce these trends towards a merely transactional and very asymmetric employment relationship.

These corporate strategies and the work experiences they induce have consequences, not always positive, in how people lead their lives. It is relevant, therefore, to examine the consequences of these kinds of jobs on the psychological well-being of the workers involved. Because such consequences, due to the nature of the changes under examination, affect the relationship of individuals to their livelihoods, it makes sense that this examination includes how the societies where these corporate practices take place are affected. The problem, however, is that HRM theories and models are notoriously blind in what concerns the lives and well-being of workers beyond the duration of their involvement in some corporate endeavour.

Design

The results of systematic literature reviews about different areas identified as relevant in this exploration will be presented. The areas explored include (i) the psychological effects of precarious work and unemployment experiences; (ii) the effects of these experiences on citizenship behaviours; (iii) how management and HRM practices may exacerbate, compensate for or attenuate such effects and; (iv) the conditions needed for the implementation of compensating practices.

Results obtained or expected

The complete set of reviews will be finished by December 2022. Work so far suggests abundant literature on the negative effects of the ongoing changes in the employment relationship and a paucity of research on the extra-organizational effects of intra-organizational practices.

### Limitations

As a review of the literature, the usefulness of this research is limited by the scarcity of research on the effects of intra-organizational practices on extra-organizational behaviours.

### Research/Practical Implications

Identifying practices that modify the effects of changes in the employment relationship is a meaningful contribution to psychological practice in and around organizations. The research gaps identified, particularly how specific interventions may counteract the deleterious effects of changed employment relationships, may be a fruitful area of research.

### Originality/Value

The psychological literature on HRM is typically limited because HRM models restrict themselves to the intra-organizational effects of HRM options. A better understanding of management and human resource management options and an awareness of how deep and wide this gap is, is a useful contribution to work and organizational psychology. Widening the scope of the problem to extra-organizational issues may contribute to understanding under what conditions HRM may evolve into a value-based management practice.

### Relevance to the Congress Theme:

The review presented in this paper adds a systematization of knowledge on innovation at work, HRM, and managing turbulent contexts.

### Relevant UN SDGs:

The present paper focuses on the United Nations Sustainable Development Goal number 8.

*Keywords: Human resource practices, Work and organizational psychology, Citizenship*

## Symposium S118

### Workplace bullying: From risk-factor identification to research-based interventions

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science\_practice

Workplace bullying is a well-known and clearly defined phenomenon (e.g., D’Cruz & Noronha, 2021; Einarsen et al., 2011), which involves negative behaviour (harassing, offending, socially excluding) occurring regularly and over a period of time. The phenomenon has been related to a variety of negative outcomes both on individual (e.g., Conway et al., 2021; Hansen et al., 2021) and organizational (e.g., Hogh et al., 2021; Salin & Hoel, 2020) levels. Although workplace bullying has been the subject of research for almost four decades, there is a continuous need for evidence-based interventions. By knowing the extent to which organizational and individual factors contribute to bullying escalation, it would be easier to create effective intervention programmes (D’Cruz et al., 2021). In this symposium, we put together five empirical studies to examine the predictors underlying the effective prevention of workplace bullying. The symposium is within the scope of the EAWOP theme as it helps to cope with stress and dysfunction (Topic 15).

In the first study, researchers focus on organizational features being possibly responsible for increased workplace bullying during pandemics. They hypothesized that 1) professional isolation was related to exposure to workplace bullying, 2) isolation via workplace bullying impaired psychological well-being, and 3) psychosocial safety climate moderated this relationship. The results of an online survey (N=1039) revealed that the positive relationship between professional isolation and workplace bullying was indeed strengthened when psychosocial safety climate was low, and vice versa. Moreover, it was found that the negative impact of workplace bullying on well-being was significant only when psychosocial safety climate was low. The researchers conclude that, to develop effective anti-bullying interventions and to promote employees’ well-being, organizations need to endorse psychosocial safety climates.

The second study by researchers aims at examining the relationship between both the work environment and vulnerability hypotheses. In a full two-wave panel study (N=253), they have shown that generally the vulnerability hypothesis was not confirmed. Contrarily, the shifts in personality traits (increase in neuroticism and decrease in agreeableness, in extraversion, and in openness to experience) resulted from exposure to workplace bullying. In line with the work environment hypothesis poor workplace conditions predicted exposure to bullying. The study underscores that, to create effective anti-bullying programmes, it is reasonable to focus on limiting organizational risk factors which trigger bullying.

The third study pays attention to the importance of gathering evidence on anti-bullying intervention effectiveness. The researchers conducted a series of intervention evaluation case studies using a mixed-methods approach. A qualitative review was carried out to examine enablers and barriers to effective interventions. The findings highlight contextual and process factors that are significant to intervention design. The researchers’ findings provide crucial information on the challenges of evaluating workplace bullying intervention programmes.

The next group of researchers concentrates on the role of bystanders in a preventive intervention. Researchers conducted an intervention project using a full RCT design (N=1500). The findings suggest that intervention was positively evaluated by the participants, yet somewhat less so by bullying victims. However, those bystanders with experience of intervening in bullying situations were even more positive than others.

The final paper provides a good illustration of the urge to focus on organizational interventions, thereby neatly and coherently bringing together all the previous papers which make up this symposium, researchers conducted a systematic review and meta-analysis of 10 studies (N=2014) on the effectiveness of workplace bullying interventions. The results indicate that, although all the interventions studied in the inquiries constituting the meta-analysis were targeting the employee, significant effects following training related to decreasing negative organizational outcomes, instead of individual outcomes. Therefore, it is crucial to create contextual-oriented workplace bullying interventions.

Taken together, all the papers included in the symposium focus on broadening knowledge on improving anti-bullying strategies to prevent organizational bullying risk factors. Importantly, the conclusion from all the five research studies, using diverse methodologies (cross-sectional and longitudinal study, qualitative case studies and meta-analysis), is straightforward: to prepare effective anti-bullying programmes, organizations need to concentrate on eliminating harmful contextual, organizational factors. The five studies included in the symposium will help both researchers and practitioners understand and manage workplace bullying more effectively.

*Keywords: workplace bullying, intervention, risk factors*

## Paper 1

### **Psychosocial Safety Climate, Prevalence of Workplace bullying, Isolation and Well-being During COVID-19 Pandemic**

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Research goals and theoretical background: Workplace bullying is a longstanding organizational issue that needs the commitment and involvement of management in protecting workers from health impairment by bullying exposure (Tuckey et al., 2022). Workplace bullying has risen during the pandemic due to role conflicts, limited access to resources, the lack of face-to-face interactions, blurring workplace boundaries, and ambiguity of instructions and supervision (Calderone & Karunakar, 2020; York, 2022). We contend that this situation could be more prevalent in workers who have a state of professional isolation during the lockdowns. One possibility is that these workers could not effectively manage interpersonal relationships and face-to-face interactions with others due to social distancing and lockdown directives (van Zoonen & Sivunen, 2022), similar to the work experience of remote workers (Golden et al., 2008). Another reason could be the rapid shift to flexible practices in organizations, leading to increased pressures, miscommunication, and ambiguity of job tasks and demands (Koch & Schermuly, 2021). Such uncertain changes in work are critical factors that encourage workplace bullying incidents (Nielsen & Einarsen, 2018). However, the existing literature has not shown adequate evidence of these assumptions, although the report from the Workplace Bullying Institute (2021) has flagged an increase in working bullying during the COVID-19 pandemic.

It is pertinent to consider the drivers of workplace bullying and anti-bullying strategies to prevent this psychosocial hazard within a context of professional isolation. Specifically, we will explore whether a professional isolation state is associated with exposure to workplace bullying. Next, we will provide additional evidence on how professional isolation via workplace bullying exposure impairs the psychological well-being (PWB) of employees. Lastly, what is more, we will use the theory of psychosocial safety climate (PSC, Dollard et al., 2017) allows us to understand the moderation effects of PSC in attenuating the adverse impacts of professional isolation and workplace bullying on PWB of employees who may have a state of professional isolation. In doing so, we contribute to the existing knowledge of anti-bullying strategies and PSC by giving empirical evidence of how organizations can protect PWB of employees who may experience mistreatment from others during the global health crisis.

Methods: We collected data during the first wave of Australia's COVID-19 pandemic lockdown in 2020 via the assistance of an online research panel company. An online survey was distributed to Australian white-collar workers from New South Wales. Of the respondents, 1,039 respondents identified themselves as being flexible workers who engaged in some form of working from home during this period. Approximately 21% (N=279) did not work in a flexible capacity. There was an equal number of male-female respondents.

This study adopted previously validated scales. We used the 12-item PSC scale from Hall et al. (2010). Workplace bullying exposure was measured with the short-form Negative Acts Questionnaire (NAQ) by Notelaers et al. (2019). Professional isolation was measured with the scale from Golden et al. (2008). PWB was operationalized with a four-item scale from Brunetto et al. (2011).

Results: Data analysis was conducted using model 59 of Hayes (2016) Process Macro within IBM SPSS v27. We found a significant moderation effect of PSC on the relationship between professional isolation and workplace bullying ( $\beta=.04$ ,  $p<.05$ ), such that the positive relationship between professional isolation and workplace bullying is strengthened when PSC is low, and vice versa. We found that the negative impact of workplace bullying on PWB is significant when PSC is low ( $\beta=-.16$ ,  $p<.001$ ), but not at high PSC.

Discussion and Implications: We argue that a hybrid work design could be the new normal of working lives. Consistent with PSC theory (Dollard et al., 2017), we found support for PSC acting as a buffer of psychosocial risks on PWB in the new normal era. Our study highlights the critical of PSC as the effective anti-bullying strategy to protect PWB of employees. Therefore, organizations need to develop and enact PSC to thwart workplace bullying and enhance PWB of employees. Future studies could validate the findings using a longitudinal design and multiple sources of respondents.

*Keywords: workplace bullying, intervention, organisational climate*

## Paper 2

### **Vulnerability versus work environment in workplace bullying: Personality traits and organizational features as predictors or outcomes of being exposed**

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**Research goals and why the work was worth doing:** The present research aims to examine the relation between both work environment and vulnerability hypotheses.

**Theoretical background:** Research on workplace bullying, defined as the prolonged and systematic exposure to negative acts against which the targeted individuals cannot defend themselves (D’Cruz & Noronha, 2021; Einarsen et al., 2020; Yamada et al., 2018), has focused on its consequences for individual health and well-being (Mikkelsen et al., 2020; Conway et al., 2021; Hansen et al., 2021; van Heugten et al., 2021) and its effects on organizational productivity and efficiency (Hogh et al., 2021; Salin & Hoel, 2020). The research on the antecedents of workplace bullying has mostly been focused on investigating the impact of organizational factors (the work environment hypothesis, Hauge et al., 2011; Leymann, 1996) and the personalities of bullying targets (the vulnerability hypothesis, Bowling & Beehr, 2006). Despite the large body of literature on both the work environment and vulnerability hypotheses, there remain important questions that still lack empirical verification (Nielsen & Einarsen, 2018). Importantly, the majority of studies have investigated bullying exclusively within either the work environment paradigm or the vulnerability paradigm. It is essential to include both these two complementary explanations in a single model to test which of the two hypotheses (the work environment hypothesis or the vulnerability hypothesis) better explains exposure to workplace bullying. The present study examines therefore both targeted employees’ personality traits and organizational factors (e.g., role conflict) within a single longitudinal study.

**Design/Methodology/Approach/Intervention:** A complete two-wave panel study was conducted, with a time lag of approximately six months between each wave. Data were collected among 253 employees from several private and public corporations (33.1%), including working students.

**Results:** Generally, the vulnerability hypothesis was not confirmed, with one exception: high extraversion predicted exposure to bullying. The cross-lagged structural path analyses revealed that exposure to bullying led to increase in neuroticism and decrease in agreeableness, in extraversion and in openness to experience. In line with the work environment hypothesis, the reversed causation model was confirmed, suggesting that bad workplace conditions predict exposure to bullying.

**Limitations:** The study sample was relatively small. Future research should focus on replicating the findings among larger and more representative samples.

**Conclusions – research and or practical implications/Originality/Value:** The present research is a test of two complementary hypotheses, the work environment hypothesis and the vulnerability hypothesis. The findings indicate that a drop in extraversion, in openness, in agreeableness and a rise in neuroticism result from the trauma of being bullied. Taking the antecedents and outcomes of

workplace bullying into consideration, we may think of a vicious circle, where affective and behavioural consequences influence back the affective event and its antecedents.

Relevance to the Congress Theme: Our topic is relevant to theme No4: Diversity and Inclusion and theme No14: Stress and Dysfunctions

Relevant UN SDGs: Our research concentrates on such UN Sustainable Development Goals as Good health and well-being at workplace and Reduced inequalities at workplace.

*Keywords: workplace bullying, vulnerability hypothesis, work environment hypothesis*

### Paper 3

#### **A critical reflection on approaches to evaluating workplace bullying interventions: lessons learned from multiple case studies**

Charlotte Emmerson, Madeline Carter, Neill J. Thompson | Northumbria University

Research goals and why the work was worth doing: Workplace bullying is recognised as an issue across most organisations, resulting in widespread consequences for individual employees, team performance and the overall functioning of the organisation. A repeated call within the literature is the need to develop evidence-based interventions, however, there remains a lack of published research on interventions.

This paper provides reflexive insights from the authors following their experiences of undertaking several projects that incorporated an evaluation of some form of workplace bullying intervention. The study aims to identify enablers and barriers to the success of workplace bullying interventions and associated evaluations and to present lessons learned.

Theoretical background: Workplace bullying is a persistent problem in organisations (Hoel & Cooper, 2000; Nielsen & Einarsen, 2018). The economic cost to organisations can be significant when taking into account reduced performance, absence and turnover (Giga, Hoel & Lewis, 2008; Kline & Lewis, 2019). The damage to individuals, teams and organisations is widespread resulting in detrimental effects to individual health and performance (Bourdrias et al., 2020; Nielsen & Einarsen, 2012).

A diverse array of workplace bullying interventions are used in practice (Caponecchia et al., 2020) but there remains a disconnect between academia and practice with a lack of robust evidence on interventions (Branch et al., 2021). Research has highlighted the need for evidence-based interventions and stronger theoretical foundations to better inform prospective change programmes (Hodgins et al., 2014).

Systematic reviews carried out on the current state of evidence have identified only a few studies that met high standards of rigour in design (Escartin, 2017; Gillen et al., 2017; Illing et al., 2013).

Overall, there is a lack of documented evidence on interventions (Escartin, 2016), resulting in calls for increased understanding of the practice and efficacy of interventions in greater granularity (Branch et al., 2019; Escartin, 2016).

This paper will illustrate the challenges of conducting workplace bullying intervention evaluation through a review of case studies from applied examples. Building on the work of Mikkelsen et al. (2011), the results will draw upon contextual and process factors that are critical to intervention design (Nielsen & Miraglia, 2017; Pawson et al., 2005). Enablers and barriers to success and lessons learned from these author experiences will be explored.

Methodology: A series of intervention evaluation case studies have been carried out by the authors using mixed-methods approaches. Interventions were designed as training approaches to tackle workplace bullying and incivility. A realistic review was also carried out to examine the existing evidence base. Qualitative reflections from the authors, stakeholders and participants have been collated and reviewed across the cases in order to understand contextual and process issues. These factors can act as potential barriers and enablers in the implementation of interventions and the undertaking of evaluations that when better understood can provide important learning for future study design.

**Results obtained:** The results describe the multi-level challenges of evaluating workplace bullying interventions and focus on defining outcomes, evaluation design, stakeholder relationships, data management, process factors and the wider implications of contextual factors. Lessons learned from these themes will be reported with recommendations for improving the design of interventions and evaluation.

**Limitations:** Data is drawn from the authors' own reflections of involvement in a range of intervention studies, although supported by evidence from participants and stakeholders.

**Conclusions:** This paper aims to develop a greater understanding of the challenges that researchers face when attempting to evaluate real-world organisational interventions such as those designed to address workplace bullying. This paper will also consider the practitioner perspective, to inform future interventions.

There is a lack of research exploring the contextual and process challenges of evaluating workplace bullying interventions. Furthermore, the call for evidence-based interventions often fails to acknowledge the complexity and challenge of undertaking intervention evaluation research. This paper will help to guide both the design and development of evaluation frameworks and help to inform researchers. It will also aid practitioners involved in intervention delivery to consider how they can build effective evaluation into their design.

**Relevance to UN SDGs:** This paper is directly relevant to the 'UN Strategic Development Goal 8: Decent Work and Economic Growth' in seeking to promote safe and secure working environments. It also relates to the conference theme facet of the 'future is now'. As workplace bullying is widely acknowledged as an essential change needed at work, we discuss issues on how to deliver on such a change.

**Intended audience:** Both academic and practitioner

**Keywords:** *workplace bullying, intervention, evaluation*

## Paper 4

### **Workplace intervention against workplace bullying and harassment: A bystander approach**

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**Research goals:** Workplace bullying (WB) is an important and prevalent risk factor for health impairment, reduced workability and lowered efficiency among targets and observers. Development and tests of effective organizational intervention strategies is thus highly important. This abstract presents an overview of a bystander intervention and the participants satisfaction evaluation of the intervention. The intervention is a cluster randomized controlled trial evaluating the effectiveness of an organization-wide intervention on preventing WB that focus on promoting active and constructive bystander involvement. The main goal is to develop an easy-to-use organizational intervention based on theory and research on bystanders' role in bullying situations.

**Theoretical background:** The intervention is based on existing literature and empirical research on bystander behavior (e.g. Paull, etal, 2012; Ng, etal, 2019). The main theoretical assumption is that the actions of bystanders in situations where coworkers are exposed to acts of WB, can either escalate or reduce WB. Hence, stimulating early, active, and constructive involvement by bystanders should prevent further escalation and possibly create an anti-bullying climate.

Thus, the theoretical hypothesis of the intervention is that

- 1) if bystanders intervene constructively in bullying situation, such intervening will then potentially eliminate further escalation of bullying situations, and
- 2) if bystanders start intervening constructively in bullying situations, then such intervening will have a preventive effect on counterproductive behavior, i.e. bullying behavior in the organization.

Thus, developing a psychosocial climate in the organization where the norms welcome positive bystander behavior, and at the same time enhance the employees' perceived bystander behavior control, is crucial in combating WB in organizations.

**Method:** Using a full RCT design, this intervention project empirically tests the outcomes of an intervention program targeting bullying as the main distal outcomes and perceived behavioral control and helping behavior among bystanders as the main proximal outcome. A one-year cluster randomized controlled design is utilized, in which controls also receive the intervention. About 1500 workers from two different locations of an industrial company are randomized into one intervention group and two control groups with at least 400 workers in each group. A survey based on the theory of planned behavior (Ajzen, 1991) are conducted electronically totally three times. Thus, the data collections take place at baseline, completion of the intervention and at four months follow-up. Also,

a survey evaluating the participants satisfaction with the intervention are sent out immediately after their participation in the group sessions (i.e. the intervention).

The intervention is based on an existing workplace intervention developed by researchers and practitioners in Denmark (Mikkelsen & Hogh, 2019). The present intervention is customized to a Norwegian industrial setting by the authors, representing both researchers and practitioners. The intervention program contains a planning meeting, and a three-hour group session.

Results: The preliminary results show that the intervention was positively evaluated by the participants, yet somewhat less so by bullying victims. However, those bystanders with experience of intervening in bullying situations were even more positive than others.

Limitations: The survey instruments are all self-report measures, and the project is thus subject to limitations specific to self-report instruments such as response-set tendencies. The survey data are also measured from the same source, yet at different timepoints. As such, common method variance may inflate the relations between constructs somewhat (Podsakoff, et al. 2003).

Research: This study primarily aims to develop, implement, and evaluate an intervention based on the abovementioned features with the aim of reducing the prevalence of WB, by focusing on bystanders. The preliminary result of the intervention shows that there are some factors predicting the satisfaction of the intervention; being a bullying victim, and prior experiences as an intervening bystander in bullying situations. Given the scarcity of evidence on effective interventions for preventing and managing workplace bullying, this study is important and timely, and may enhance our knowledge on how organizations may focus their efforts and resources in combating workplace bullying.

Originality: This project address important knowledge gaps in research on workplace interventions against workplace bullying, focusing on the role of bystanders in a preventive intervention. By examining mediating and moderating variables in the relationship between perceived bystander behavior control and outcomes, this project will generate novel knowledge important for extending and developing the theoretical basis of our understanding of bystander behavior.

*Keywords: workplace bullying, intervention, bystanders*

## Paper 5

### Effectiveness of Workplace Harassment Interventions: A Meta-Analysis

Iván Sánchez-Iglesias & Mirko Antino | Universidad Complutense de Madrid; William Fernando Duran, Pontificia Universidad Javeriana; Alfredo Rodríguez-Muñoz, Universidad Complutense de Madrid

**Research goals and why the work was worth doing:** A large literature examines the antecedents and effects of harassment in the workplace. However, research on interventions to prevent or mitigate the effects of bullying is less abundant. We conducted a meta-analysis of studies on the effectiveness of workplace harassment at work.

**Theoretical background:** Despite the crucial role of interventions in preventing harassment at work, this field has many limitations. For example, the interventions delivered in workplaces often vary in terms of content, dose, and method used. Similarly, the conceptualization of harassment changes between interventions (e.g., workplace bullying, incivility, social exclusion, etc). The result is a heterogeneous number of studies.

**Design/Methodology/Approach/Intervention:** We provide a systematic review (for the period of 1980–2022) of the published and unpublished literature, in ProQuest, Pubmed, Scopus, Cochrane Library, and WHO International Clinical Trials Register. Meta-effect estimates (Hedge's  $g$ ) were computed using data from 10 studies ( $N=2014$ ).

**Results obtained:** All the interventions included in the study were targeting the person (100%), not the environment, with a variety of contents (e.g., cognitive reappraisals, expressive writing, or mindfulness-based intervention). Preliminary results indicate significant effects following training for decreasing negative organizational outcomes ( $p<0.05$ ), but not for individual outcomes.

**Limitations:** The small number of studies included, that some of them did not provide detail about attrition, and that follow-up was not always reported either, may potentially limit the scope of this study.

**Research/Practical Implications:** Based on our study, it is clear more organisational interventions are needed to alleviate this problem. This is particularly important if we take into account that the main antecedents of harassment are contextual, and all interventions are employee oriented.

**Relevance to the Congress Theme:** Our research is in line with the congress delivery line. How do we mitigate harassment? Is it effective?

**Relevant UN SDGs:** This research relates to the UN Sustainable Development Goal of decent work and economic growth.

**Keywords:** workplace bullying, intervention, meta-analysis

## Posters

### Poster P001

#### **Fair Judgement and CV Evaluations: The Impact of a Nudging System on Cognitive Biases amongst Recruiters**

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science&practice

Despite being an indispensable tool in hiring, the process of CV evaluation appears to be highly biased. This research had two main goals – analysing the extent to which recruiters engage in cognitive bias when evaluating CVs and whether nudging could improve the judgement reliability of recruiters.

The literature on CV evaluation points towards two core issues: firstly, the CV as a selection tool does not provide the necessary insights into predicting the future performance of the candidate, and secondly, recruiters are highly biased when assessing resumes. The hiring recommendation is often subject to error because of biases like Anchorism which does not allow the recruiter to take a fair and reasonable assessment of the applicants' qualities which are relevant to the job. Looking at the large body of empirical evidence, it appears that nudges mainly work in situations where the decision-maker has limited access to information or short attention spans (Löfgren and Nordblom, 2020). Nudges are therefore techniques that aim at using heuristics from System 1 Thinking (Tversky and Kahneman, 1974; Kahneman, 2003) to alter the decisions in a subtle way, leading to a more rational reconsideration of choice.

The experimental design implemented for this study collected data from experienced professionals in the field of HR and Recruitment. After splitting the participants into a control and an experimental group, the efficacy of the nudge was tested. Participants of the experimental group were asked to review CVs with the help of our nudging instrument, which was essentially a 'Candidate Checklist' that gave fair weighting to a wide set of elements deemed by job experts as important for the job.

Overall, the results suggest that recruiters in both research groups are likely to engage in cognitive bias, however, this is seemingly less, although not excessively, amongst participants exposed to the nudge. Furthermore, this study suggests that the nudge can improve the perceived suitability of applicants by cueing recruiters to consider more CV deducible qualities. Keeping all aspects constant, results strongly suggest that a nudge can enhance the selection process and quality decision of the recruiter.

Given the short time frame of this study, the window for participation was limited and recruitment of participants was difficult. Moreover, this experiment was conducted under non-laboratory conditions – the materials were sent to participants via email and there was no control over whether the participants of the experimental group used the checklist as instructed or not.

The nudge seems to interfere in the CV evaluation process by diverting the focus of the recruiter towards job-relevant information on the resume, resulting in a more rational judgement. The concept of nudging in CV evaluation also contributes to a structured procedure of CV review.

The practical implications of this study are relevant for all hiring professionals since the nudge can be introduced as a minor intervention in their daily routine.

This research incorporates several topics in one. Firstly, the impact of new technologies on the recruitment process – to what extent can automated systems reduce error and decision risk as well as improve decision-making in hiring? Secondly, the research contributes to a more uniform and structured selection process, creating a fairer environment for applicants to be judged, based on their qualifications rather than non-job-related attributes.

*Keywords: Decision-making and control, Person-job fit, Candidate Perceptions*

## Poster P002

### **EMPLOYABILITY, CAREER ADAPTABILITY AND PSYCHOLOGICAL CAPITAL AMONGST NON-DEGREEED YOUTH AT AN EDUCATIONAL INSTITUTION**

Rudolf M Oosthuizen, Jean Van Vuuren & Linda Steyn | University of South Africa

science

**Research goals:** The study investigated the relationship between employability, career adaptability and psychological capital amongst non-degreeed youth at an educational institution.

**Theoretical background:** The world of work is evolving and dominated by the demands of the fourth industrial revolution (4IR) and ever-faster technological developments. Employability, rather than just finding employment, is required today. Consequently, employees, but increasingly so, the youth, needs to adapt and adjust their skills, knowledge, and behaviour to maintain employability in our contemporary work context. To remain employable, people must adopt a protean career by adapting to their circumstances and updating their skills and knowledge to stay relevant in the 4IR work environment and contribute to their employer's success.

**Research Design, Approach and Method:** This study used a cross-sectional quantitative, non-experimental research approach to evaluate the interrelatedness of variables. A biographical questionnaire, Employability Attributes Scale (EAS), Career Adapt-Abilities Scale (CAAS) and Psychological Capital Questionnaire (PCQ-24) were utilised to collect data. A non-probability approach was followed to select the participants, using a convenience sampling method. There were 263 participants in the sample group. Descriptive statistics and correlation statistics were used to analyse the data.

**Results:** The results demonstrated a strong positive significant relationship between employability and career adaptability, employability and psychological capital and career adaptability and psychological capital. The relationship between employability and career adaptability was more substantial than the relationship between employability and psychological capital. There was also statistical evidence of significant statistical differences at a demographic level.

**Limitations:** A longitudinal study is recommended to investigate the changes in perceived employability, career adaptability and psychological capital over time given the influence of technological advancement and what the possible causal links may be.

**Research/Practical Implications:** The contemporary work environment is volatile due to the pressures of the 4IR. Therefore, there is an ever-increasing need to equip youths and new entry workers with the attributes that ensure employability and the know-how to adjust their careers according to the demands of the work environment. There is also a need to aid them in strengthening their psycho-social career resources to help them cope with changes in their career and to help them maintain employability.

**Relevance to the Congress Theme:** The results of the study suggest that developing youth in educational institution's employability attributes as well as their career adaptability factors, together with psychological support factors such as resilience and efficacy, may strengthen their self-perceived employability and how well they adjust their careers to a changing 4IR world of work.

**Relevant UN SDGs:** The research is meaningful in its value as it contributes to the Sustainable Development Goal of Decent work and economic growth regarding how employability, career adaptability and psychological capital relate to each other. It is also a study focusing on a South

African view on this combination of variables and how professionals can use it to the advantage of South African youth.

*Keywords: career adaptability, employability, psychological capital, psycho-social career resources, fourth industrial revolution*

## Poster P003

### Empowerment of Women Leaders in the Fourth Industrial Revolution

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science

**Research goals:** The aim of the study is to explore the empowerment of women leaders in the Fourth Industrial Revolution (4IR).

**Theoretical background:** Leaders require a certain set of proficiencies to effectively lead organisations and to be aligned with the 4IR. Research has shown that women leaders recognise the need to be empowered in a rapidly changing technological environment. Compared to previous industrial revolutions, the 4IR is evolving at an exponential rather than a linear pace. It is important to shape the 4IR to ensure that it is empowering and life-centred instead of divisive and dehumanising. This is the work of leadership. To deal with the complex challenges of the 21st century, new ways of knowing and leading will be increasingly important. In the 4IR, leaders will need to be more agile, human-centric and adapted to a highly volatile, uncertain, complex, and ambiguous world. Ultimately, the challenges of the 4IR may empower women leaders to connect more readily with the wisdom of knowledge and facilitate the change and transformation needed to ensure a sustainable future.

**Research Design, Approach and Method:** The critical review of the research literature entailed a broad systematic review of contemporary research on the empowerment of women leaders in the 4IR. A qualitative approach was followed which enabled the author to evaluate documented research on the empowerment of women leaders in the 4IR.

**Results:** Empowered women leaders exhibit high levels of human intelligence, which are made up of the four types of intelligence (strategic, emotional, inspired, and somatic) that determine 4IR-Intelligence. Empowerment of women leaders in a VUCA world are highlighted that help build employees' psychological capital as a reliable source of competitive edge during the 4IR.

**Limitations:** Potential publication bias could be viewed as a limitation of the study.

**Research/Practical Implications:** Future research could focus on the narratives of successful empowered women that navigated this arduous journey in a VUCA world that requires certain mindsets and behaviours from women leaders that are different from those required in the past.

**Relevance to the Congress Theme:** Owing to the ever-changing 4IR world of work and evolving 4IR technologies, a creative approach to leadership is crucial. The study highlights the empowerment of women leaders that embrace 4IR leadership essential for success in this 4IR world. This necessitates the incorporation of the principal concepts of a transformation attitude.

**Relevant UN SDGs:** The research is meaningful in its value as it contributes to the 2030 Agenda for Sustainable Development, with the Sustainable Development Goal of Decent work and economic growth. Women leaders applying 4IR intelligence in their day-to-day operational tasks is a key competence to deliver results and promote advancement in addition to the competence to motivate employees to aspire to the vision and mission of an organisation.

**Keywords:** *Women's empowerment, Leadership, Transformation, Women leaders, Fourth Industrial Revolution*

## Poster P007

### Telework demands/resources and burnout: The mediating role of work-life conflict

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science&practice

**Purpose :** Following the covid-19 pandemic, a considerable proportion of employees continue to work from home, as telework became the norm for many jobs that it was technically feasible (teleworkable jobs). This leads to blurred boundaries between work and personal life. The aim of this research was to explore how specific telework demands and resources relate to the core dimensions of burnout (exhaustion and disengagement), via their association with work-life conflict.

**Theoretical background:** Based on the job demands–resources model, it is argued that telework demands and resources relate positively/negatively to work–life conflict. Moreover, COR theory proposes that work–life conflict may lead to a wide variety of stress reactions (i.e. exhaustion, disengagement), because valued resources are lost in the process of management both work and personal life roles. In line with these assumptions, it is hypothesized that telework demands/resources have an indirect positive/negative relationship with the core dimensions of burnout (exhaustion/disengagement) via their association with work-life conflict.

**Methodology :** One-hundred thirty-one employees of a Greek Independent Administrative Authority participated in the study. Employees, assessed via self-reports telework demands/resources, work life conflict exhaustion and disengagement. Hypotheses were tested by means of path analysis with manifest variables using the AMOS v.26 software package. A model with paths from job demands/resources to work life conflict and to exhaustion/disengagement respectively fit to the data. Moreover, the hypothesized model included paths from work life conflict to exhaustion/disengagement respectively. This model was a fully saturated model and as such had a perfect fit to the data.

**Results :** All examined telework demands (continuous availability/connectivity, boundaryless working hours, intensive use of ICT) and telework resources (flexible working hours, saving time on commuting to work and job autonomy), have been found to significantly associate with work life conflict (Hypothesis 1 & Hypothesis 2). Work life conflict was, in turn, significantly associated with employees' exhaustion and disengagement (Hypothesis 3 & Hypothesis 4). Particularly, work life conflict mediated the relationship between telework demands/resources and exhaustion/disengagement link (Hypothesis 5 & 6).

**Limitations:** The research used data collected from a self-report questionnaire developed for practitioner's research. As such, there is a risk of misunderstanding of questions and subjectivity in the interpretation of the scales. Moreover, this study is based on cross-sectional survey data which inhibits causal inferences of the investigated relationships.

**Research/Practical Implications .** For a successfully telework related wellbeing, organizations need to focus on decreasing high telework demands (e.g., boundaryless working hours, intensive use of ICT) and increasing telework resources (e.g., flexible working hours, job autonomy). Organizations should strive to educate their managers to support work-life balance and offer a variety of programs that meet the exact needs of their employees, maintaining with this way, good levels of work-life balance, which consequently leads to low levels of exhaustion and disengagement.

Originality/Value. Results shed light on the psychological processes that may underlie the association between telework demands/resources and exhaustion/disengagement link.

*Keywords: burnout, telework demands/resources, work life conflict*

## Poster P008

### Relationship between work–family conflict and life outcomes: does position matter?

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science

The aim of this research is to analyze how does a position in organization (leading vs. following) moderate the relationship between work–family conflict and different life outcomes: happiness, life satisfaction, job satisfaction, and subjective general health. The ongoing debate about desirable leadership position in mass media and the lack of unambiguous insights from scientists on this topic was the main trigger for the research.

Theoretical background: Studies have found that work–family conflict may lead to various negative consequences, e.g., lower job/family/life satisfaction (Kossek et al., 2011; Zhao et al., 2020). However, what kind of effect does a position in organization have on the relationship between work–family conflict and different life outcomes is barely analyzed. Leader`s position is perceived as the most important position in organization that can lead any organization to success or failure (Antonakis & Day, 2017; Chemin, 2021). Therefore, this important role is often related with higher resources and higher demands, as well. The question remains – higher demands or higher resources win, especially when we talk about work-family conflict and its negative outcomes.

Methodology : European social survey (ESS) data (Round 10, year 2020-2022; v1.0) was used for the analysis. Data from 10 European countries (n=18060) was used. 3826 participants from the sample were supervising other employees. There were 9960 females, from which 1747 were leaders. Average age of employees was 51.99 (SD=17.45), while average age of leaders was 53.56 (SD=16.36). Average years of full-time education completed for employees was 12.88 (SD=3.52) and for leaders - 14.61 (SD=3.60). Finally, average number of employees leader has/had – 10.24 (SD=49.19). Work–family conflict was measured using three-item scale developed for ESS ( $\alpha=.77$ ), while happiness, job and life satisfaction, and subjective general health were measured using one-item each.

Results : Analysis revealed significant difference between leaders and non-leaders in: work-family conflict, subjective happiness, subjective satisfaction in life, subjective general health, and subjective job satisfaction. Leaders perceived higher work-family conflict, felt more happiness, were more satisfied with life and job and had better health in comparison with employees. Moderation analysis revealed that position in organization moderated ( $-.26$ , CI 95%  $[-.38; -.15]$ ) only the relationship between work–family conflict and subjective job satisfaction ( $R^2 = .11$ ,  $F=370.98$ ,  $p<.001$ ), meaning that having an employee position weakens the negative relationship between work–family conflict and job satisfaction (more conflict, less satisfaction).

Limitations: Although ESS provides methodologically very valuable and comparable data, majority of variables are being tested using only one item/question, which often is a debate if a single item is enough to measure the construct.

Research/Practical Implications : Future studies need further and deeper investigation of differences between leaders` and follower`s perceived job demands and resources and how do they affect work–family interaction. Meanwhile, practitioners should pay more attention to leaders` perceived work–family conflict and finding ways to help them manage both work and family duties. In most cases, leaders are perceived as resources to help employees manage work and family life, however less attention is paid to them.

*Keywords: work-family conflict, life outcomes, position*

## Poster P009

### Reduction of time and performance pressure - Five fields of action

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Research goals and why the work was worth doing

Many employees have to deal with time and performance pressure (TPP) in their everyday work. Research shows that TPP is a relevant risk factor for employee's health and well-being. Therefore, work design to reduce TPP and to foster a good coping with TPP is a key requirement for companies. Nevertheless, companies and occupational health and safety stakeholders are often overwhelmed by this requirement and are reaching their limits. Against the background of current work design knowledge, five fields of action for the reduction of TPP were identified which could give guidance to companies and their stakeholders.

Theoretical background

The five fields of action to reduce TPP are based on the results of several research projects which took place from 2012 to 2022. They covered different theoretical backgrounds relevant for the demand of TPP, such as the job-demand-control-model or the job demands-resources model but also more current models like the demand-induced strain compensation model.

Design/Methodology/Approach/Intervention

Data and results of several prior research projects concerning work design to reduce TPP or to cope better with existing TPP were reviewed and processed in an overarching manner. In addition, an expertise was commissioned to prepare the current state of knowledge on work design measures to reduce TPP. Based on the analysis of all results five thematic fields of action were derived.

Results obtained or expected

The five thematic fields of action for the reduction of TPP are: 1) to obtain a balance between demands and resources, 2) to create transparency and smooth workflows, 3) to ensure necessary autonomy at and over work, 4) to develop, communicate and live a realistic and health-compatible performance culture and 5) to create a caring climate in the company and to live mutual care. The five fields of action contain both condition-related as well as behavior-oriented measures to reach the aims. They address different design levels from the organizational level to the team and task level down to the level of individual employees.

Limitations

The current work design knowledge for the reduction of TPP was prepared only for the context of service and knowledge work, mainly for German companies. The transferability of the five fields of action to other contexts and companies needs to be assessed.

Research/Practical Implications

The five fields of action could guide work design processes in companies with the aim of reducing the important demand of TPP. The integration of the five fields of action in an action aid for companies is planned and subject of a current research and development project.

Relevance to the Congress Theme

The reduction of TPP plays a central role for employees' health and well-being. Therefore, orientation and guidance for companies to reach this aim is necessary.

Relevant UN SDGs

The research contributes to the aim of health and well-being as well as to the aim of decent work.

*Keywords: time and performance pressure, work design, psychosocial risk management*

## Poster P011

### **Effort-Reward-Imbalance within a PhD Student Population: Development and Validation of the Effort-Reward-Imbalance Scale for Doctoral Students**

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science

**Theoretical background:** Many studies show that high stress is common during gaining a PhD degree. Nevertheless, there is no common standardized instrument to measure work stress of PhD students and explain the adverse health effects of stressful work experiences.

**Research goals:** To capture work stress, we adopted the Effort-Reward-Imbalance (ERI) Scale for doctoral students and tested it in a sample of PhD students gaining a doctoral degree in Germany.

**Design:** We calculated Item-total correlations and Cronbach's alpha to assess the internal consistency and used exploratory and confirmatory factor analysis to test the theoretical structure of the tool. Criterion validity was demonstrated by investigating the association of the PhD-ERI with respondents' burnout.

**Expected Results:** We expect that our calculations in August 2022 are going to show, that the PhD-ERI questionnaire has good overall validity and reliability and that the ERI differs according to sociodemographic factors. Also, it is assumed that a high level of burnout is associated with a high ERI.

**Limitations:** The study focuses on PhD students, which gain a doctoral degree at German universities.

**Implications & Conclusion:** It will be assessed whether the PhD version of the ERI questionnaire is a valid and reliable new instrument for assessing the psychosocial work environment of PhD students. As this current study is the first of this kind further analyses are needed with an international doctoral sample.

**Relevance to the Congress Theme:** Considering current debates about the working conditions and the academic contract law there is a need for a discussion and implementation for a healthy working environment among PhD students.

*Keywords: Effort-Reward-Imbalance, Burnout, PhD students*

## Poster P012

### Effort-Reward-Imbalance in Judges

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science&practice

Theoretical background: Judges state a lot of different burdens in their professional work due to very high job demands, such as highly emotional cases, high time pressure and workload. At the same time rewards are perceived very little leading to the feeling of a lack of social reciprocity between the effort given into the job and the reward gained. We propose, that the Effort-Reward-Imbalance model (ERI) and its additional component overcommitment (OC), a well-known model to explain work stress and occupational health, might explain judges' work stress. However, the exact relations between ERI and OC have not been cleared up so far. Originally an interaction hypothesis between ERI and OC was proposed, but many studies failed to support the hypothesis (Siegrist & Li, 2016). Recent studies recommend using OC as a mediator within the framework of the ERI model. This study is one of the first to follow this recommendation proposing OC, defined as excessive motivation to expose oneself to demanding work, to mediate the relationship between ERI and well-being. Additionally, we assumed self-efficacy to buffer negative consequences as it is proven to be a valuable protective factor in the stressor-strain relationship.

Research goals: In the present study we shed light on the relationship between effort-reward-imbalance and well-being over time in the highly demanding profession of judges. Key indicators of well-being (perceived stress and job satisfaction) were examined. Furthermore, we proposed the process in which overcommitment is a potentially harmful coping mechanism by mediating the forenamed relationship. A protective factor on the individual level (self-efficacy) was identified.

Design: In a survey 713 judges in Germany participated in a two-part online study (time lag of 8 weeks). To test this study's hypotheses we calculated two parallel moderated-mediation analysis run with the PROCESS macro for IBM SPSS Version 24.

Results: As hypothesized, ERI predicted both a reduction in job satisfaction and an increase in perceived stress over time through increased OC. However, when the judges showed self-efficacy to a high degree, the mediation with job satisfaction dissolved. No moderated mediation was found for the model with perceived stress as an outcome.

Limitations: We have obtained our data through self-reports which may have caused common method bias. Additionally, due to our research design, we were not able to draw casual conclusions and therefore reversed causality is possible for our line of arguments.

Implication & Conclusion: We addressed a gap in the literature analyzing the process in which OC is mediating the relationship between ERI and judges' well-being and job satisfaction. The results of this study help to gain a better understanding of the detrimental role of ERI as well as OC on judges' well-being over time. Furthermore, by identifying self-efficacy as a protective factor in the ERI process, that is open to change, the present study brings along important implications for practice.

Relevance to Congress Theme: We followed a call for research to test the mediation hypothesis linking the ERI model with occupational well-being at work via OC. We have added further value through our specific target group of judges, which, to the best of our knowledge, has not yet been considered in the context of the ERI model. By introducing the protective factor of self-efficacy into the ERI model, we also contributed to practice.

*Keywords: Effort-reward-imbalance, overcommitment, well-being*

## Poster P013

### Does Off-Work Volunteering Promote Work Creativity? A Lab Experiment

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science

Volunteerism cultivates a cohesive societal foundation for commercial companies to thrive, but welfare organizations often face volunteer shortage. Adults often cite formal job responsibilities for not volunteering, but this research suggests that off-work volunteering can promote work creativity. The findings will show how contributing to societal good via volunteering can benefit volunteers and their formal employers too.

Based on construal level theory, we hypothesize that volunteering for causes more psychologically distant exposes one to diversity, which expands one's tendency to accept inconsistencies (dialectical thinking). This will promote creativity in one's formal job, especially if one focuses on the broad meaning as opposed to specific features of volunteering (high construal level) as they will recognize and integrate the inconsistencies more effectively.

A lab experiment was conducted. Undergraduate participants reported their trait construal level before engaging in a volunteering task to help someone who is psychologically close or distant. They reported their state dialectical thinking before completing a creativity task to develop ideas for a school-related issue. Trained research assistants blind to the hypotheses would rate the creativity of these ideas.

Data collection and analyses are ongoing, and results will be presented at the EAWOP Congress. We expect the creativity ratings of participants in the high construal level — high psychological distance condition to be significantly higher than those in the low construal level — low psychological distance condition.

The experimental design might have low fidelity, thus we plan to follow up with a field study using full-time employees who volunteer during their off-work hours.

This research aligns with the congress theme because it explores the novel idea that individuals may possess multiple work identities straddling paid and unpaid domains. It also looks at how to integrate beneficial spillovers from the social sector (volunteering) to the commercial sector (formal job).

This research contributes to UN SDG #11 (Sustainable Cities and Communities) that emphasizes inclusive and resilient communities. Our findings offer insights into how unpaid volunteering that benefits the marginalized in society can also benefit employees and their employers.

The third, fourth, and fifth authors contributed equally and are listed by alphabetical order of first names.

*Keywords: volunteering, creativity, dialectical thinking*

## Poster P014

### **A systematic review of the link between process factors and outcomes in work-wellbeing interventions for healthcare staff**

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Consideration of how work-related wellbeing can be enhanced through interventions for healthcare workers is of utmost importance for multiple reasons, not least the relationship between work wellbeing and patient safety (Hall et al., 2016).

Process factors are gaining more traction in being paramount to evaluating organisational interventions, including those focused on work-wellbeing, in order to understand why and how such interventions can change outcomes. These can include factors pertaining to; intervention factors, such as implementation strategy; and mental models, including organisational readiness for change; and context, such as barriers and facilitators to implementation (Nielsen & Randall, 2012).

It is important to consider how intervention process factors can influence the outcomes of such interventions, outside of the intervention content itself. However, a recent systematic review of quantitative measures of process factors found that a limited number of studies investigated the relationship between process factors and intervention outcomes, such as wellbeing (Nielsen et al., 2022). There is a current lack of systematic reviews that investigate relationships between process factors and wellbeing outcomes in studies using qualitative and mixed-methods approaches, as well as limited reviews concerning process evaluation within work wellbeing interventions in healthcare staff. This systematic review will therefore address this gap by addressing the research question 'How do process factors affect outcomes in work-wellbeing interventions for healthcare staff?'

This review will consist of results from searching databases including APA PsycINFO, MEDLINE and CINAHL, using search terms that pertain to 'organisational intervention', 'healthcare staff' and 'process evaluation'. Studies are included if; they report on an organisational wellbeing intervention; participants are any kind of physical or mental health worker that work directly with service-users; report on at least one process factor and how they affect work-wellbeing outcomes; primary outcomes are related to work wellbeing, including physical and psychological; a qualitative and/or quantitative methodology is employed; they are published in peer-reviewed journals. Limitations of publications written in English language and those published between 2012 and 2022 are applied to the search. Results will be synthesised using a narrative approach as opposed to a meta-analysis, due to the inclusion of quantitative, qualitative and mixed-method research; lack of ability to account for the diversity of organisational settings within healthcare (Blamey & McKenzie, 2007); as well as the participatory process that may be utilised within included studies (Nielsen & Miraglia, 2017).

Anticipated implications of the systematic review will include informing on relevant process factors, such as multi-level contexts, that should be considered in the design of participatory organisational approaches that aim to enhance the work wellbeing of healthcare staff.

*Keywords: Wellbeing interventions, process evaluation, healthcare staff*

## Poster P015

### **Value creation in the modern organizational context: A systematic overview of its' antecedents, mechanisms and consequences**

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The multidimensionality of value is not an easy concept to grasp. As a concept, it is interdisciplinary by nature, since it has made its appearances on sociology, philosophy and at last, psychology, where it is conceptualized as an influential and malleable mental structure, that enjoys special implementation in the workplace, serving a multitude of beneficial mental functions for the individual. While it also has being defined differently throughout the centuries, its' solid theoretical background has led us to the conclusion that It is not limited to an economic aspect, but can take many other forms, respective to each individual's motives, with our focusing being on Lackeus' conceptualization of value as a reference point, which includes social, influential, enjoyment, harmony and economic value. Value can be created and maintained through psychological mechanisms that influence the outcome of the effect of certain organizational factors, otherwise commonplace in the organizational context, with the most prominent ones being commitment, creativity, motivation, productivity, human and social capital, certain organizational cultures, fulfillment of psychological contract and opportunity capitalization. After being created, a new dichotomy seems to be evident in the literature: value can either be captured, ostensibly staying within the context of the same organization that created her in the first place, or slipping outside of its borders. On the latter case, the organization seems to lose the strategic advantage it possessed by creating a specific kind of value. Therefore, our literature review explored the previously under-researched field of organizational value creation and its' outcomes.

*Keywords: value creation, value capture, value slippage*

## Poster P016

### **The people practitioner of the future: Identity, role and contribution**

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The transformation of the technology-enabled workplace has a significant impact on the future professional roles, services and capabilities of both the human resource professional (HRP) and industrial/organisational psychologist (IOP). The present study aimed to identify the intersecting professional personas and capabilities that speak to both the HRP and IOP as people practitioners of the digital era.

The study builds upon two previous research papers. The first focused on the key employer perspective of what the people practitioner of the future role should be, while the second provided a thematic overview of four digitally-dexterous capabilities proficiency domains and six professional personas relevant to the technology-enabled working environment. In this paper, we utilize these insights to further explore the people practitioner capabilities required in the future through an integrated perspective. First, we discuss the professional in the context of professional identity, and the contribution towards organizations and society; next we discuss the people function of the future and last, we propose 3 future scenarios impacting the people practitioner of the future.

The study adds to the research literature on the shifting roles and capabilities of IOPs and HRP as future people practitioners in technology-enabled hybrid and virtualised work environments.

*Keywords: skills, people practitioner, competency*

## Poster P017

### Conceptualisation of Hybrid Work: Where, When and How Do We Work in the Future?

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**Purpose :** Due to the recent pandemic and accelerated digitalisation, organisations are forced to adopt new ways of working. Employees have more flexibility in where, when, and how they work, which is often referred to as hybrid work. However, there is not yet a formal definition. Therefore, the purpose of this research is to provide a conceptualisation of hybrid work and identify factors that influence employees' choice of their work arrangement.

**Theoretical background :** So far no scientific conceptualisation of hybrid work has been established. Research has been conducted on relating concepts, for example, telework and Flexible Work Arrangements (FWA) focusing mainly on remote work and time-spatial flexibility. However, the aspect of how we collaborate with co-workers, i.e. via Information and Communication Technology (ICT) or face-to-face, has not yet been taken into consideration. To bring these elements of hybrid work together this research will focus on three dimensions: place of work, working time, and virtuality. Additionally, factors influencing the decision employees take when choosing their work arrangement will be identified.

**Design :** A case-study design with a leading food & beverage organisation will be used to validate and expand the three proposed hybrid work dimensions through literature review and qualitative interviews. Therefore, semi-structured interviews will be conducted with knowledge workers currently working in a hybrid work environment. A random sample of employees (N=12) from different functions (Supply Chain, Sales, Marketing, Enabling Services), level, age and tenure will be interviewed on their hybrid work routines as well as preferences and needs. The interviews will take place end of 2022/ beginning of 2023 and first results will be available to present at the EAWOP conference.

**Results expected :** Considering the recent changes in ways of working, it is expected that hybrid work will differ from relating concepts. The conceptualisation of each of the mentioned dimensions is not expected to be different from earlier research, but rather that their extent and their availability varies depending on organisational policies and employees' personal circumstances and preferences.

**Limitations :** Generalisability will be limited due to focusing only on one global organisation with specific processes and culture. Additionally, will the interviews be conducted at a certain point in time. As employees are still adapting to hybrid work and their approach and preferences change over time, this is also a limitation.

**Research/Practical Implications :** Through conceptualising hybrid work this research will provide a basis for further research on future work arrangements and it will support organisations by providing a better understanding of hybrid work and its implementation.

**Relevance to the Congress Theme :** This research relates to EAWOP by focusing on the changing world of work and exploring how employees will work in the future.

**Relevant UN SDGs :** By focusing on how employees will work in the future and identifying their preferences and needs, this project is in line with the UN sustainable development goals number 3 ('Good Health and Wellbeing') and 8 ('Decent Work and Economic Growth').

*Keywords: Hybrid Work*

## Poster P018

### **Organizations as non-human, abstract attachment partners – How are general and organizational attachment related?**

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Attachment theory has become increasingly recognized in the organizational context (Yip et al., 2018). Yet, the growing body of research has mostly focused either on general attachment (e.g., Klohnen et al., 2005) or on relationship-specific attachment (e.g., towards the supervisor: Game, 2008; towards other people at work: Leiter et al., 2015; or towards the organization itself: Feeney et al., 2020). The purpose of the present study is to extend existing research by empirically examining relationships between general attachment and the newly developed relationship-specific organizational attachment scale (Feeney et al., 2020).

Attachment theory proposes that human behavior in relationships is influenced by two dimensions of attachment – namely attachment avoidance and anxiety (for a review, see Brennan et al., 1998). Attachment avoidance refers to doubts about the trustworthiness of the attachment figure (cf., Brennan et al., 1998) and attachment anxiety is concerned with negative expectations of self-worthiness in the relationship (cf., Bartholomew, & Horowitz, 1991). Whereas general attachment develops based on the history of relationships with diverse others (e.g., Klohnen et al., 2005), relationship-specific attachment reflects unique dynamics tied to a specific attachment partner (e.g., Game, 2008). In the case of organizational attachment, the attachment partner is the organization (Yip et al., 2018). Yet, little is known about the extent to which general attachment and attachment to a non-human entity, as in organizational attachment, are related.

Data were collected via online panel including 253 employees in Germany. The survey included a short version of the German equivalent of the ECR-R for assessing general attachment (BoBi; Neumann et al., 2007) and the Organization Attachment Survey (OAS) for measuring organizational attachment (Feeney et al., 2020). Structural equation modeling was used to test relationships between general and organizational attachment.

Organizational attachment avoidance was positively and moderately related to general attachment avoidance, as were organizational attachment anxiety and general attachment anxiety. Moreover, correlations across the attachment dimensions were significant, showing a small positive effect. Lastly, while no significant correlation was found between the general attachment dimensions, organizational attachment dimensions were correlated.

Using self-report measures may potentially result in common-method bias and the cross-sectional design prevents inferences about causality.

Results show that organizational attachment is not independent of, but also not completely determined by employees' general attachment. Hence, results suggest considering both in organizational contexts. Specifically, more research is needed to explore how positive attachment-relevant experiences influence organizational attachment beyond general attachment. Moreover, it seems useful to offer training programs to raise the awareness of managers, supervisors or HR for general and specific attachment needs of their employees.

With organizational attachment being just recently acknowledged, this study is an early contribution to a better understanding of the relationships between organizational attachment and general attachment as well as the resulting responsibility of HR to shape a sustainable workforce.

*Keywords: Organizational attachment, Human Resources, Attachment theory*

## Poster P019

### **iJobs – an internet intervention for the unemployed: A feasibility and acceptability study**

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practice

Background: The unemployment rate is still elevated (e.g, 6.2% in the EU), but a more alarming feature is its highly asymmetrical distribution, even across the same country, such as Romania (Statista, 2022). Unemployment has significant individual repercussions, being associated with mental health impairment (Paul & Moser, 2009). Therefore, evidence-based intervention programs for increasing employment are highly needed. JOBS II (Curran et al., 1999) is one of those programs. It comprises five elements: Job-search skills, Active learning, Inoculation against setbacks, Social support, and Trainer referent power and combines principles from behavioral and social sciences (i.e., self-efficacy theory, theory of planned behavior, coping theory). JOBS II was and is still being adapted in different countries (e.g., the US, Finland, South Africa, and Germany), but only in a face-to-face format. An online adaptation of this intervention has several advantages: is asynchronous, highly scalable, allows self-administration, and has reduced costs. The relevance of these advantages became even more evident in the recent period of lockdown used for mitigating the COVID-19 pandemic, the context in which the current study emerged.

Aim: The current study aimed to test the feasibility and acceptability of iJobs, an online adaptation of the JOBS II program.

Design: We conducted an open-label trial, with an uncontrolled, within-group, pre-posttest, and follow-up design.

Intervention: iJobs is a two-week asynchronous intervention with five modules that focus on identifying job skills, dealing with obstacles to employment, finding job openings, analyzing resumes, exercising different types of interviews, and planning for setbacks. The content is only text-type. After each module, participants received personalized written feedback on the web platform.

Participants: Out of the 56 participants allocated to the intervention, 36 completed (Mage=25 years; 57.1% females) the post-test (36% dropout), and 34 the three months follow-up.

Results: The quality of module completion was high among the protocol-compliant participants (mean above 4 points out of 5 for each module). The online platform's usability was high (84.86 points out of 100). Participants reported increased overall satisfaction with the program.

After iJobs, inoculation against setbacks ( $d = .64$ ), job search self-efficacy ( $d = .50$ ), and self-esteem ( $d = .28$ ) increased significantly, while future career anxiety in the COVID-19 context decreased significantly ( $d = .34$ ).

Three months after iJobs 55.9% of the participants found employment, while 5.9% were in a job selection process, and 38.2% were unemployed. Job satisfaction was high among the employed.

Discussion: Our results showed that iJobs is a feasible intervention and was accepted by its beneficiaries. Even though the results are promising, the trial design does not allow causal inferences regarding the program's efficacy or effectiveness. The sample characteristics (young, highly educated, with a short period of unemployment) restrict the findings' generalization. Moreover, social support facilitated by the interaction between participants, a central component of JOBS II is

almost absent in iJobs. After further testing its efficacy in an RCT that will address those limitations, iJobs has the potential to become a cost-free, easily accessible, and highly scalable resource for the unemployed.

*Keywords: unemployment, JOBS II program, internet intervention*

## Poster P020

### **The attitudes towards Augmented Decision Making (ADM) Scale: Development and an initial validation**

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**Purpose:** Organizations increasingly use (AI) decision-support systems. Research shows that the highest decision-making performance is achieved when humans intensively collaborate with such systems in a complementary manner, a process also referred to as augmented decision-making (ADM). Although portrayed as ideal, ADM typically fails to deliver added value, as employees are unwilling to collaborate with these systems. In Technological Acceptance Models (TAM) attitudes predict a person's willingness to use technology. Researchers recently showed that attitudes consist of cognitive instrumental and affective experiential components. As TAM was typically intended to research traditional, passive tool technologies, it gives primacy to human agency. Therefore, based on the premise that people will use their usage to extrinsic rewards, TAM research has predominantly focused on instrumental evaluations, neglecting employee experiences. However, in ADM, also decision-support systems have agency, and employees may experience a transfer of agency, rights and responsibilities that may also impact their willingness to collaborate with these systems. Therefore, to better predict behavior, we need to broaden our scope in conceptualizing and assessment of attitudes towards ADM, by also assessing their experiential evaluations. A scale that can assess such attitudes may give organizations insights into factors that can enhance ADM performance from a human perspective.

**Design:** We have performed an interdisciplinary literature review, to conceptualize employee experiences of ADM and define our dimensions. Semi-structured interviews based on the critical incidence technique were used to triangulate our findings stemming from the literature. On this basis, items will be developed, and evaluated by subject-matter experts, and by actual users through cognitive interviewing. Lastly, Exploratory Factor Analyses will be performed among employees that currently collaborate with such systems, to quantitatively extract dimensions and reduce redundant items.

**Results:** The Scale will be developed in March, and pre-tested at the beginning of April 2023. Validation of the items will take place at the beginning of May 2023.

**Limitations and Future Research:** The generalizability of the scale may be limited due to the sample solely consisting of employees working in the forecast planning domain. Future research should test the applicability of the scale in other domains in which ADM takes place as well as performing extensive reliability, and validity tests. Subsequently, future research should explore the relationship between these attitudes (or dimensions) and employee system usage behaviors.

**Practical Implications:** Organizations need to adopt a more comprehensive view of employee attitudes toward ADM, to optimize the collaboration between humans and AI decision-support systems, thereby enhancing both employee well-being, and decision-making performance.

**Relevance for Congress:** Given our focus on ADM that will increasingly be applied in work-settings, our research is clearly related to the ' The Future is Now: The Changing World of Work ' theme.

Relevant UN goals: This article provides insights into designing satisfactorily augmented decision-making processes, to optimize employee behavior and facilitate increased ADM, contributing to the UN sustainable development goals 'Decent Work and Economic Growth' and 'Industry, Innovation, and Infrastructure'.

*Keywords: Artificial Intelligent, shared decision-making, attitudes*

## Poster P021

### University employees' psychological wellbeing profiles in Lithuania: a person-centered approach

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science

Different perspectives propose a variety of employees' well-being indicators. However, only a few research is using a person-centered approach to understanding multiple dimensions of employees' well-being. The current study aimed to identify clusters of university employees who shared common configuration of perceived health (stress, burnout) and positive attitudes (job satisfaction, organizational commitment and work engagement) at work. Selected indicators represent both eudemonic (pursuit of meaning) and hedonic (pursuit of pleasure) approach of well-being (Grant, McGhee, 2021; Giuntoli et al., 2021; Bartels, Peterson, Reina, 2019; Diener et al., 2010).

Cross-sectional survey in three Lithuanian universities involved 451 employees (31 percent males and 67 percent females; 57 percent academic staff, 22 percent non-academic staff and 20 percent doing both academic and administrative tasks). Two scales from COPSOQII (National Centre for the Working Environment, 2007) about stress and burnout, short scale of job satisfaction based on the Spector model (1985), Organizational commitment questionnaire (Meyer et al., 1993) and UWES (Schaufeli, Bakker, 2003) were used as the main questionnaires.

Results of the cluster analysis showed that in the flourishing group of employees (57 percent of the sample) stress and burnout were perceived as low and job satisfaction, organizational commitment and work engagement were rated as high. An opposite situation was in the group of languishing employees (43 percent of the sample): more health problems, less positive attitudes. Further analysis of group comparison and identification of significant demographic factors as predictors of profile membership is on the go.

As Grant and McGhee (2021) pointed out and our research showed, integration of eudemonic and hedonic approach was the best solution for understanding employees' well-being. Moreover, a person-centered perspective applied in this research added knowledge about well-being to still dominating a variable-centered perspective (Cheung, 2016). Nevertheless, longitudinal research in the field would be a useful future direction for determining the stability and transition patterns of well-being profiles over time. The main message for practitioners – HRM intervention programs in universities should be based on the needs of particular groups of employees that perceive the changing world of work differently.

*Keywords: well-being, eudemonic and hedonic approach, cluster analysis*

## Poster P023

### **Virtual Teams: supporting collaboration, productivity and wellbeing in virtual teams and remote workers**

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science&practice

Research goals and why the work was worth doing:

The main purpose of this study was to explore the challenges and needs of team leaders who work remotely. This study was conducted in the framework of the Virtual Teams project, an Erasmus plus funded project that aims to support Team Leaders operating in SMEs across the EU to acquire the appropriate competencies, to manage their Team's productivity and wellbeing better while working remotely, and at the same time enrich their capacity to use the appropriate technological tools.

Theoretical background:

The nature of work has undergone profound changes driven by technological progress, macroeconomic fluctuations, other internal and external factors, and recent COVID pandemic. The number of workers who identify as "Remote/virtual workers" is increasing dramatically. Managers who lead remote/virtual teams not only face the usual leadership dilemmas but also have to adapt to these challenges in an environment where the practices have changed. Managing virtual teams requires a different approach. It means developing new skills, communication methodologies and techniques to get the best out of teams and improve organisational and personal performance (Grant et al.,2013).

Design/Methodology/Approach/Intervention

A focus group and a questionnaire to team leaders, from all the partner countries (Cyprus, Greek, France, Ireland, Slovenia and Spain) were conducted with the aim to help the consortium address the needs of the primary target group. By utilising the findings from this primary research the consortium then designed and developed a step by step toolkit for effective management of Virtual Teams for enhanced employee engagement, wellbeing and productivity.

Results obtained

A total of 128 team leaders from the 6 partner countries completed the questionnaire. Findings indicated that their main challenges are to build trust with their team members, keep their members motivated and engaged and ensure team's connectedness and communication. A total of 49 participants took part in the focus groups. Findings indicated that some of the key challenges that team leaders face include dealing with mental health Issues of their team members, staying connected with remote team members, helping remote workers maintain a healthy work life balance, managing performance and finally dealing with technical issues.

Limitations

Cross-sectional nature of study, self-reported data and relative small sample size.

Conclusions – research and or practical implications/Originality/Value

Through the survey and focus group, the consortium gathered information that assisted them in the development of a toolkit, and currently a training course and other free material with the aim to benefit both the team leaders and their team members are being developed.

#### Relevance to the Congress Theme

The study is relevant to the Congress Theme “The Future is Now: the changing world of work”, as an increasing number of leaders in the future will be asked to manage remote teams.

#### Relevant UN SDGs

The topic is relevant to the Sustainable Development Goals (SDGs) and especially to the goal for good health and wellbeing.

*Keywords: Virtual teams, remote working, team leaders*

## Poster P026

### Job Crafting put into context: Can proactive people benefit from their job design?

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#### Research goals

Job crafting - the process by which individuals actively shape their work to enhance a sense of meaning - has been a focal research topic over the past decades. Various studies have shown that job crafting is influenced by personal traits and thereby supports work outcomes. Nevertheless, evidence on the boundary conditions impacting the role of job crafting is missing. The goal of the present study is to provide insight into the contextual conditions (autonomy, skill variety) that shape job crafting and its relationship to antecedents (proactive personality) and outcomes (work engagement).

#### Theoretical Background

On the basis of the job demands–resources model, we investigate whether proactive personality predicts job crafting and in turn, work engagement. Building on the job characteristics model, we also explore whether the mediating relationship between proactive personality, job crafting and work engagement is stronger at higher levels of autonomy and skill variety at work.

#### Methodology

Three hundred and forty-four employees from different organizations participated in a two-wave study. Using online questionnaires, we first measured proactive personality and job characteristics (autonomy, skill variety). One day later, we assessed job crafting and work engagement. We used two time points to clearly capture the directionality of effects (with personality and job characteristics predicting job crafting and work engagement).

#### Results

As expected, job crafting mediated the relationship between proactive personality and work engagement. However, our findings did not confirm that both autonomy and skill variety moderated the relationship between proactive personality and job crafting. Instead, autonomy and skill variety had a direct and positive impact on job crafting.

#### Limitations

Our study has some limitations that should be considered when interpreting our findings. Specifically, we only assessed employees' perceptions regarding job crafting and not their actual behavior. Furthermore, we collected our data during the pandemic and may thus not have captured 'typical' manifestations of autonomy and skill variety at work, factors that possibly impacted our findings.

#### Practical/Research Implications

Our findings provide support for the multilevel nature of work (re-)design by suggesting that there are two independent mechanisms that support job crafting: personal, i.e., bottom-up (proactive personality) and organizational, i.e., top-down (job characteristics). We suggest future research to explore whether high manifestation of one mechanism is enough to engage in job crafting behaviors.

Such insight will help organizations to promote job crafting either by selecting employees with high proactive personality or by shaping their job characteristics.

#### Relevance to the Congress Theme

In an effort to provide first evidence on the boundary conditions impacting the role of job crafting, a mechanism which is becoming extremely valuable given the changing nature of work, we found that both personal and organizational mechanisms are supportive for job crafting. With our study, we combined top-down characteristics (job characteristics) and bottom-up processes (job crafting) as recently called for.

#### Relevant UN SDGs

We adopt a human-centered approach and combine top-down characteristics (job characteristics) and bottom-up processes (job crafting) to decent work and economic growth.

*Keywords: Job crafting, job characteristics, proactive personality*

## Poster P027

### Deepening the Job Demands-Resources Model applied to safety: The role of hope and job dedication

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Most of the safety studies focused on safety prevention, investigating the factors leading workers to incur or not in accidents and injuries. However, the absence of these adverse safety outcomes does not provide evidence of safety. Following the safety promotion perspective, this study focuses on promoting safety participation, defined as proactive and voluntary behaviours that are not mandated by the worker's role (e.g., assisting colleagues in hazardous conditions) (Griffin and Neal, 2000). Safety participation decreases the probability of accidents and injuries by directly creating a safer work environment. Several studies have analysed its antecedents. However, only a few have explored its role within the motivational process of the Job Demands-Resources Model (JD-R Model; Bakker and Demerouti, 2001;2017). Expanding this model applied to safety (Nahrgang et al., 2011), this study aims to understand the role of job demand (i.e., workload), two job resources (i.e., autonomy and supervisor support), a personal resource (i.e., hope), and job dedication in promoting safety participation. This objective results into the following research hypotheses: job resources help workers to have goal-directed and planned goals (hope). This allows workers to provide the willingness (job dedication) to reach goals and behave more frequently in safety participation. Job demands, instead, could adversely affect this virtuous process. To test these hypotheses, a cross-sectional study was conducted involving 225 people working for a multinational corporation. Half of the sample were female (53%) and almost half were aged 30–39. Data were analysed using SPSS with the Bootstrap method. Model 87 (Hayes, 2017) was performed for testing moderated serial mediations. Results showed that autonomy (1) and supervisor support (2) were associated with safety participation through two serial mediators, such as hope and job dedication ( $\beta_1=.04$ ,  $SE=.02$ ,  $CI [.01;.07]$ ;  $\beta_2=.02$ ,  $SE=.01$ ,  $CI [.01;.05]$ ). At the same time, workload moderated the relationship between job dedication and safety performance ( $\beta=-.16$ ,  $SE=.06$ ,  $p <.01$ ), indicating that a high workload weakened the favourable connection between job dedication and safety participation, rendering job dedication insufficient to achieve safety participation. These results showed that workers were hopeful and more dedicated when they felt resourceful. Consequently, experiencing hope and being dedicated at work made workers implement positive safety behaviours, such as safety participation. At the same time, being exposed to job demands makes dedicated workers not behave safely. Thus, their resources could be focused on coping with job demands and cannot be available to achieve safe, voluntary behaviours. The research is not without limitations. The data were collected through a cross-sectional study and self-report measurement scales. Future research should use longitudinal study designs and incorporate objective measures (e.g., micro-accident rates). Our results allow for deepening the JD-R Model applied to safety by including the role of hope. In addition, they suggest the need to supplement mandatory training with pathways aimed at developing personal resources and attitudes to improve safety performance.

*Keywords: Safety at work, safety promotion, JD-R*

## Poster P029

### Mixed Feelings and Creative Minds: A Leader-Follower Crossover Mechanism

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science

With diverse responsibilities and challenges, leaders readily experience emotional ups and downs at work, making them likely to express a mix of emotions to followers. This offers an ideal opportunity to understand how mixed emotions shape creative processes in an organized setting. This study aims to investigate how leaders' emotional complexity shapes followers' dialectical thinking and creativity. We shed light on a novel and complex crossover (from leader to follower) and spillover (from affective to cognitive) mechanism underlying employee creativity.

Based on emotions-as-social-information theory, we hypothesize that leader emotional complexity sends signals of ambiguity, thus positively predicting follower dialectical thinking (i.e., tendency to identify and accept inconsistencies), especially in followers with higher emotional intelligence who are able to recognize others' emotions effectively. We expect dialectical thinking to predict creativity, especially if there is stronger error management climate that regards risky creative endeavors as learning opportunities.

We conducted a lab experiment for Study 1 in which 120 undergraduates rated their emotional intelligence, watched a video of a student leader expressing either high or low leader emotional complexity, reported their state dialectical thinking, and created a poster for the creativity task. Trained research assistants blind to the hypotheses rated the posters. In Study 2, a lagged-wave, multisource study is conducted on 132 leaders with 392 followers.

Results demonstrated that leader emotional complexity expression positively predicts follower dialectical thinking more in employees with high (vs. low) emotional intelligence, and dialectical thinking positively predicts creative work behaviors if the work unit has a weaker error management climate.

There are several limitations, for example in Study 1, we manipulated only leader emotional complexity expression but not follower trait emotional intelligence, thus compromising on the controlled environment of the lab experiment. We encourage future research to explore rigorous ways to manipulate trait emotional intelligence.

Future work requires employees to work creatively and adaptively with burgeoning technologies to meet fluid market demands. This study aligns with the congress theme because it explores the novel idea of how leader emotional complexity can be leveraged to benefit follower dialectical thinking and creativity.

This research contributes to UN SDG #9 (Industry, Innovation and Infrastructure) that emphasizes innovation facilitation because we shed light on a potential way to promote creativity in the workplace.

*Keywords: emotional complexity, dialectical thinking, creativity*

## Poster P030

### TELEWORK SATISFACTION AND WELLBEING DURING COVID-19 LOCKDOWN IN SPAIN: ARE CHILDREN A RESOURCE OR A DEMAND?

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#### Research goals and why the work was worth doing

The research goal is to study telework satisfaction in a context where the main advantages of teleworking (e.g., less work interruptions) were missing, and to analyse its effects on subjective wellbeing during the COVID-19 lockdown.

This work is worthwhile because we evaluate the level of satisfaction with telework using a specific set of items. Furthermore, our longitudinal design supports the causal interpretation of the effects moving forward from previous cross-sectional research.

#### Theoretical background

According to the spill-over hypothesis (Bakker & Demerouti, 2013), job satisfaction is one of the determinants of subjective wellbeing because positive experiences at work can influence other life spheres, which enhance wellbeing. We extend these arguments to telework satisfaction.

#### Design/Methodology

Our longitudinal study explores the relationship between telework satisfaction (time 1) and subjective wellbeing (time 2) during the COVID-19 lockdown, with a time lag of one month. Data were collected through an online survey in Spain (N=111).

Building on Staples et al.'s work (1999), we measured telework satisfaction through a nine-item scale (i.e. facets like organization of working hours, possibility to concentrate without interruptions, supervisors' support, availability of ICT). Cronbach's alpha was .84.

We measured subjective wellbeing through the WHO-5 (World Health Organization - Five Wellbeing Index) in its Spanish version (Topp et al., 2015). Cronbach's alpha was .84.

#### Results obtained

Telework satisfaction ( $b = .26, p < .01$ ) and the control variable 'children under 18 years old' ( $b = .21, p < .05$ ) had significant positive effects on subjective wellbeing. Further, telework satisfaction and 'having children under 18 years old' were significantly negatively correlated ( $r = -.34; p < .01$ ). Interestingly, employees with children felt less telework satisfaction but higher subjective wellbeing. Having children at home while teleworking is likely to be both a "resource" (compensating loss of social relationships at workplace) and a "demand" (increases home demands and workload; Shockley et al., 2021).

#### Limitations

The generalization of the results is limited because of a highly feminized (80%) snowball sample. Furthermore, our data allowed studying only short-term effects of satisfactory telework.

#### Research/Practical Implications

Future telework studies should explore further outcomes of telework satisfaction in crisis and non-crisis times, measuring long-term effects (with children at home) and contributing to the validation of the telework satisfaction scale.

Furthermore, we send a clear message to practitioners: Organisations can improve employees telework experience. The effort will not be in vain: Teleworking is here to stay, thus designing adequate telework conditions will prepare organizations for the Post-Covid-19 era.

#### Relevance to the Congress Theme

The sudden and extensive adoption of telework since the outbreak of the pandemic has changed peoples work but also family life in a radical way. Our research aims to contribute to a meaningful adaptation of working conditions.

#### Relevant UN SDGs

The UN Sustainable Development Goals (2015) that apply to my paper are: “Good health and wellbeing” and “Decent work and economic growth”.

*Keywords: telework, wellbeing, children*

## Poster P031

### **The effects of executive coaching on behaviors, attitudes, and personal characteristics: a meta-analysis of randomized control trial studies**

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science

Coaching is widely used in organizations to create cultural and well-being change (cf. O'Connor & Cavanagh, 2013). A growing number of studies emphasize executive coaching as an effective developmental tool. Yet, the existing literature suggests a large variety of processes and outcomes and generally lacks clarity on the main dimensions impacted by executive coaching. The current meta-analysis aims to shed light on the most impacted outcomes by executive coaching.

Reviewing 18 studies with a rigorous methodological design that used control trials and pre-post tests, this meta-analysis examined the effectiveness of coaching for three theoretically and practically relevant individual-outcome dimensions: behaviors, attitudes, and personal characteristics. The results indicate a significant and positive effect of executive coaching on behaviors (Hedges'  $g = 0.86$ ,  $k = 12$ ), attitudes (Hedges'  $g = 0.34$ ,  $k = 11$ ), and person characteristics (Hedges'  $g = 0.53$ ,  $k = 15$ ) with the strongest relationship with behavioral coaching outcomes. Moreover, we found significant and positive effects for specific outcomes such as self-efficacy (Hedges'  $g = 0.31$ ), goal attainment (Hedges'  $g = 1.32$ ), psychological capital (Hedges'  $g = 0.83$ ), and resilience (Hedges'  $g = 0.57$ ). The aggregated effect size for job satisfaction was positive but not significant (Hedges'  $g = 0.36$ ). The results show no differences regarding the length of the coaching program, the number of sessions, the background of the coach, and the coaching method. Our findings suggest that executive coaching is an effective intervention, and behavioral, attitude, and person characteristic change is likely to occur due to coaching interventions. As an implication for practice, we suggest that coaches take a more systemic approach and facilitate the alignment of the manager's goals with the organization's strategy to enhance their positive attitudes toward the organization and, thus, the motivation and engagement in achieving their goals. Designing coaching interventions to provide frequent feedback from coaches and encourage executives to reflect on positive changes in their relationships at work could have important consequences on the organizational level (cf. O'Connor & Cavanagh, 2013).

This meta-analysis contributes to the existing coaching literature in three different ways. First, we have included only the studies on executive coaching in organizational settings with high methodological rigor and design that allow for causal conclusions. Second, we shed light on what dimensions are most impacted by executive coaching. This furthers our understanding of what resources executive coaching may enable and how these may contribute to the employee's optimal functioning, allowing both the employee and the organization to flourish. Third, we explored what factors moderate the coaching outcomes. These findings contribute to supporting the effectiveness of coaching and help coaches and clients to strive for the coaching outcomes that contribute the most to clients' performance.

Future research might explore dimensions not covered here, such as cognitions and intentions, which we could not analyze due to a lack of studies.

*Keywords: executive coaching, coaching effectiveness, organizational performance*

**Poster P032**

**Impulsivity as a Personal Demand - Toward Complementation of the Job Demands- Job Resources Theory**

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science

The study took up the idea of adding a new component to the Job Demands - Resources Theory (Bakker & Demerouti, 2018), which should be called “personal demands”. As an example of personal demands, the construct of Impulsivity was studied. A cross-sectional questionnaire was conducted. A total of 394 (Female = 59.6%) workers were surveyed. The standardized survey questionnaires were used in the study, i.e. The Utrecht Work Engagement Scale (UWES-9), Life Roles Self-Efficacy Scale (LRSES) and UPPS-P Impulsive Behaviour Scale. The obtained results indicate, that Impulsivity correlates negatively with Work Engagement. In addition, Positive Urgency, which is one of dimension of impulsivity, moderates the relation between Self-efficacy and Work Engagement, in line with theory. This confirmed the fact, that impulsivity should be included in the JDR theory as a personal demand.

*Keywords: Job Demands Job Resources Theory, work engagement, impulsivity*

## Poster P033

### Toxic Leadership Style: Relationships with Work Motivation and Work Engagement

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**Research Goals** . The purpose of this study is to investigate relationships between immediate manager's toxic leadership style and subordinates' work motivation and job engagement.

**Theoretical Background**. Blumen (2009) defines toxic leadership as: "a process in which leaders, by dint of their destructive behavior and/or dysfunctional personal characteristics generate a serious and enduring poisonous effect on the individuals, families, organizations, communities, and even entire societies they lead" (p. 29). Piecing together the various definitions, we find two elements that define toxic leadership. First of all, toxic leaders' behavior harms (directly or indirectly) individuals within the organization. And second, their behavior results in systemic damage to the effectiveness of the organization. The dimensions of toxic leadership are: Abusive Supervision, Authoritarian Leadership, Narcissism, Self-Promotion and Unpredictability (Schmidt, 2008).

**Design/Methodology** . A cross-sectional survey design was used with a convenience sample (N=263) of Estonian employees. Toxic Leadership Scale (Schmidt, 2008 34 items); The Multidimensional Work Motivation Scale (MWMS with 24 items); The Work-Related Basic Need Satisfaction Scale (W-BNS with 18 items) and Utrecht Work Engagement Scale was used in this study. 6-point scale for assessment was used in all questionnaires.

**Results**. Toxic leadership style is negatively related with all subscales of motivation, especially with identified and intrinsic motivation. The only significantly positive relationship is with amotivation. Narcissism subscale show somewhat different results compared to other toxic leadership subscales: weak positive correlation with amotivation and weak negative correlations with only identified and intrinsic motivation. Extrinsic material motivation has weak negative correlations only with abusive supervision and self-promotion subscales. Absorption is negatively related with self-promotion and authoritarian toxic leadership subscales. Vigor and dedication subscales have negative relationships with all subscales of toxic leadership. Dedication subscale show the higher negative correlations with work motivation compared to other work engagement subscales. Multiple regression analysis, where intrinsic motivation was as dependent variable and vigor, dedication and toxic leadership were independent variables shows a good fit:  $F(3, 193) = 44.172, p < .0001$  and  $R^2 = .411$ .

**Limitations**. The small sample size and use of cross-sectional design are limitations of these study.

**Practical Implications**. Our study clearly shows the negative consequences of toxic leadership on employee motivation, especially intrinsic motivation. Somewhat less impact has toxic leadership only on extrinsic material motivation. Toxic leadership shows negative consequences to work engagement, especially when it comes to dedication.

**Relevance to the Congress Theme**. Our study is connected mainly with decent work and economic growth theme of congress.

*Keywords: Abusive Leadership, Self-Determination Theory of Work Motivation, Work Engagement*

## Poster P034

### Workplace Bullying among Brazilian Urban Public Transportation Workers

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Workplace Bullying is a process in which abusive, hostile, and humiliating behavior occurs repeatedly and frequently. The psychosocial approach to understanding this kind of violence associates it with individual and relational factors. It is a collective situation that includes work organization managers and society, which establishes the rules of human relations in its context. It is a psychosocial risk factor, which generates negative implications, causes suffering, and damages the health of those involved. In Brazil, there is a lack of studies showing the incidence of this kind of violence. This study identified the occurrence and characterized workplace bullying among urban public transport workers. A total of 382 workers from a capital city in the South Region of Brazil participated in the study. Participants answered a socio-professional questionnaire, the Escala Laboral de Assédio Moral - ELAM (Workplace Bullying Scale), and questions related to violence at work. Descriptive and inferential statistical analyses were performed. Results showed a difference between the number of workers identified by ELAM items as targets of bullying (48.6%) and those who recognize themselves in this situation (33.7%). It was found that work conditions and organization are conducive to situations of workplace bullying; most of the hostile acts described are related to a deterioration of work conditions, attacks on human dignity, and humiliation; and direct bosses are the main bullies, reflecting a reality of abuse of power. In addition, single individuals [ $H(2) = 8.96$ ;  $p = 0.01$ ], bus collectors [ $H(2) = 8.77$ ;  $p = 0.01$ ], and individuals who had a higher workload [ $H(2) = 9.35$ ;  $p < 0.001$ ] had higher scores on the scale, meaning they were exposed to bullying situations more often. There was a weak and negative association between participants' age and ELAM's total score ( $r = -0.217$ ,  $p < 0.001$ ), showing that younger workers had higher scores on the scale. The main limitations of the study were: the use of a self-report instrument, with potential biases; a convenience sample, which increases the possibility of biased data, as probably only workers willing to discuss the subject participated; and the fact that, as this is a cross-sectional study, it is not possible to reach conclusions on causal relationships. By specifically approaching the professional occupation of urban public transport workers, it was possible to observe exclusive aspects of this sector. The study identified the occurrence and described the characteristics of this kind of violence, which allowed the unveiling of variables that contribute to its occurrence. The data point to the need for efforts by organizations and unions to implement actions that can prevent this kind of violence, aimed mainly at supervisory positions, as well as inform and prepare workers to recognize real bullying situations. This topic adheres to the UN's 2030 Agenda for Sustainable Development, as the discussion on workplace violence has contributed to the dissemination of information, which is the first step to mitigating this kind of behavior and establishing well-being practices and decent work in the different professional categories.

*Keywords: Workplace Bullying, Urban Collective Transport, Working Conditions*

## Poster P036

### The relationship between organizational safety climate and driving style of Lithuanian professional drivers

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**Theoretical background .** Drivers in occupational settings are frequently provided with inconsistent demands for work performance (long working hours, speeding for timely delivery of goods vs. following safety rules in traffic and avoiding accidents). This compromises safety and might lead to crashes that account for between 20% and 40% of work-related accidents in industrial countries. Organizational safety climate is an important predictor of employees' safe performance at work helping drivers to manage their job demands, remain focused, avoid fatigue, and maintain good reaction time while driving. Still, data on how safety climate might be related to habitual driving style of professional drivers is limited. So, the current study is aimed to explore the relationship between organizational safety climate and different driving styles of Lithuanian professional drivers.

**Methodology.** Eighty-two professional drivers (51 male, 31 female; the mean driving experience – 15.8 years) from different Lithuanian organizations participated in cross-sectional study. Organizational safety climate (OSC) (Brondino et.al., 2011) was used to measure their evaluation of organizational safety systems, safety training, safety communication and safety values. The multidimensional driving style inventory (Taubman-Ben-Ari et.al., 2004) was used to evaluate four driving styles - anxious, reckless/careless, hostile/angry and careful/patient.

**Results .** Female professional drivers reported more anxious driving style than male professional drivers. No significant gender differences were found in perceptions of organizational safety climate. Significant negative correlation was found among driving experience and perceptions of safety communication and safety training. Age was not statistically correlated to any organizational safety climate. Contrary to expectations more frequent safety communication in organization was related to more hostile driving style among professional drivers. While higher scores on safety training and safety values were correlated to more reckless driving style. Anxious and careful driving styles were not related to perceptions of organizational safety climate.

**Limitations .** Small sample size and self-reported data limit the reliability and generalizability of results. Lack of information about the type of organizations where participants work (e.g. delivery, passenger transportation etc.) does not allow to control additional variables that might be related to organizational safety climate.

**Conclusions .** Unexpectedly, perceived organizational safety climate did not contribute significantly to safe driving style. On the contrary, present results indicate that higher scores in perceived organizational safety climate provoke professional drivers' to be more irresponsible and to take higher risk by driving recklessly or in a hostile way. So, further studies should focus on investigating psychological mechanisms or other organizational characteristics, explaining why safety climate does not operate in the expected way in this specific sample.

**Research/Practical Implications.** These results indicate that when professional drivers believe that their work environment is safe and their organizations take care of safety, they might tend to drive in more dangerous way while performing their work. So, organizations who employ drivers should look for additional means to ensure safety, not only emphasizing safety rules, values or training.

*Keywords: organizational safety climate, driving style, professional drivers*

## Poster P037

### Home Office and Its Impact on the Job Performance

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There is currently an increase in the use of flexible work arrangements by knowledge workers, based on the experience gained during the COVID epidemic.

Measures to limit the spread of the COVID-19 epidemic have suddenly changed the working conditions of many people, especially in regard to working hours and work location.

There has been an increase in the use of home office work among knowledge workers and the researchers show that the transition to working from home has had a significant impact on their work-life balance. Currently, organisations have to decide how to deal with the home office in the post-pandemic period.

Research published so far shows that employers will continue to use the home office. It is necessary to define the optimal home office setup taking into account the employer's interest and the impact on job performance.

This research aims to determine the impact of work-from-home on job performance with a consideration of personality.

According to the results of the literature review, this topic has not yet been sufficiently researched. I set the hypothesis on the basis of available knowledge:

H: An individual's personality influences their work performance when they work from home.

The research is realized in two parts.

For the implementation of the survey, I chose a questionnaire and a qualitative method in the form of structured interview. In the first part, employees are interviewed by questionnaire survey. In the second part, the method of structured interviews with supervisors is used.

The research starts in 2023 and will be completed in 2024.

The respondents are employees of an international company in the Czech Republic - 150 persons, both men and women. The selection of respondents was done by the method of purposive sampling. The research sample includes respondents who have specific experience of working from home, which means that they currently use work from home.

This new knowledge and the subsequent use of the results by employers can help to optimally adjust the use of the home office with consideration of the employee's personality and to address the work-life balance of knowledge workers and their work performance. This can be used in attracting and retaining talented knowledge workers.

The research will be presented by e-Poster only.

*Keywords: Flexible working arrangements, Job Performance, Work-life balance*

## Poster P038

### A better understanding of Occupational Well-Being using NLP techniques

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Occupational Well-being represents a well-known field of study, which is usually related to Health Psychology and mainly, it represents a valuable component of Organizational Psychology. Natural language processing (NLP) is regarded as the most promising method for developing new knowledge, but it is also the most challenging to acquire. This is because of the technological advancements that have occurred in this field. Some of these include the development of computational linguistics and digital information technologies. On the one hand, NLP is a subfield of linguistics and artificial intelligence. It focuses on the development of systems that can understand and improve the grammar and structure of natural human languages. On the other hand, besides being able to improve the grammar and structure of natural human languages, NLP can also be used to describe and measure the subjective states of people. Types of text that are commonly used in this field include interviews' transcripts, dialogs, narratives, answers to open ended questions, as well as clinical notes and social media messages.

Natural language processing has become a popular tool for detecting and analyzing the expressions of sentiment in text. The goal of this process is to identify the words (i.e., positive, negative, or neutral words), or phrases that the author uses to describe a particular topic. It can be used to perform various tasks such as sentiment analysis and information extraction. One of the most common tasks that can be performed by this technology is to detect the subjective state of a person in a text. The concept of the subjective level refers to the various aspects of a person's life, such as happiness, well-being, and satisfaction.

There is currently a lack of methods that can capture the psychological constructs that are commonly used in language analysis. However, computational methods are being used in social sciences to perform this task. The use of semantic measures is offering a better description of the construct, which can help differentiate them from other similar constructs. In daily life, individuals tend to communicate their thoughts and feelings using words instead of numbers and scales. They tend to give open-ended answers when it comes to asking someone how they feel or think.

First, this approach is different from the rating scale method, which requires the respondent to perform a brief mental analysis of their natural responses and select the best answer option that would fit from the given scale. Second, instead of forcing the respondent to use numerical rating scales, they are encouraged to provide open answers. Lastly, the construct measured is then interpreted by the respondents and they can provide fitting answers according to their attitudes, emotions, and thoughts.

So far in psychology, machine learning can be used to train models identifying certain features that are associated with a given task or psychometric scale. This method can then predict a score without requiring any traditional measurement. New technologies that can improve the measurement and intervention of well-being are expected to have a significant impact on the scientific understanding of this field. It is widely believed that the use of certain machine learning technologies can evaluate a person's well-being.

*Keywords: Natural Language Processing, Linguistic analysis, Qualitative research*

## Poster P041

### Laboratory Design Methodology for Deception Detection Research in Job Interviews: A case study

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Research goals and why the work was worth doing: Numerous requirements for job applicants increase the likelihood of deception in personnel selection processes. Lie detection is still an unsolved riddle, but increasing technological advances allow researchers to noninvasively study the physiological and behavioural changes during lie and truth production to determine whether the person was honest or not. Our main objective is to present a case study describing the methodology of laboratory setup for conducting deception detection experiments by using non-contact technology as facial infrared thermal imaging, eye tracking, remote photoplethysmography, and behavioural analysis in personnel selection simulations.

Theoretical background: Deceptive behaviour is an undeniable part of a person's life. The average person lies at least 1-2 times a day. In situations where the stakes are high, such as a job interview, this frequency can be even higher. For example, up to 90% of job applicants fraudulently change at least one answer to be more successful. As a result, research has begun to focus on detecting deception not only in litigation, but also in job interviews. A technology-based approach to lie detection relies mainly on contact polygraphy for its accuracy. However, contact polygraphy can easily introduce bias into the basic interaction, which is particularly problematic in personnel selection, where non-invasive tools seem more promising. However, the study of deception in the context of job interviews under experimental conditions using the aforementioned non-invasive technology is still in its infancy, and there is no existing laboratory methodology for conducting these experiments.

Design/Methodology/Approach/Intervention: To achieve the goal of the study, a within-subject experimental design was conducted. Above-mentioned non-invasive technologies were used. Independent variables included baseline condition and prepared and spontaneous truthful and deceptive scenarios. A system of PC codes was developed in Esri ArcGIS Pro software for thermal face data selection. All measures were carried out in the experimental laboratory of the Department of Psychology of Palacký University in Olomouc.

Results obtained or expected (if not available, it must be made clear when they will be) : A final methodological design was prepared and tested in a pilot experiment. Mixed-effects regression models revealed a statistically significant effect of prepared scenarios on most of our variables. Our data showed no significant effect of general deceptive behaviour on any variable except the number of eye-fixation measurements.

Limitations : Because this is a laboratory study, the results cannot be generalised to regular conditions of personnel selection procedures.

Research/Practical Implications : The methodological approach could be used and re-evaluated in future laboratory studies of non-invasive deception detection in job interview simulations. The results pave the way for further application of non-invasive technology in lie detection which could overcome the ongoing problems with contact-based measurements.

*Keywords: non-invasive deception detection, personnel selection, psychophysiological experiment*

## Poster P042

### Animal ethics committees all around the world

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Millions of animals are used each year for scientific purposes. Often life-saving treatments without alternatives for performing research on a complete living being are implemented. In animal experimentation medical treatments are developed, drug toxicity is determined as well as product safety, biomedical or other health care processes for humans is checked. Often animal rights-activists or groups describe animal experimentation as cruel and inhumane and insist on alternatives for replacement. So, animal ethics committees play a very important role in order to discuss if a special animal experiment is necessary or can be replaced, reduced or refined according to the 3 R's of Russel & Burch (1959).

In a mapped review scientific articles about animal ethics committees all around the world were found. Veterinarians are the most important experts in evaluating the animal welfare in animal experiments. Despite, this group of experts are in most countries not the only members but animal-rights activists or simply laypersons are members of animal ethics committees also that are part of the population of a country as well.

In the results the methodological procedure will be outlined. Starting with the appropriate search string, then presenting the chosen data bases in showing a prisma flow diagram and finally constituting the in- and excluded criteria of the review will be part of the process.

A scientific report of every country in the world is difficult to receive. Looking at continents most literature is published in the European countries. Grey literature is an important additional source of information which especially in conference proceedings and institutional working papers can be achieved.

In a changing world and at a time of war people all around the world reflect about the dealing with animals. On the one hand animals are our best friends as pets and on the other hand humans are using them as food, for experiments or as spare parts stores.

Most animal ethics committees around the world are composed of a mixture of experts and laypersons. The quality of education is different in the groups of members in order to represent the population more as a whole and not only the experts as a special part of the population who may be more in favor of being for animal experimentation. In reducing inequalities while decision making processes pro or contra animal experimentation, experts and laypersons have the equality of votes.

*Keywords: animal ethics committee, ethics of animal experimentation*

## Poster P045

### **How demands of flexible work relate to employee engagement and emotional exhaustion. The mediating role of (mal)adaptive regulation**

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science

The goal of this study was to investigate whether and to what extent high job autonomy might strain employees. This aligns with meta-theoretical reasoning (e.g., Warr, 2017). However, only inconsistent evidence supports this theorizing (Kubicek et al., 2014; Dettmers & Bredehöft, 2020). Theoretically, we combined research on Job Design Demands (JDD) (Dettmers & Bredehöft, 2020) and on Cognitive Demands of flexible work (CODE) (Prem et al., 2021). The JDD and CODE scales were developed to capture demand-like features that might emerge from job autonomy. We focused on the task and process domain. Examples include development, planning demands and demands to regulate effort (JDD subscales) and demands for coordinating with others (CODE subscale). Theoretically, e.g., coordinating, and planning might involve the expenditure of (mental) effort. Hence, employees might experience e.g., more fatigue or less detachment. However, dealing with JDD and CODE might simultaneously foster work motivation, or cognitively flexibility (Kubicek et al., 2021). Against expectations many employees seem to experience resource gains, rather than losses, when dealing with JDD and CODE (Dettmers & Bredehöft, 2021; Kubicek et al., 2021; Kubicek et al., 2022; Uhlig et al., 2022). To further investigate these assumptions, we combined the JDD and CODE scale with (mal)adaptive regulation. Regarding adaptive regulation, we assume that many employees will use increasing JDD and CODE to better align their jobs with their strengths (Job crafting towards strengths). Regarding maladaptive regulation, we assumed that many employees would prolong their working hours when dealing with JDD and CODE. Thus, when JDD and CODE (T1) promote both adaptive and maladaptive regulation (T2), this should lead to both more exhaustion and more engagement (T3). We conducted a three-wave lagged design, with 130 heterogeneous participants and three measurement points at an interval of four weeks. Preliminary results of hierarchical multiple regression analyses show that only development demands predicted both prolonged working hours and engagement. Against, our expectations planning demands showed negative relationships with exhaustion, while, as expected, showing positive relationships with job crafting towards strengths and engagement. Furthermore, demands to regulate effort showed only a positive relationship with exhaustion, while coordinating with others was unrelated to outcome variables. Finally, no expected mediation effects were found. Our main limitation is the self-assessment of cognitive demands that in many cases might occur rather unconsciously (Rau et al., 2020). Practically our findings might indicate that demands emerging from unstructured work are very unlikely to strain the average employee. We urge future research to focus on (un)favorable boundary conditions that might amplify potentially straining and motivating autonomy-outcomes (Van Veldhoven et al., 2020). Our study aligns with conference's topic (changing world of work) and the UN SDGs (decent work and economic growth). Empirically, the changing face of work, seem to contradict only partially the unambiguously health promoting nature of job autonomy (e.g., Warr, 2017). Instead, contradiction-free autonomy might be an ever more important prerequisite for proactivity and value creation, as well as for adaptive regulation and well-being.

*Keywords: Flexible work, cognitive demands, job strain*

## Poster P046

### Development of a digital situational judgment test for social and emotional competences in medical assistants

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science

#### Research goals

The mental wellbeing of people working in the health care sector has been a widely discussed topic during the Covid-19 pandemic. Medical assistants (MAs) work in doctors' offices and perform tasks both in patient management and treatment assistance. For these tasks they not only need healthcare skills, but also social-emotional competences, for example for calming down agitated patients. However, instruments to assess general social competences often do not reflect the specific competences needed by MAs. We therefore further developed a situational judgment test specifically targeted at the social and emotional competences of MAs in training.

#### Theoretical background

According to Monnier et al. (2016), the central social and emotional competences MAs need in their daily work are emotion regulation, perspective coordination and communication strategies. For operationalising emotion regulation, we resorted to the works of McRae and Gross (2020) on the use of different strategies in dealing with emotions. Perspective coordination was defined following Selman's (1986) research on the ability to coordinate different perspectives in interpersonal conflicts. The operationalisation of communication strategies is based on Rosenberg's (2015) approach to nonviolent communication. Resorting to these theoretical foundations, we developed rating schemes for open format questions on all three competences.

#### Methodology

The computer-based assessment instrument is designed as a (kind of) situational judgment test (Ployhart & MacKenzie, 2011). There are three parallel versions of the test, each comprising 12 interaction situations identified in requirements analyses with MAs and doctors by Critical Incident Technique (Flanagan, 1954). The situations are presented as short video clips, filmed from a first-person angle, followed by open-format questions addressing the three competences.

We are currently piloting the test with 200 apprentices in their second year of training to become MAs.

#### Results expected

Firstly, we will present sample test items. Secondly, we will describe the development of the rating schemes for participants' answers. Thirdly, we will present psychometric properties of the current test versions like interrater-reliabilities, internal consistencies and factor loadings based on the data collected in the piloting phase in autumn 2022.

#### Limitations

Preliminary data analyses indicate that test-taking takes longer than expected and that participants might progressively reduce their effort, which in turn may result in varying amounts of information available for rating the answers.

## Implications

We developed a theoretically founded test for occupation-specific competences that could not be assessed properly so far. The test will be used for research purposes like evaluating the effectiveness of trainings. Additionally, teachers and trainers could use the tests to assess competence levels in their classes to inform them on their apprentices' needs for support in this area. The test could also be adapted to other professions with similar social-emotional demands.

## Relevance to Congress Theme

To maintain a functioning healthcare system, not least during the COVID-19 pandemic, MAs need social-emotional competences now in order to stay healthy themselves and do a good job in supporting doctors in their practices in the future. To foster these competences successfully, we first need to develop instruments that assess them reliably.

*Keywords: Social-emotional competences, medical assistants, computer-based testing*

## Poster P050

### Relationships between leaders' and followers' views on the effectiveness of teamwork

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science&practice

**Research goals:** Our research aims to better understand the relationship between team leaders' and team members' views of teamwork effectiveness. Discrepancies in perceptions can have a negative impact on engagement, participation and job satisfaction, because these factors play an important role in team/organisational performance, development and innovation, and employee well-being.

**Theoretical background:** The effectiveness of teamwork can be hindered by many factors. Research of related studies has confirmed the importance of focusing on teamwork effectiveness as it increases organisational resilience, agility and the ability to innovate. This was partly examined in Studies I and II (2021). Study I proved evidence about discrepancies in perceptions of teamwork effectiveness between teams and leaders. Study II shows that to significant factors influencing team performance and innovation include clear mission, diverse talents and decision-making power.

**Methodology:** We are interested in the nature of the relationship between team leaders' and team members' views on teamwork effectiveness, as team leaders' views may be causally related to those of team members. The sample of 85 work teams (75 team leaders, 11 team superiors and their 740 followers, and 9 participants in the team role „Others“) was surveyed from 12/2014 to 3/2021 using the online questionnaire TAS-II. Our first step is to estimate the direction and strength of the relationship between team leaders' mean scores and team members' scores on the 8 main scales of TAS-II (Context, Mission, Talent, Norms, Buy-in, Power, Morale and Results). For this purpose, we used the Bayesian hierarchical regression model with the skewed normal response distribution, the identity linkage function and the default priors. Team members' and average team leaders' scores were used as response variable and independent variable, respectively. Team IDs and TAS-II scales were used as grouping variables, as we can assume that the available observations within the same teams and on the same scales are more similar.

**Results:** The resulting 95% credible interval for the population-level effect of independent variables includes values between 0.14 and 0.26, indicating a relatively weak positive relationship between team leaders' and team members' views on teamwork effectiveness. When examining specific TAS-II scales, the strongest effects are observed for the Morale, Mission, and Buy-In scales and the weakest effects in the case of Results, Talent and Power scales.

**Limitations:** The study is only correlational in nature and therefore provides only weak evidence for the existence of a causal relationship between the views of team leaders and team members on the effectiveness of teamwork. The TAS-II questionnaire has not yet been localised for Slovakia.

**Research/practical implications:** Our study offers new insights into the potential mechanisms of the influence of the leader's perception of teamwork effectiveness on teamwork/followers in the team. We discuss the implications of the findings. The findings are useful not only for academics but especially for practitioners. Eliminating discrepancies and communicating regularly about moral values and shared mission are helpful in enhancing performance, commitment and job satisfaction as

well as innovation, and in helping individuals, teams and organisations to progress in a highly competitive environment. This work was supported by KEGA 005/UKF4/2021 and IGA FF 2023/001.

*Keywords: TAS-II, teamwork effectiveness, team L&D*

## Poster P051

### Days When Mothers Work from Home: Interferences, Coworker Incivility, and Work Vigor

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science&practice

Hybrid work arrangement (HWA) offers employees the options of working in office on some days and at home on others. It has become a contemporary work norm after Covid-19, and has been lauded for offering employees greater flexibility in juggling their work and personal demands. Some advocating it as a solution for increasing women's participation in the workforce. This research challenges the notion that HWA is beneficial for women. Integrating theories of gender roles and biases with workplace incivility, we hypothesize:

On days when they work from home (vs. office), employees will experience greater daily work-family interference (WFI) and family-work interference (FWI).

The daily positive relations of working from home with WFI and FWI will be stronger for women, especially women with children.

Daily WFI and FWI will be positively related to the daily incivility employees receive from their coworkers.

Daily incivility will be negatively related to next-day work vigor, but this will be weakened if employees perceive general ease of communicating with their coworkers virtually (vs. in-person).

We conducted an experience-sampling study on 117 full-time employees who were in a HWA (i.e., at least 50% split between home and office). They completed a baseline survey and two daily surveys for ten consecutive workdays. We received and matched 1104 daily observations. In the baseline survey, they reported their gender, whether they had children, and the general ease of virtual communication with coworkers (e.g., "In general, it is more tedious exchanging information with my supervisor/coworkers online than in-person (reverse)"). In the midday survey, they reported whether they worked from home (vs. office) on that day, family-work interference, work-family interference, and workplace incivility experienced so far that day. In the end-of-day survey, they reported their work vigor projected for the next day (e.g., "I look forward to getting up the next morning to start work"). We conducted multilevel modelling in Mplus.

The results showed that on days when they worked from home, women, especially those with children, experienced greater FWI (but not WFI) than men and women without children. Both daily FWI and WFI were positively related to daily incivility from coworkers. Interestingly, daily coworker incivility was positively related to next-day work vigor in employees who perceived greater ease of virtual communication with coworkers.

The research used ratings from a single source. Future studies could consider other-source ratings for variables like FWI, WFI, and incivility.

The research poignantly demonstrated that women with children experienced greater FWI when working from home and their coworkers penalized them with incivility. This suggests that even if HWA could encourage women's participation in the workforce, women with children might experience unpleasant treatment from their coworkers when they take up HWA.

This research contributes jointly to the congress theme and the UN SDG #5 (Gender Equality). We identify a vulnerable group who may be disadvantaged by the contemporary HWA and suggest that

this detriment could be reduced by strengthening online communication mechanisms in the organization.

*Keywords: hybrid work arrangement, workplace incivility, interferences*

## Poster P052

### Applying a job crafting intervention in a higher education context

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science&practice

Higher education (HE) students are a growing part of the overall population and of great importance to the growth of a country's economy (Auerbach et al., 2018; Wörfel et al., 2016). At the same time, HE students report high levels of exhaustion and burnout is even higher during study than during work (Robins et al., 2018). For this reason, universities should offer interventions to counteract this.

Lesener et al. (2020) introduced the study demands-resources framework (SD-R) and confirmed the core assumptions of the of the JD-R model (Demerouti et al., 2001) for the HE context. Job crafting—within the JD-R model—describes the proactive adjustment of employees' resources and demands with the goal of better matching work to personal needs and abilities (Tims & Bakker, 2010). Due to the positive effects of job crafting, interventions have been introduced to foster this behavior in the work context. The concept study crafting has also recently been examined in the HE context; however, no interventions have yet been introduced to foster study crafting.

Therefore, this study evaluated two brief (two weeks) online interventions aimed at (1) increasing resources, or (2) reducing demands. Based on findings from the work context, it was hypothesized that the resources-intervention would increase resources and the demands-intervention would reduce demands. Furthermore, it was hypothesized that both interventions would increase study crafting and thereby increase engagement and reduce exhaustion.

The study was a randomized controlled trial with a waiting-list control group. The final sample consisted of 205 participants divided among the resource-intervention group (  $n = 64$ ), the demands-intervention group (  $n = 70$ ), and the waiting-list control group (  $n = 71$ ). All participants completed a questionnaire before (T1) and after (T2) the intervention and at the 8-week follow-up (T3).

Results showed that the resource mindfulness, the study crafting strategies increasing structural resources and increasing challenging demands increased in the resources-intervention group after the intervention and at follow-up compared with the control group and compared with the pre-intervention level, while exhaustion decreased. The demand procrastination and the study crafting strategy increasing structural resources increased in the demands-intervention group after the intervention and at follow-up compared with the control group and compared with the pre-intervention level, while exhaustion decreased.

Several limitations need to be mentioned: The study was conducted at only one university and female students were overrepresented, limiting generalizability. In addition, the data were collected exclusively as self-reports.

Our study confirms that job crafting interventions can be effective in other contexts—in this case, the HE context. Therefore, universities should be aware of the potential of (study) crafting interventions as a cheap and effective intervention that can be an important component of student health management, but also support the successful application of study crafting strategies.

The relevance of our poster is that it presents an effective intervention to promote well-being and reduce burnout in the important group of HE students.

*Keywords: study crafting, engagement, burnout*

## Poster P053

### Trickle-around effects of injustice amidst the COVID-19 pandemic

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science

Research goals and why the work was worth doing:

Covid-19 has been an unprecedented shock that dramatically hit a myriad of stakeholders, including governments, organizations, families, and individuals. The Covid-19 pandemic has undoubtedly raised justice problems and different perceptions of inequality in the treatment and benefits received from employers that could have nurtured feelings of anger and resentment towards organizations. In this study, we propose a trickle-around effect of injustice during the Covid-19 pandemic. Specifically, we expected an indirect relationship between employees' overall injustice perceptions stemming from employers and incivility at work directed towards colleagues via employees' anger states. Moreover, we consider Covid-19 anxiety and moral obligation as potential boundary conditions of these relationships.

Theoretical background:

The Stressor-Emotion Model of Counterproductive Work Behaviors by Spector and Fox (2005) suggests that when an environmental factor such as injustice perceptions is perceived as a stressor, it can elicit a strong negative emotional response (e.g. anger), which, in turn, can trigger a behavioral action. We also propose that anger towards organizational representatives can trigger the behavioral action of incivility at work.

Additionally, relying on uncertainty management theory (van den Bos & Lind, 2002), we consider individual's Covid-19 anxiety as an individual factor that can moderate the relationship between individuals' perception of overall injustice and anger towards the organization.

Finally, we expect that moral obligations helps prevent individuals in engaging in uncivil acts and behaviors towards their colleagues.

Methodology:

We collected our data during the COVID-19 pandemic (May, 2020) in the United States. We used a three-wave survey design. Participants were recruited from Cloudresearch, an online sample provider. We obtained 156 complete and valid answers.

Results obtained:

We tested our model through structural equation modeling with Mplus. The results confirm the hypotheses of mediation of anger between justice and incivility and moderating role of both Covid-19 anxiety and moral obligation

Limitations:

Even if the data was collected in three waves, we cannot exclude reverse causation or assume causal relationships. Longitudinal and/or experimental studies can further provide empirical evidence for our proposed model.

Research/ practical implications:

We demonstrate how a significant and massive external shock can shape employees' organizational justice perceptions and their incivility behaviors at work – generating a trickle-around effect from actions of organizational representatives to employee's actions towards colleagues. We also focus on two important individual characteristics that can moderate the effects of overall justice perceptions, namely Covid-19 anxiety and moral obligation. Practically, results suggest that organizations do not get a free pass during a pandemic.

Relevance to the Congress Theme:

Our study adds to our understanding of how organization's actions towards employees during the first pandemic in recent times affected employees' state of mind and their behaviors towards their colleagues. Results help us to evaluate organization's responses and consequences of the pandemic, which can hopefully prepare us all better for the future pandemics and crises.

*Keywords: justice, covid anxiety, incivility*

## Poster P054

### Generational Differences in Work Values: Fact or Myth?

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science&practice

**Research goals:** Whether, how, and to what extent employees from different generations (i.e., Babyboomer, Generation X, Generation Y, or Generation Z) differ with regard to their work-related expectations, attitudes, values, or behaviors has become a frequently discussed topic in the popular media. The goal of the present research therefore was to shed more light upon this topic by developing a short, valid measurement instrument to assess work values and by examining potential generational differences in those work values in a representative online sample.

**Theoretical background:** Previous scientific research has provided limited or very mixed support for generational differences in work values. However, those findings are restricted with regard to sample characteristics (e.g., convenience sample / not representative of the population) or work values (e.g., some general values assessed but other more work-specific values missing).

**Methodology:** In a first step, we developed and validated ( n = 316) a short scale that allows to measure a broad range of work values. In a second step, we collected data within a representative online sample ( n = 956) to test for generational differences in these work values.

**Results:** Results provided support for the validity of our newly developed measurement instrument. We also found some statistically significant generational differences in work values, which, however were well explainable from an employee lifecycle perspective. For example, younger generations valued career or social aspects more strongly than older generations, whereas older generations valued stability/structure more strongly than the younger generations. On the other hand, generations did not differ significantly in values concerning sustainable organizational development, basic needs, or intrinsic work characteristics (e.g., autonomy or meaning).

**Limitations:** As we applied a newly developed scale, more research is necessary to further prove its validity. Furthermore, this study is limited by the shortcomings that generally hold for generational research (e.g., age-period cohort effects).

**Research/Practical Implications:** Our newly developed scale can be used by practitioners as well as researchers within the context of employer branding, recruitment, and employee retention. Furthermore, our results highlight the relevance of an employee lifecycle-perspective (rather than a focus on generational differences). We therefore strongly recommend to incorporate employee lifecycle strategies within organizations.

*Keywords: work values, generations, employer branding*

## Poster P055

### **The Perception of Skills in Organizational Psychology: The construction of a measure**

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science&practice

The role of the psychologist in the organizational and work context involves preparation to intervene in transformation processes, but also in a context in which the old coexists with the new and the management models are hybrid.

Considering the needs of the field, the Brazilian Association of Organizational and Work Psychology built a reference for training and professional qualification in WOP in Brazil. The document considered technical primary competences, basic for any interventions (analysis of demands and needs, assessment and diagnosis, planning, intervention, evaluation and communication), in addition to a set of primary personal competences, which consist of personal traits, attitudes facing their own career and relational skills (continuous professional development, self-assessment, creativity, innovation and entrepreneurship, working in multidisciplinary teams, communication, political vision and team articulation and leadership).

Although the manual, there was a gap in measures for the assessment of these competencies. Therefore, the objective of this work is to present the construction of an instrument on the perception of competences to work in organizational psychology, aimed at the public of psychology students inserted in internships, in addition to newly psychologists.

For the development of the instrument, the Skills Manual for Working in WOP was analyzed, together with the mapping of skills necessary for the performance of trainees in people management, carried out by Ramos, Costa and Feitosa (2017). From this analysis, an instrument with 13 dimensions and 41 items emerged, covering personal and technical skills. The first version of the instrument will be sent to eight judges selected for being specialists in competences and in the construction of instruments and for composing the target audience of the instrument. In a second moment, a pre-test will be carried out with about 70 students from a public university, in order to verify the initial psychometric behavior.

As results, it is expected that the judges' analysis and the pre-test present an initial structure of the instrument from its validity evidence, to be presented at the congress, along with the construction process. Such results will then enable a large-scale collection that represents a validation at the national level, planned for later stages of the project.

We emphasize that the construction process already has limitations, such as the use of only two national references, which restricts competences to the Brazilian context. After the stages of construction and validation for this context, it is expected that the instrument can be expanded and adapted to other realities.

Despite this, it is believed that the proposal has the potential to build scientific knowledge that can improve academic and professional practices. The application of the instrument should provide greater knowledge about the skills necessary for the performance of students and professionals involved in the WOP area, as well as the possibilities for professional development. It is believed that the instrument contributes to psychology as a science and profession, based on the advancement of the necessary skills for this performance. The work expands the discussion about the psychologist's

career and its potential and limitations, in addition to generating technical support for this discussion, which can be used in different situations.

*Keywords: Skills, Organizational Psychology, Measurement*

## Poster P056

### **Development of competencies for work in organizational and work psychology: An intervention model**

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practice

The objective of this work is to present an intervention model aimed at the development of competences for the work in WOP of psychology students and recently graduated psychologists, inserted in the area. The performance in these spaces is considered complex, involving not only the preparation to intervene in transformation processes, but also in a context in which the old coexists with the new and the management models are hybrid. Despite the great insertion in the area and the constant search for training, some studies demonstrate the need for professional development for this activity, based on gaps in the necessary skills to work with interns and psychologists at the beginning of their careers.

To develop the method, the assumptions of individual and on-the-job learning were considered, anchored in the concepts of Training, Development and Education, which seeks to create environments that facilitate learning at work and that consider the internal and external conditions existing in the environments. In these processes, it is necessary to carry out in-depth needs analysis and planning and execution, in addition to evaluating the results based on pre- and post-tests, based on the competencies and expected impacts. As a theoretical reference, we used the manual for training and professional qualification in WOP in Brazil developed by the Brazilian Association of Organizational and Work Psychology (SBPOT), which considers primary technical and personal skills.

The intervention proposal consists of holding open workshops offered based on the needs analysis carried out previously, based on an instrument developed for this purpose. The activity will take place on a monthly basis, in remote or hybrid format, lasting approximately three hours. The schedule of the workshops will be defined from the initial assessment, approaching the topics that present the greatest need in the assessment of competences.

As results, until the congress, it is expected that at least five workshops will have already been carried out and evaluated, with the presentation of the initial model and its results, in addition to the analysis of needs, being expected. The presentation of these results will enable the exchange of experiences and improvement of the project, so that it can be applied in its entirety.

It is considered that training cycles, based on practical needs and experiences, can provide direct benefits to workshop participants, by creating a space for training and improvement that represents an impact on performance and, therefore, on their careers. It is also believed in the potential for promoting the necessary dialogue between academia and the practical environment, by establishing a constructive dialogue with the organizational environment. The possibility of academic training and dissemination of scientific knowledge should strengthen healthy and ethical organizational practices, contributing to the development of the POT area.

Despite its limitations, especially as it represents an initial model that requires an assessment of feasibility and impacts, in our view, the model already represents an important contribution. It can enrich the discussions offered by EAWOP and offer support to students and educators in the area, based on the advancement of the necessary skills for this activity.

*Keywords: Skills, Intervention, Development*

## Poster P057

### The Predictive Effects of Personality and Gender on Leader Emergence in Groups

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science&practice

**Aim & Theoretical Background.** Despite women increasingly entering leadership positions in organizations, inequalities in career advancement continue to exist (Sczesny et al., 2007). While past research focused mostly on contextual and organizational factors to explain disproportional leadership emergence of men and women, the current study contributes to this discourse by examining the role of individual-level traits and behaviors in predicting leader emergence of men and women. Specifically, the current study aims to understand how the mechanisms underlying the well-established relationship between extraversion and leader emergence (Judge et al., 2002) may differ between men and women. I predict that the assertiveness facet of extraversion, as manifested in the construct dominant behavior, mediates the positive effect of extraversion on leader emergence. Based on social role theory (Eagly, 1987) and gender stereotypes (Costa et al., 2001), female group members showing dominant behavior might be evaluated less favorably than men, undermining the positive effect of extraversion on leader emergence. Thus, I expect a moderating effect of gender on the relationship between dominant behavior and leader emergence.

**Methodology.** Data was gathered from 98 participants and was analyzed using a moderated mediation analysis in PROCESS, with extraversion as independent variable and leader emergence as dependent variable. Dominant behavior was the mediator between extraversion and leader emergence and gender the moderator of the effect of dominant behavior on leader emergence.

**Results.** As expected, extraversion and leader emergence were positively related. This relationship was fully mediated by dominant behavior. In contrast to my hypothesis, gender did not moderate the effect of dominant behavior on leader emergence. However, significant mean differences were found in dominant behavior and leader emergence, with men displaying more dominant behavior and emerging more frequently as leaders.

**Implications.** The findings contribute to our understanding of gender differences in leader emergence in three ways. First, results support previous findings on the predictive effect of extraversion while revealing that the assertiveness facet is highly relevant for leader emergence. Second, the positive effect of dominant behavior on leader emergence does not seem to differ for men and women, suggesting that dominant behavior is equally rewarded and predicts leader emergence across gender. Third, however, women, on average, seem to engage less in dominant behavior, contracting the positive effects of extraversion on the acquirement of leadership roles and hence restricting their access to those.

**Limitations.** Future studies should make use of experimental designs to further increase the generalizability of the results and establish the direction of causality. Additionally, a group setting would allow to assess all group members and investigate the effects of group composition in terms of gender and group-level extraversion. Alternative measures of leader emergence should be included to test if any moderating effects of gender exist for other operationalizations.

**Relevance.** This research is in line with the congress topic areas of leadership as well as diversity and inclusion and primarily addresses UN SDG5 (gender equality) and SDG10 (reduced inequalities).

*Keywords: leader emergence, leadership, gender differences*

## Poster P060

### **Leadership – The Role of Your Life? The Influence of Leadership Motivation on the Team, Mediated by Role Satisfaction in China and Germany**

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science

Research goals and why the work was worth doing

Our research goals were (1) to introduce role satisfaction with the leadership role as mediator of the effects of different motivation-to-lead types and (2) to show that cultural background is an important boundary condition for the relationships.

Theoretical background

The motivation to lead (MTL) paradigm in its German version (FüMo, Felfe et al., 2012; based on Chan & Drasgow, 2001) distinguishes three different types of motivation for a leadership position: affective (aMTL, enjoyment of leadership itself, intrinsic), normative (nMTL, leadership as social norm and responsibility; extrinsic) and calculative (cMTL, motivated by personal benefits, extrinsic). Badura et al. (2020) show in a meta-analysis positive effects of aMTL and nMTL and negative effects of cMTL on work-related attitudes and behaviors.

We complement this research by integrating role satisfaction with the leadership role as one important mechanism for these effects of MTL on team effectiveness and team climate and adding culture as a boundary condition for positive effects of nMTL.

Design/Methodology/Approach/Intervention

We collected online questionnaire in three different samples: a German leader sample (N = 129), a German follower sample (N = 104) and a Chinese follower sample (N = 164). Items were related to the participant him\*herself (in the leadership sample) or the direct leader (followership samples), and the participant's team.

Results obtained

We found that MTL influences team effectiveness and team climate. The strengths and direction of this influence depends on the type of MTL. Role satisfaction mediates this effect, especially regarding aMTL. Additionally, we found cultural differences. aMTL is always positively related to role satisfaction and team outcomes. In contrast, nMTL has positive effects in China, but not in Germany. cMTL is especially negative from a German follower perspective, while Chinese followers perceive it somewhere between neutral and positive.

Limitations

Because the data is cross sectional, we can not draw conclusions about the causality of the relationships.

Research/Practical Implications

We draw the conclusion from our results that the way in which a leader is motivated for his or her leadership position is strongly connected to team outcomes. Therefore, it is important for organizations to take motivation to lead into account when filling a leadership position. Additionally,

our data shows that in practice as well as in research it is highly important to consider the cultural background when working with MTL.

#### Relevance to the Congress Theme

In a rapidly changing world of work where complexity is increasing, it is important that leaders are motivated in a way that they feel satisfied with their role and thus can guide and positively influence their followers.

#### Relevant UN SDGs

This research contributes to the UN SDGs of good health and wellbeing as well as to decent work and economic growth. We show that motivation to lead is an important factor for the satisfaction of leaders as well as for the effectiveness and the climate of their team. These variables are important for the wellbeing as well as for decent work conditions of leaders and their followers.

*Keywords: motivation to lead, role satisfaction, cultural influence*

## Poster P061

### Organizational factors determining workaholism: the results of a systematic review

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science

Research goals and why the work was worth doing. As the majority of research focused on describing, rather than explaining workaholism, antecedents are probably the least understood aspect of it. The existing reviews did not generate a comprehensive discussion around the theme of workplace aspects predicting workaholism. Therefore, the aim of this review was to systematically review scientific literature on the relationship between organizational factors and employees' workaholism.

Theoretical background. Keeping in mind the fact that organizations often appreciate hardworking employees, the authors suggested that organizational factors (the aspects of work itself, the organizational environment, as well as interpersonal communication) play an important role in the development and maintenance of workaholism behaviors. However, the data of the previous research are still scattered and far from consistent.

Methodology. Computer-based literature searches were conducted through September, 2020. Five online databases were used to search for scientific papers. The key terms used in a literature search (with their synonyms and closely related words) were "workaholism" and "organization". The relevance of the studies was determined by screening the titles, abstracts and full texts. Studies that met the following criteria were considered eligible: research was quantitative; the focus was on the role of organizational factors in predicting employees' workaholism.

Results. The results of the 24 studies in this review show that workaholism is influenced by a wide variety of organizational factors. However, the overall construct of job demands (as well as two specific types thereof that are referred to as emotional and cognitive demands) was confirmed as the most important factor predicting the increased levels of workaholism. Some conflicting information was also found. For instance, although the phenomenon of social support at the workplace was a commonly measured factor in predicting workaholism throughout the studies and although the authors expected social support provided by a manager and co-workers (and overall organizational support) to be the factor decreasing employees' workaholism, however, all of them reported controversial results.

Limitations. The primary limitation concerns publication bias. Taking into consideration the exclusion criteria used during the process of study selection, we did not analyze all the relevant scientific literature in this field. Second, all studies included were cross-sectional in design, limiting the interpretations of cause-effect relationships.

Research Implications. Our systematic review is (to the best of our knowledge) the first to summarize the existing knowledge of the effects of organizational factors on the levels of employees' workaholism. Hence, the present review expands the knowledge of the field and lends highly necessary support to the claims of a link between organizational factors and workaholism.

Relevance to the Congress Theme and UN SDGs. The current review helps to disclose the organization-related factors strengthening workaholism and simultaneously leads to consider how this health-damaging phenomenon can be addressed from organizational level.

*Keywords: Workaholism, organization, antecedents*

## Poster P062

### Defining the border between workaholism and work addiction: the results of a systematic review

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science

Research goals and why the work was worth doing. There was a long period of confusion as to the conceptualization of both forms of excessive work (workaholism and work addiction). We strongly believe that subsuming different types of work-related behaviors under the same heading is not a very good strategy because this “blurs” the meaning of possibly different phenomena. Therefore, the aim of this review was to define the conceptual border between workaholism and work addiction.

Theoretical background. The primary scientific debate is now focused on the juxtaposition of work addiction with workaholism. These terms were often used interchangeably, leading to a lack of conceptual and empirical clarity. It left many questions unanswered such as whether workaholism could be separated from work addiction or maybe both of them could be merged into a single phenomenon and used as synonyms.

Methodology. The purpose of a current study was achieved by performing a systematic search of scientific literature. The search was limited to references published from 2007 onwards. Five online databases were used to search for scientific papers. Since “workaholism” was traditionally used in the literature as a general term to indicate related phenomena (including work addiction), the former was regarded as the general keyword throughout the search. The relevance of the studies was determined by screening the titles, abstracts and full texts. Both authors performed a study selection independently. Only those papers that did not include any established exclusion criteria and that met all the inclusion criteria were analyzed.

Results. A systematic review included a total of 79 studies. Most authors who attributed workaholism to the group of addictions described it as a state of being overly concerned about work, driven by an uncontrollable work motivation and investing much time and effort into work, which leads to negative consequences. Seven clinical criteria (saliency, tolerance, mood modification, conflict, withdrawal, relapse and problems) were proposed as key aspects comprising the phenomenon. The authors who named workaholism as a behavioral pattern or a personal characteristic, defined it mainly as the obsessive, irresistible inner drive to work excessively hard and explained the phenomenon in terms of the aspects of excessive and compulsive work.

Limitations. The primary limitation concerns publication bias. It is possible that the validity of the present review was influenced by publication bias due to the exclusion of gray literature, unpublished studies and non-English publications.

Research Implications. This review contributes to literature by integrating current divergent opinions on the conceptualizations of workaholism and work addiction and guiding future research. By reducing the “blurred” boundaries between the similar constructs, our review addressed the issue of the conceptual confusion that hindered theoretical and empirical progress on a field. We suggest that the term “work addiction” should be used to denote merely the genuine addiction and the term “workaholism” - to denote anything related to too high involvement in work.

Relevance to the Congress Theme and UN SDGs. The present study provides a first quantitative summary of differences between workaholism and work addiction, which is a highly important step towards the necessary changes in studying and managing these constructs of employee well-being.

*Keywords: Workaholism, work addiction, concept*

## Poster P063

### **From training to transfer: a qualitative study on the implementation of motivational counseling by public health insurance practitioners.**

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science&practice

**BACKGROUND AND PURPOSE** - Absence from work due to sickness is an increasing societal problem. Return to work (RTW) can be seen as a complex decision-making process which involves biomedical, psychological and social factors. Personal coaching is needed to facilitate the RTW of work disabled patients. Important stakeholders are public health insurance practitioners who have a dual task: evaluating the eligibility of the sickness benefits but also providing their patients with advice and guidance.

Because of the controlling aspect that is inherently present in these consultations, we suggest that adopting a more positive and need-supportive communication can benefit work disabled patients' well-being. Furthermore, since motivation is an important predictor of RTW, practitioners should focus on enhancing patients' motivation and stimulate them to take charge of their own RTW process. Therefore we developed an innovative counseling method (i.e. motivational counseling) that integrates both the techniques of motivational interviewing and the principles of the self-determination theory.

The purpose of this qualitative study is to explore the experiences of health insurance practitioners who are trying to implement motivational counseling (MC) in their daily practice. This will allow us to provide recommendations for further training and implementation of motivational counseling which in turn can promote the RTW of work disabled patients in the future. Besides these advantages for practice, this study also contributes to expanding the knowledge on transfer of trainings based on motivational interviewing.

**METHODS** – We used the intervention mapping protocol to develop our motivational counseling training program. This protocol consists of 6 steps: 1) problem analysis, 2) determining change objectives and 3) identifying theory-based methods to address these, 4) practical application into an organized training program, 5) adoption and implementation plan and 6) evaluation plan to conduct effect and process evaluations. 32 public health insurance practitioners (advising physicians, paramedics and RTW-coordinators) will receive a 10-hour training in motivational counseling. One month after we will conduct a focus group with each participating health insurance fund in order to perform a process evaluation of the implementation. A total of 7 online focus groups will be audio-recorded, transcribed and analyzed through thematic analysis. The Medical Research Council (MRC) process evaluation framework will be taken into account for the interview guide and the coding process of the collected data.

**RESULTS** - The qualitative results are expected to be obtained in December 2022 and analyzed by early 2023.

**LIMITATIONS** – Our results will only be applicable for the Belgian social security context.

**RELEVANCE TO THE CONGRESS THEME AND UN SDG's** – This study will contribute to improving the practice of health insurance practitioners and may therefore also benefit their well-being at work. A more long-term goal of this research project is to promote work disabled patients' well-being and

facilitate their process of a sustainable return to qualitative work. Therefore this study relates to the UN SDG's of 'good health and well-being' and 'decent work and economic growth'.

*Keywords: sickness absence, training implementation, self-determination theory*

## Poster P064

### Internet addiction, studyholism, and exhaustion: a moderated mediation with optimism

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science

**Research Goals:** Understanding the psychological wellbeing of university students by investigating the role of study load and internet addiction as demands and optimism as a personal resource.

**Theoretical Background:** University students during the COVID-19 emergency experienced increased stress, anxiety, study obsession (studyholism) (Aristovnik et al., 2020; Loscalzo & Giannini, 2021), ICT use for learning and problematic internet usage, related to decreased psychological wellbeing (Gavurora et al., 2022). Study load and Internet addiction (IA) are positively related to academic burnout (Tasso et al., 2021; Zhu et al., 2022). Studyholism is related to stress, sleep problems, and negative affect (Loscalzo, 2021) and it may be considered an early form of workaholism (Atroszko, 2016). Compulsive internet use has been linked with workaholism (Quinones et al., 2016), but this relationship is less investigated in students. However, the presence of personal resources such as PsyCap, of which optimism is a dimension (Luthans & Youssef, 2004), can protect against the risk of adopting maladaptive coping strategies, such as internet and study or work addiction.

**Methodology:** The study has been conducted during the second lockdown of the COVID-19 pandemic in Italy, involving 10298 participants from 11 universities (70.8% females, mean age 24.25 years; SD= 6.13). Participants gave their informed consent to fill in an online questionnaire on various aspects of academic and personal life. SPSS 26 and R were used to perform descriptive analyses and test a moderated mediation model.

**Results:** The moderated mediation was conducted including study load and IA as independent variables, optimism as a moderator, studyholism as a mediator and emotional exhaustion as dependent variable. I controlled for age, gender, broad scientific area, and being on par with exams. Both study load and IA were positively associated with studyholism, which partially mediates the relationship between the two IV and exhaustion. Optimism is a protective factor against studyholism, although the interaction effects are positive, showing that the two IV have a stronger effect on studyholism and indirectly with exhaustion for higher level of optimism. The first regression model explains 41% of variance, the second 43%.

**Limitations:** The study uses a cross-sectional design and self-reported data, increasing the likelihood of common method variance, and excluding causal inferences. There are no systematic pre-pandemic analyses on these dimensions in this population, preventing comparisons.

**Research/Practical implications:** This research offers some insight about the nature of studyholism and contributes to the notion that study addiction may stem from a combination of personal and contextual resources and demands. The results show that the compulsive use of internet and excessive study load lead to study addiction with negative consequences on well-being.

**Relevance to the Congress Theme:** Internet addiction and overworking are increasingly common problems, which may originate early; investigating students' wellbeing is important to reflect on what kind of work environments we will shape in the future.

**Relevant UN SDGs:** Good health and wellbeing, Quality education

**Keywords:** *studyholism, internet addiction, student wellbeing*

## Poster P065

### **The longitudinal influence of job and off-job crafting on well-being among school principals: The role of basic psychological need satisfaction**

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**Goal and Theoretical background:** The stress of the COVID-19 crisis is clearly taking a toll on school principals, who are already dealing with a large workload (Lien et al., 2022). It is important to take into account their well-being, as they play a crucial role in their school and beyond. Job and off-job crafting may be a promising strategy for principals to adapt to the increasingly dynamic work environment. Job crafting is the process of changing one's job duties or responsibilities in order to improve one's work experience (Tims et al., 2012), while off-job crafting is the process of shaping one's off-job life in a way to meet psychological needs (Kujanpää et al., 2022). Both job and off-job crafting can contribute to well-being (Tims et al., 2013; Kujanpää et al., 2022). However, it is not well understood whether these two types of crafting have unique contributions to well-being when both are simultaneously considered in a single framework. Moreover, the common mediating factors underlying the relationships are not much explored in the literature. This study aims to address these gaps by examining how job and off-job crafting is associated with work engagement and perceived health (fitness and depressive symptoms), and whether need satisfaction mediates these relationships. Combining crafting theories (de Bloom et al., 2020; Tims et al., 2012) and self-determination theory (Ryan & Deci, 2008), we propose that an increase in job and off-job crafting contributes to an increase in need satisfaction, which, in turn, predicts desirable changes in well-being.

**Methodology:** The data was collected from Finnish school principals in the Spring of 2021 and one year later via an online survey platform (Qualtrics). Participants assessed their own job and off-job crafting, need satisfaction, work engagement, fitness, and depressive symptoms. For this study, longitudinal data from 205 principals were used, and hypotheses were tested using path analysis in AMOS 28, with missing data complemented by multiple imputation.

**Results:** The increase in job and off-job crafting predicted the increase in need satisfaction. The increase in job crafting contributed to the increase in work engagement. The increase in need satisfaction predicted an increase in work engagement and fitness and a decrease in depressive symptoms. Need satisfaction mediated the relationship between crafting and well-being outcomes: the increase in job and off-job crafting contributed to the increase in work engagement and fitness and the decrease in depressive symptoms via the increase in need satisfaction.

**Limitations:** The main limitation of this study is a small sample size and the risk of common method bias due to the exclusive reliance on self-reporting for the measurement approach.

**Implications:** The results of this study suggest that increasing job crafting and off-job crafting leads to an increase in need satisfaction, which ultimately predicts desirable changes in well-being. School principals are therefore encouraged to engage in both job crafting and off-job crafting.

**Relevance to the congress theme:** Accelerating social change and the protracted unforeseen crisis have imposed enormous demands and pressures on school principals, which puts their well-being at risk. Therefore, an effective means for maintaining their well-being is urgently needed. This study suggests that by crafting the job and off-job activities, principals may be able to manage their well-being in a proactive manner.

**Keywords:** *Job crafting, off-job crafting, need satisfaction*

## Poster P068

### Intersectionality at Work: An Investigation of Ethnicity and Sexual Orientation Perceptions

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science

Estimating Turkey's cultural nature (i.e., collectivistic, House et al., 2004), identities falling outside the dominant social identities (i.e., Turkish and heterosexual, Özatalay & Doğuç, 2018) may be more likely to be stereotyped and discriminated in work setting (e.g., Strinić et al., 2021). As intersectionality theory (Crenshaw, 1989) emphasized, since people have multiple identities, the possible intersection of these identities can provide diverse insights. Likewise, double or multiple jeopardy theory (Chappell & Havens, 1980; Nelson & Probst, 2004) argued that belonging to more than one outgroup simultaneously can increase the severity of discrimination.

Based on the gap in the literature and grounded in intersectionality theory (Cole, 2009), our study's aim was to explore others' competence/warmth perceptions and preference to have others as colleagues and managers regarding their ethnicity, sexual orientation, and their intersection in the business context.

We adopted a descriptive research methodology. We had different profiles indicating ethnicity (Kurdish/Turkish), sexual orientation (Homosexual/Unspecified), and interaction of them. We asked university students to rate the profiles on their level of warmth and competencies by deploying the Warmth/Competence Survey of Cuddy et al. (2009). We also asked whether others would like to be colleagues with them and would like to have them as their managers. Our sample consisted of 451 university students (87.1% Turkish, 82.3% Women).

We conducted a MANOVA to check grouping variables' possible effects on warmth and competence perceptions and preference for being a colleague or a manager. The results revealed that the grouping variable explained 12% of the variance in competence ( $F = 70.97, p < .001$ ), 7% in warmth ( $F = 39.25, p < .001$ ), 15% in colleague preference ( $F = 93.65, p < .001$ ), and 20% in manager preference ( $F = 130.35, p < .001$ ). Tamhane's T2 analyses revealed that the Turkish category was rated significantly warmer than Kurdish and other categories, including homosexuality. Compared with TurkishxHomosexual, KurdishxHomosexual was evaluated as significantly less warm. The Homosexual category did not significantly differ from the Kurdish. The analysis also showed that Turkish was evaluated as the most competent and significantly more competent than all other categories except UnspecifiedxKurdish. On the other hand, HomosexualxKurdish was evaluated as significantly less competent among all categories but Homosexual. Regarding the preference to be a colleague, Homosexual was significantly less preferred than HomosexualxTurkish. On the other hand, Kurdish was rated less preferred than HomosexualxKurdish. The TurkishxHomosexual category was rated over the Homosexual and HomosexualxKurdish. Regarding the preference for a manager, the categories including homosexuality were significantly less preferred than ethnicity and unspecified only, and unspecified x ethnicity categories. While Kurdish was less preferred than Unspecified, Turkish was more preferred than Unspecified.

Some limitations include a sample dominated by women and people who identify themselves as Turkish. Yet, as students will soon be part of the workforce, it draws attention to the fact that organizational decisions are vulnerable to societal perceptions. Thus, practitioners should cultivate practices to hinder latent biases while researchers focus on different identity elements and empirically test the phenomenon.

*Keywords: intersectionality, social content model, organizations*

## Poster P069

### **Social well-being profiles: Associations with trust in managers and colleagues, job satisfaction, and intention to leave**

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Recent research (2023) increasingly shows that the quality of working relationships is the single most important factor that affects employees' well-being. It is thus essential that social scientists pay more attention to this aspect of well-being to form a better understanding of how it can support employees from diverse backgrounds to equally thrive within work and organizational contexts.

Existing research shows that interdependence among employees is crucial due to information, resources and social support that flow through networks. The workforce composition has also become more diverse and calls for a nuanced understanding of the factors that may influence employees' sense of social inclusion, belonging and connectedness to others – factors that influence their motivation and access to equal opportunities and decent work.

Using a positive psychology framework as point of departure, well-being can be understood as a multidimensional, context specific construct which reflects an individual's subjective state of feeling good (emotional well-being) and positive functioning (psychological and social well-being). Previous studies focused relatively more on the emotional- and psychological components while less is known about employees' social well-being.

This study challenged homogeneity of social well-being among members of a diverse workforce. It employed a cross-sectional survey design and a person-centered approach to identify social well-being profiles and to examine differences between the profiles in terms of trust in managers and colleagues, job satisfaction, intention to leave, and demographic variables.

The study is situated in a developing country context and targets permanently employed individuals of a utility organization which is critical to the South African economy (N=403). The Social Well-being Scale, Workplace Trust Survey, and Job Satisfaction and Turnover Intention Scales were administered. Mplus version 8.6 was used to analyse data. Three profiles of social well-being were identified: the socially well, socially withdrawn, and superficially socially well. The first two profiles demonstrated either relatively high or relatively low scores on five dimensions of social well-being (contribution, integration, acceptance, actualization, and coherence). The superficially socially well profile showed above-average social contribution and integration, but below-average social acceptance, actualization, and coherence. The socially well profile was associated with trust in managers and colleagues, job satisfaction, and low intention to leave. The opposite patterns were found for the socially withdrawn profile. Two demographic variables, namely, age and service years, were associated with profile membership. The associations between age, job satisfaction, and intention to leave were more significant in specific social well-being profiles.

The originality of this research stemmed from methodically identifying and comparing specific subgroups of employees both in terms of their individual social well-being configurations and how these patterns related to trust relationships at work and complexities as influenced by a demographically diverse workforce composition. Recommendations were made regarding ways in which the social well-being of specific sub-populations within the sample group could be supported

*Keywords: social well-being; trust; latent profile analysis*

## Poster P070

### **Speaking without words: A meta-analysis of over 70 years of research on the power of nonverbal cues in job interviews**

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Interviews are the most popular method of personnel selection (Posthuma et al., 2002). Prior research shows that evaluations of interview performance are affected by both the verbal content of job candidates' responses to interviewers' questions (Burnett & Motowidlo, 1998; Krajewski et al., 2006) and by the nonverbal cues, behavior and characteristics beyond speech content, displayed within the interview (e.g., Fox & Spector, 2000). Moreover, people's nonverbal cues influence interviewers' judgments even after accounting for the content of interviewees' responses (Burnett & Motowidlo, 1998).

Yet, it remains unclear which cues most influence interviewers' judgments. Often hampered by small sample sizes and a limited number of cues, studies have produced inconsistent results. However, meta-analytic research may resolve the uncertainty produced by inconsistent results by aggregating results across multiple studies, allowing for the estimation of true, underlying effects by sifting the "signals" of those effects from the "noise" often contributed by small, underpowered studies (Schmidt & Hunter, 2015). Although many meta-analyses have focused on the employment interview (e.g., Huffcutt et al., 1996; Levashina et al., 2014), no meta-analytic research to date has been dedicated to examining the impact of specific nonverbal cues on interview performance.

The purpose of this investigation is to conduct the first comprehensive meta-analysis of the relationship between specific nonverbal cues and job interview performance. To do so, we integrated findings across 63 studies (total  $N = 4,868$ ) for inclusion in our meta-analysis. The nonverbal cues demonstrating the strongest association with employment interview performance were professional appearance ( $\rho = .62$ ), eye contact ( $\rho = .45$ ), and head movement ( $\rho = .43$ ). Only two of the five moderators examined (interview modality, structure, duration, gender, interview type, and study design) explained meaningful variance in the relationship between nonverbal cues and interview performance.

Gender of the interviewee played an important role on the effect of most, but not all, nonverbal cues on interview performance. Samples with more women than men demonstrated stronger effects of kinesics, professional appearance, facial expressions, and overall dynamic cues on interview ratings, but no effect on stigmatized appearance, vocalics, static overall, and nonverbal overall cue categories. Thus, women may be rewarded in their interview ratings more than men for how they dress (professional appearance) and for displaying dynamic nonverbal cues in the kinesics category, which includes facial expressions (eye contact and smiling), head movements, haptics, hand gestures, and posture. Second, the effect of nonverbal cues on interview performance is stronger in experimental studies than in correlational studies. This may have occurred because many experimental studies use simulated interviews in low stakes settings where motivation to effectively respond may be lacking (e.g., Woodzicka, 2008), which could artificially inflate the effect of nonverbal cues on interview performance.

Overall, results suggest nonverbal cues and characteristics are an important influence on job applicants' success in employment interviews. These findings imply that applicants may be able to improve their interview performance by honing some of their nonverbal skills.

*Keywords: Job Interviews, Nonverbal Cues, Meta-Analysis*

## Poster P071

### How much is too much? Reconceptualizing and Measuring Information Overload and Communication Overload

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science

**Research goals/Relevance :** Due to employees working from home, there has been a surge in the use of Information and Communication Technologies ( ICTs ) at work. Studies show that communicating via ICTs differs from face-to-face interaction and that collaborating via ICTs is related to adversarial outcomes. To improve understanding of these outcomes, this study aims at 1) re-defining two central constructs, namely Information Overload ( IO ) and Communication Overload ( CO ) and 2) developing short scales that enable researchers and practitioners to measure both IO and CO efficiently.

**Theoretical Background :** IO and CO are two central constructs of Technology Overload. Meta-analyses indicate the negative impact of the constructs on e.g. employee's well-being. However, most research confounds the concepts of IO and CO, e.g. by using measures of IO to measure CO or vice versa.

While IO and CO are correlated, both can exist independently. IO develops mainly due to the contents of an information, which can be explained using Cognitive Load Theory. CO develops mainly due to the number of messages, as explained by the experienced Social Load and the perceived Normative Response Pressure. This is in line with meta-analytical findings that IO is more strongly affected by Information Quality than Quantity.

**Methodology :** Based on existing literature, definitions for IO and CO are derived. In a second step, new measurements for IO and CO are generated. Two samples will be collected, sampling professionals working at least 20h/week, whose work requires the usage of ICTs. The scale development will be done using EFA on the first and CFA on the second sample.

**Expected Results :** Data collection is ongoing (First sample N = 127, Second sample currently at N = 78). We aim at developing short-scales for both IO and CO, that fulfil both discriminant and convergent validity requirements. Predictive validity will be tested by predicting Technostress, work-related burnout and well-being. Construct validity will be evaluated using adapted measures from the NASA-TLX to measure Cognitive and Social Load. Exploratory factor analyses from the first sample indicate that IO and CO are distinct constructs that can be measured with the developed instrument.

**Research/Practical Implications :** The refined concepts will enable future research to evaluate the negative outcomes of ICT usage at the workplace more precisely. The developed scales will enable practitioners to monitor the overload of employees and avoid long-term negative consequences such as burnout. They can also be used for longitudinal field studies in organizations.

**Limitations :** Because we aim at developing short scales, the statistical properties of the scales are likely not going to be ideal compared to longer instruments.

**Relevance to the Congress Theme :** The refined concepts help understanding new sources of strain in the changing world of work. Measuring them can help employers to avoid adversarial outcomes for their employees.

**Keywords:** *Cognitive Load, Computer Mediated Communication, Technostress*

## Poster P073

### **Does work-related rumination (affective, problem-solving pondering) or burnout predict psychiatric morbidity?**

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science

Research goals and why the work was worth doing:

Burnout has been associated with poor health and work-related outcomes, especially among health professionals. Health professionals are regularly exposed to excessive high-stress conditions, particularly throughout the COVID pandemic, which has contributed towards increased higher reported burnout within this occupational group.

The aim of this study were to examine the association between work-related rumination, burnout, with psychiatric morbidity among health professionals.

Theoretical background:

The association between burnout and psychiatric morbidity has been well-established in previous literature. Especially among health professionals, there is a high prevalence of psychological distress, and this seems to be related to high rates of occupational burnout in this profession.

Furthermore, research suggests that the role of unwinding from work is critical for several aspects of wellbeing. Work-related rumination (the inability to mentally unwind and switch off from work) is detrimental to health and is associated with several health problems, such as depression, anxiety, diminished executive function, and occupational burnout. Affective rumination is a form of negative thinking involving intrusive, repetitive thoughts about work during non-work time. Problem-solving pondering is typified by prolonged thinking about a specific problem, or evaluation of previous work to see how it can be improved. It is not necessarily negative, however, as many people enjoy the act of evaluating their work performance.

Design: This was a cross-sectional questionnaire study. The questionnaire included questions taken from the Maslach Burnout Inventory (Maslach & Jackson, 1981), the affective rumination and problem-solving pondering subscales of the Work-Related Rumination Questionnaire (Cropley et al., 2012), and the General Health Questionnaire-12 (Goldberg & Williams, 1988).

Results: Correlational analyses showed a significant positive association between emotional exhaustion and problem-solving pondering (.453,  $p < .001$ ), and emotional exhaustion and affective rumination (.740,  $p < .001$ ). There was a negative significant correlation between emotional exhaustion and personal accomplishment (-.352,  $p < .001$ ).

The main research question was tested using a multiple regression. Control variables (age, gender) were entered in step 1, burnout (emotional exhaustion, personal accomplishment, depersonalisation) in step 2, and work-related rumination (affective rumination, problem-solving pondering) in step 3. The control variables accounted for 1.3% of the variance and were not significant. Burnout contributed significantly to the model, explaining 38.2% of the variance ( $R^2 = .411$ ,  $F(5,105) = 13.97$ ,  $p < .001$ ). After controlling for burnout, work-related rumination contributed significantly to the model, explaining 50.8% of the variance ( $R^2 = .541$ ,  $F(6,105) = 16.51$ ,  $p < .001$ ). Affective rumination accounted for 32% of the variance, and problem-solving pondering accounted for 19% of the variance within the model.

Limitations: These findings are based on cross-sectional data, thus causation cannot be determined. The sample is also small (N=106) and biased towards pharmacists (86.7% of the sample).

Research/practical implications: These preliminary results reiterate the importance of being able to mentally switch off from work, and highlight the need to provide support with achieving this successfully.

*Keywords: Rumination, burnout, wellbeing*

## Poster P074

### **Evidence-based approach for categorizing change projects to guide practitioners on their investment decisions for organizational change management**

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science&practice

#### Research Goals

The need to deal with simultaneous changes has become the new normal in organizations. Even if potential negative consequences of poorly managed changes on employees' wellbeing and health are well known (e.g., Oreg et al. 2011) budget for change-management (CM) is scarce, underestimating its importance (Creasey et al., 2018). Hence, practitioners ask for an evidence-based tool to justify their OCM-investments. This research developed and validated a tool that aims to help demonstrating the need for CM.

#### Theory

Nadler et al. (1995) defined 4 types of organizational changes (Tuning, Adaptation, Reorganization, Recreation) by combining the two dimensions continuity (incremental vs. discontinuous change) and timing (anticipatory vs. reactive change). This research builds upon the assumption of Nadler et al. (1995) that the change-categories (CCs) differ in their intensity of change and the associated need for CM-resources.

Hypothesis 1 assumes ordered mean differences in CCs for (H1a) subjective-change-impact (SCI, Caldwell et al., 2004) and for (H1b) stress (Oreg et al., 2018) in the following order: [low SCI/ stress] Tuning < Adaptation < Reorientation < Recreation [high SCI/ stress], investigating content respectively criterion validity.

Hypothesis 2 addresses the assumed interaction of CCs and CM-practices (e.g., communications). While more intense changes lead to higher SCI and stress levels, CM-practices aim to reduce negative consequences (Jong et al., 2016; Morin et al., 2016). The latter relation is expected to be stronger for more intense CCs.

#### Methodology

The two change dimensions were adapted from Nadler et al. (1995) and assessed with self-developed items to build the 4 CCs. Other scales (SCI, stress, CM-practices) were obtained from previous research (Caldwell et al., 2004; Oreg et al., 2018; Straatmann et al., 2016). Data were collected via an online-survey (cross-sectional). Sample: 773 persons M(age) = 39.3 years (52.6% female) from a financial institution impacted by various organizational changes. Hypotheses were tested using the statistical tool R, "successive-difference-contrast-testing" and linear regression modelling.

#### Results

Results mainly support hypotheses, showing a main effect of CCs on SCI (H1a)  $F(3, 769) = 19.51, p < .01, \eta^2 = .067$  and on stress levels (H1b)  $F(3, 769) = 10.33, p < .01, \eta^2 = .035$  with most means differing between CCs in the assumed order. However, not all mean category differences are significant. Testing for interactions (H2) shows support for some CM-practices, yet not reaching significance in model comparisons. For more intense CCs, better CM-practices show stronger relations to reduced levels of SCI and stress compared to less intense CCs.

## Limitations & Implications

Being aware of limitations (e.g., correlational design, self-report measures bearing the risk of common-method-bias, employees from one organization) the tool demonstrates its usefulness by showing expected differences in outcome variables across CCs. Partially significant interactions also tend to support H2, indicating that CM may be more important in more intensive CCs. For CM-practitioners the tool might be a fruitful way to further support their CM-investment decisions. Being able to demonstrate decision makers the type of change employees are facing, together with potential negative risks, opens the stage for earlier and likely more successful negotiations on budget for CM.

*Keywords: Organizational Change Management, Type of Change, Stress*

## Poster P075

### **Only who has will be given more? A panel analysis on the psychology of economic inequality, financial inclusion, and future investments in Germany**

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science

Research goals and why the work was worth doing: Economic elites generate much of their income from capital. However, even in countries such as Germany with relatively high income and savings, most households do not invest their money to generate additional income, better prepare for retirement or accumulate wealth. In face of aging societies, social spending restraints and high investments needs required for a green transformation of economies in Europa, households need to invest more privately. Our research aims at a better understanding of social psychological factors that influence financial decisions and might influence public financial policies.

Theoretical background: Economic research struggles to explain low Capital Market Participation (CMP). This is true for research based on classic economic models (Haliassos et al., 1995) but also research from behavioral economic models including psychological factors (Barberis et al., 2003). Based on more recent research on decision-making under different socioeconomic life conditions (Haushofer et al., 2014), we investigated psychological factors for capital market participation and focus on how they differ considerably between Socio-Economic Status (SES) groups.

Design/Methodology/Approach/Intervention: We analyzed four waves of German Socio-Economic Panel (GSOEP) data spanning around 20 years and including around 13,000 household heads. We estimated the association of risk attitude, patience, control beliefs, political orientation, social trust and sociability with CMP in different SES groups as well as the overall interaction of these variables with a latent SES factor and its components (income, education level and occupational status). We regressed on CMP in the respective year but also on CMP over the years based on a Latent Growth Class Analysis (LGCA).

Results obtained or expected (if not available, it must be made clear when they will be): We found that risk attitude and right political orientation (and negatively also patience) were strong CMP predictors for higher SES, while control, trust and sociability were stronger CMP predictors for lower SES. We also analyzed different dimensions of sociability.

Limitations: Findings are based on associations between self-reported measures. The binominal measurement of CMP and especially its stability over time made it difficult to analyze within-person association of CMP and psychological variables. However, the panel data provided a unique opportunity to analyze differences across a full range of socioeconomic groups as well as to take a longitudinal perspective based on the LGCA.

Research/Practical Implications: Financial policy makers and investment product designers might need to focus less on different risk profiles to increase CMP and financial inclusion, but instead on control and trust perception as well as social identities in relation to financial decisions, especially in lower SES groups. Estimated effect sizes and assumed change levels suggested that psychological interventions might have equal impact as direct monetary payments.

Relevance to the Congress Theme: "The Future is Now." Despite the feeling of being overwhelmed by current crises, households need to regain a sense of control, social trust and future optimism.

They need to make NOW financial – but also non-financial - investments for THEIR FUTURE and the future of THEIR SOCIETIES.

*Keywords: Economic inequality, financial decisions, socioeconomic status*

## Poster P076

### **Work readiness in student nurses voluntarily supporting NHS during COVID-19 pandemic. A mixed methods investigation into students' experiences.**

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science&practice

This study explored the experiences of student nurses who responded to Covid-19 crisis to understand the impact of this early transition to the clinical workforce. This study was important to do as it provided evidence for how to improve training for nursing students as they transitioned to professional practice.

Previous research has shown high turnover rates of graduate nurses within the first year of their work (e.g., Kovner et al., 2014; MacKusick & Minick, 2010; Shi et al., 2016). Nursing graduates have been previously shown to be overwhelmed and stressed during the transition from student to clinical practice (Duchscher, 2009; Flinkman, Isopahkala-Bouret, Salantera, 2013; Hofler & Thomas, 2016). The transition period has been recognised as a particularly stressful time due to issues of “reality shock” as nurses fully immerse themselves into the work environment. Kramer put forward Theory of Reality Shock (1974) which described this difficulty experienced by new graduate nurses.

This was a mixed methods study that incorporated quantitative and qualitative methods. The first part of the study we utilised the Work Readiness Scale (WRS-GN; Walker et al., 2015) to measure participants' self-perceived readiness to work at the beginning of their COVID-19 placements. In the second part of the study interviews were conducted. Themes were drawn from the data and used to support the development of an interview schedule for the second part of the study. There were seven interviews conducted lasting between 45-60 minutes. These interviews were Thematically Analysed (Braun & Clarke, 2006).

Overall readiness scores were at a relatively high level (M= 7.04 on a scale from 1 to 10) with the aspects of personal work characteristics perceived as the lowest (M= 3.87). There were five themes that emerged from the analysis of interviews. These themes were: coordination of support, drivers to take part, identified gaps in clinical knowledge, and developing into the role. These themes highlighted the importance in understanding the transitional experience as nursing students prepare for clinical practice.

This study has implications for how to improve training for nursing students as they transition to professional practice by informing undergraduate curricula of the dynamic experiences of this process. This is an important consideration as nursing students have highlighted through this study areas in their education that has not prepared them for clinical work as well as support that would be instrumental in the process of transition.

The pandemic brought forth an overwhelming demand on healthcare system. Therefore there is a need for understanding of experiences and dynamic processes of people's transition to professional practice. This study contributes to our understanding of how we can support our nursing students' development and transition to the hugely demanding and ever-changing work. This is imperative in dealing with current and future healthcare crises, which speaks to the themes of Contribution and Urgency.

*Keywords: Qualitative, Healthcare, Training*

## Poster P077

### **Work-related stress and Burnout in high school teachers: development and evaluation of an online training for stress-reduction**

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science&practice

**Research goals:** Based on the increased need for e-mental health interventions, that became especially apparent during the Covid-19 pandemic, we aimed to develop a brief online-based mindfulness-based stress reduction (MBSR) program, that supports high school teachers in developing positive coping skills to reduce stress and prevent burnout.

**Theoretical background:** High school teachers experience a high amount of work load embedded in a socially demanding work environment. They belong therefore to a professional group that is especially prone to experience burnout symptoms, such as emotional exhaustion. Work-related stress and burnout are not just considered as a challenge for mental but also for physical health, which highlights the importance of “teaching” teachers stress-reductive coping skills.

**Design:** The whole faculty of a local Austrian school was invited to participate (N = 60). Participants provided questionnaire data regarding work-related stress (effort reward imbalance/ERI) and burnout (MBI-GS) as well as about physical (SF-36) and mental (GHQ-12) health, at two time points before (N = 33) and after (N = 29) the intervention. Further, salivary cortisol (cortisol awakening response/CAR) was assessed as an additional stress marker at both time points (N = 10). The MBSR intervention included four evening online meetings, 60 minutes per session, combining traditional MBSR elements with skill training.

**Results:** There was a significant negative relationship between work-related stress/ERI and mental health/GHQ-12 ( $r(32,28) = -0.45$ ) at both assessment points as well as with self-reported physical health (e.g., “vitality”:  $r(32,28) = -0.44/-0.48$ ). Similar but even stronger relationships were found regarding burnout symptomatology/MBI-GS (e.g., SF-36: vitality”:  $r(32) = -0.72$ ). No significant stress-reductive effect could be detected, neither based on self-report, nor by changes in cortisol levels.

**Limitations:** Due to a surprisingly low rate of participation in the MBSR intervention (N = 8), results regarding the evaluation of the intervention can only be considered as preliminary which might also explain the lack of an intervention effect.

**Practical implications:** Considering the reported associations between perceived stress and health in teachers, we suggest to implement the training of health-preserving coping skills into the training of high school teachers. We further aim to sensitize in general for the health-imperiling effect of work-related stress.

*Keywords: teacher burnout, work-related stress, MBSR*

## Poster P078

### **Negative Effects of the Exposure to Sexism on Women's Performance and Job Satisfaction: a multi-group analysis between STEM and non-STEM workplace**

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science

#### Research goal

The gender gap is a highly topical issue, of universal nature and imbuing the culture, science, economy and all formal and informal social groups. Sexist assumptions about women and men, manifested as gender stereotypes, are partially responsible for these inequalities, and negatively affecting performance, sense of belonging, mental health and job satisfaction.

The aim of this study is to examine the impact that sexism could have on performance and job satisfaction in a sample of female workers in STEM and non-STEM sectors.

#### Theoretical background

The theory of ambivalent sexism introduced by Glick and Fiske (1996, 1999) claims that sexist attitudes include substantial ambivalence from each gender to the other. Hostile sexism refers to explicitly antagonistic sexist attitudes, while benevolent sexism refers to apparently positive but implicitly devilish attitudes (Acar & Sumer, 2018). Studies revealed that benevolent sexism was detrimental to women's personal and professional well-being (Rubin et al., 2019; Moya et al. 2007), implied lower career aspiration levels and impacted on task performance.

Click et al.(2000) showed that significant correlations between levels of benevolence and hostility could be considered indices of gender inequality.

#### Methodology

Three-hundred-and-sixty-four women were enrolled to participate in the study. They agreed to complete a survey on google platform, measuring as predictors Work Engagement, Psychological Capital and Organisational Support; as Moderators the Ambivalent Sexism toward Women and the Hostile Sexism toward Men, and as outcomes Task Performance and Job Satisfaction. For the moderation hypothesis it was used SEM, whereas for estimating the difference between STEM and non-STEM workplaces it was applied invariance tests and multigroup analyses.

#### Results

The results showed that benevolent sexism towards women (ASI) and hostile sexism towards men (AMI) had a significant direct negative effect on task performance and job satisfaction. Furthermore, benevolent sexism dampened the positive relationship between Psycap and Task Performance and between Organisational Support and Task Performance. Whereas hostile sexism only dampened the positive relationship between Work Engagement and Job Satisfaction. A significant difference emerged in relation to the effect of the work context (STEM vs. non-STEM), supporting the greater impact of sexism in traditional male-dominated contexts.

#### Practical Implication

The results suggested that the perception and exposure to sexism affected work outcomes and counteracted the resources held such as psychological capital and work engagement or perceived organisational support. These findings provide insight into the effect of sexism on personal and

occupational wellbeing and suggest that empowering personal and organisational resources could be a functional strategy.

#### Relevance to the Congress Theme

The topic of gender job equality is currently central to the international debate in the field of counselling and organisational psychology, and its promotion is one of the priority goals of the Agenda for Sustainable Development. Furthermore, equality and equal opportunities between men and women is one of the most reliable and effective tools for combating poverty and social exclusion, and thereby contributes to the guarantee a decent work for all and to important economic growth and development.

#### Relevant UN SDGs

Gender equality, Decent work and economic growth

*Keywords: gender equality, sexism, workplace*

## Poster P079

### Development of a measure for the Behavioral Assessment of Telework Strategies (BATS)

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science&practice

The present work started from the qualitative review of previous literature through which we extracted a series of behaviors that people use when working from home, with the aim of building a questionnaire that quantitatively evaluates the behavioral strategies of this type of work. The main objective of the present study is to develop and validate the Behavioral Assessment of Telework Strategies Questionnaire (BATS). Secondary objectives address the internal and external validity of the BATS questionnaire.

The work-family boundary management literature states that people create, maintain, or change boundaries to simplify and categorize the world around them (Ashforth et al., 2000). Boundaries refer to space and time, and individuals are categorized into segmenters or integrators when they separate or mix family and professional roles (Nippert-Eng, 1996). Clark (2000) argues that people create psychological boundaries alongside physical and temporal boundaries that can be flexible or permeable. Individuals may also impose physical, cognitive, and behavioral boundaries with the implication that they may shift from one role to another multiple times during a day. Based on boundary management theories, the boundary work tactics model was created. This model posits that individuals adopt behavioral, physical, temporal, and communicative strategies to manage the conflict between family and work roles as effectively as possible (Kreiner et al., 2009).

The methodology includes content validity, factorial structure, construct validity and replicability of the BATS questionnaire. The data were collected in two samples, an internal sample (N=374), population from Romania and an external sample (N=342), population from the USA. To analyze the data and the factorial structure of the BATS questionnaire, we applied the method of confirmatory factor analysis, using the R statistical computing platform.

The results of the confirmatory factor analysis on the internal sample demonstrated a model of the BATS questionnaire having 24 items related to 6 factors (physical, behavioral, temporal, communicative, me-time and role mixing). The scale has obtained adequate model fit and residual evaluation indices and good internal consistency, both for the entire scale and separately for each dimension. Regarding the external sample, the results of the confirmatory factor analysis were similar to the results obtained in the internal sample, both in terms of internal consistency and in terms of fit indices, which denotes a good evidence of replicability.

One of the limitations of this study may be the fact that the data was collected immediately after the cancellation of the restrictions due to the pandemic context, the data may be somewhat unnatural because many of the respondents were forced to work from home for the first time.

The present study brings theoretical improvements to the literature aimed at managing role boundaries by adding two distinct complementary strategies to the tactics proposed by Kreiner and his collaborators (2009), as well as practical implications by developing and validating the BATS questionnaire. We believe that this telework behavioral assessment tool can be useful in managing the boundaries between professional and family roles, potentially benefiting both individuals and organizations.

*Keywords: boundary management strategies, telework*

## Poster P080

### **Tell me a different story! Storytelling, reflective practice and self-awareness: A case study**

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**Aim:** The purpose of this case study was to test the role played by storytelling and reflective practices in promoting self-awareness at work. More in detail, by focusing on individual reflectiveness, we aim to explore how constructing, giving sense and sharing stories may contribute to individuals' self-awareness (Boyatzis, 2009, 2019).

**Theoretical background:** According to the narrative, to the reflective approach (Robert & Ola, 2021) and particularly to the storytelling intervention model (Mirvis, 2019), individuals can develop their self-awareness through practices, which allow them to make sense of their work experiences from different perspectives.

**Method and Intervention:** 10 managers of an Italian company (outsourcing and consulting sector) participated in a 12 month program. In the first part (3 months), participants were asked to tell some stories about their work life. In the second part (5 months), managers were involved in reflective sessions, where they recaptured their prior experiences, used reflexivity and evaluated them by taking different perspectives. In the third part of the program (4 months), participants narrated again their stories, by using a different sense meaning. All stories were collected and a content analysis based on thematic coding was conducted (Braun & Clarke, 2016, 2019).

**Results:** The coded themes were: "Myself at work", "My relations with others" and "My relationship with time". Regarding the first theme, participants described their emotions and thoughts as personal "perturbations", which interfere with their professional attitudes. Regarding the second theme, colleagues and clients were split into "good people" and "bad people". Concerning the relation with time, stories were categorized as "Losing time" and "Running against time". Then, after the reflective sessions, the main themes took different meanings. Emotions appeared as "natural components", which may contribute to better understanding the context. Thoughts were divided into "mental loops" to be stopped and "reflective thoughts" to be developed. Relations with others were reinterpreted by using others' points of view, so that people's attitude and behaviors could assume different nuances. The relationship with time was described as an emerging chance to "Sparing time", that is to adopt a proactive attitude toward the temporal dimension and to try to create "empty times" to better think and to choose how to use time more properly.

**Implications:** Managers' development programs (e.g., mentorship, coaching) may consider using storytelling and reflective practices to develop self-awareness and a better understanding of others' actions. Moreover, reflexivity can contribute towards developing thinking skills and proactive attitudes.

**Relevance to congress themes:** Developing leaders' self-awareness can be beneficial for both themselves and their subordinates. Thus, in a context of changes in the world of work that are generating phenomena such as the "Big Quit", reflection practices might develop meaningful jobs in the workplace (UN SD Goal 3).

**Limitation:** This study was focused on exploring how managers reinterpret their meaningful work experiences by developing their self-awareness. Therefore, future studies ought to be conducted in different and controlled settings, with different measurement tools, to evaluate the effectiveness of the intervention protocol based on reflection activities.

**Keywords:** *storytelling, reflectiveness, self-awareness*

## Poster P081

### The role of leadership during implementation of robots in elderly care

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science

#### Research goals & contribution

Due to the demographic development the social services in Sweden are, to an increasing extent, implementing automation as a strategy to meet demands for welfare services. This has generated many questions from both practice and academia, and today we know little about how these types of welfare technologies best are implemented, and what the consequences are for employees and users. The overarching aim of the study is to contribute with knowledge on how managers in social services successfully can support implementation of automation. This will be done by studying an implementation of medical dispensers. The study will explore meanings assigned to the role of leadership and perceptions of what managers have done to support the implementation.

#### Theoretical background

To explore leadership in relation to implementation of the robot this project will foremost build on theories of leadership, including implementation leadership. The implementation framework of CFIR (Consolidated Framework for Implementation Research) describing factors that may explain implementation outcomes serves as a background. Empirical findings are assembled from various fields of research related to implementation of the technologies in focus.

#### Design, method & results

This study is a qualitative interview study involving elderly-care within two municipalities in Sweden. Semi-structured individual interviews will be conducted with professionals who have been influenced by or involved in the implementation of digital medical dispensers. A purposeful sampling will be used including key informants involved in the implementation as well as aiming at covering varying perspectives. Being dependent on the cooperation with key persons to assist with sampling in practice, is regarded as a limitation.

Reflexive thematic analysis will be used to develop inductive, and data driven themes developed from codes, following the coding of the whole data set. Using a reflexive approach means recognizing coding as a profoundly subjective process. This means bringing theoretical assumptions to the surface as well as embracing personal experience of the coder as a resource in the process.

30 - 35 interviews will be conducted and analyzed during spring 2023. The Poster will contain early results exemplify and illustrate insights to some aspects of the cases.

#### Practical Implications

Medical dispensers are designed to help people take the right medication at the right time without medical supervision. These technologies are envisioned to create smarter, more qualified work and result in better quality care, empowering clients. The two municipalities are in different stages of implementation, both having several dispensers in full use. As time passes new users will enroll using

dispensers making it important for the project to contribute with knowledge, to the municipalities studied, and to other contexts where findings seem to be of value.

*Keywords: Implementation, Automation, Elderly-care*

## Poster P082

### **Towards sustainable careers in retail: Job demands, job resources and personal resources as predictors of work-related and health-related outcomes**

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science

#### Research goals

Employing close to one out of ten workers in Europe, the retail industry is a major force in the European economy. It has undergone major structural changes related to consumer behaviours, global competition and digitalization, and is projected to continue doing so. There is limited knowledge available about how these changes affect working conditions and, thus, mental health, attitudes and behaviours. Taking the Job Demands-Resources model as point of departure, the aim of this study is to investigate how a) job demands (e.g., emotional demands, job insecurity and physical workload), b) job resources (e.g., control, leadership and learning opportunities) and c) personal resources (e.g., employability and coping) associate with employee mental health (burnout), attitudes (job satisfaction) and behaviour (turnover intention) among retail workers in Sweden.

#### Background

Many young workers with lower education are employed in retail. Here, they often experience a work situation characterized by alternative employment forms in order to meet flexibility needs, as well as customer interactions and evolving competence demands. Recent studies on retail workers have reported challenges related to lack of support and sense of security, especially for young workers.

Associations between work environment factors and outcomes are well established in the existing literature. Less is known, however, about how these associations can be applied to outcomes among retail workers, especially considering job demands and job resources in the retail industry. Previous literature has called upon further investigation of the customer–employee interaction as well as factors related to high levels of flexibility and insecurity, physical workload and evolving competence demands.

#### Methods

Cross-sectional survey data were collected through the nationally representative Swedish Longitudinal Occupational Survey of Health [SLOSH] in the 2020 wave. A sub-sample representing individuals with employment in the retail sector will be selected (preliminary N = 765) based on occupational codes as applied in previous studies. The research questions will be investigated through hierarchical multiple linear regression with burnout, job satisfaction and turnover intention as the outcome variables. Step 1 will be demographic controls (e.g., gender, age and education). Step 2 adds job demands and Step 3 job resources to the model. In Step 4, personal resources will be added. The study has been approved by the Swedish Ethical Review Authority (ref.no. 2022-02880-01 and 2022-03845-02).

#### Expected results

Data analysis is planned to be completed by spring 2023.

#### Limitations

Studies based on cross-sectional data are always exposed to potential risks of common method variance and do not allow for causal inferences. The data was collected in Sweden and during a time where the ongoing COVID-19 pandemic might have imposed unknown effects on the study variables.

#### Implications

The results will provide insights on key factors for employers and policy makers to craft attractive, healthy and sustainable careers in retail.

#### Relevance to the Congress theme

A similar development to that of the retail industry is likely to take place also in other industries as the world of work becomes increasingly complex and volatile. As such, retail serves as an interesting context for investigating work- and health-related outcomes both in itself and as a prototype for the future of work.

*Keywords: Job Demands-Resources, Retail, Sustainable work*

## Poster P083

### Work Meaning During the College-to-Work Transition: A Two-Year Follow-Up

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science

The college-to-work transition is critical for successful integration into the labor market. In today's changing labor market, there is an increasing need to find purpose in one's work (Hirschi, 2018). Dick and Duffy (2009) have emphasized the importance of focusing on work meaning to increase awareness of one's purpose in life. The goal of the present study was to test the development of the purpose of work during the college-to-work transition. Using the multidimensional Work Orientations Questionnaire (WOQ; Willner et al., 2020) we elicited the purpose students give to their future work: calling (prosocial value), job (financial benefits), social embeddedness (belongingness), career (advancement and influence), and busyness (filling ones' time with activity).

The present study aimed to test whether and how work orientations change during the college-to-work transition. In a 2-year follow-up study, we first tested the work orientations of 674 Israeli college seniors (60% women) at the end of their last semester in college (Time 1). We sent out a follow-up questionnaire after one year (Time 2; N = 224) and two years (Time 3; N = 145), in which we tested students' work orientations.

The results of Pearson correlations revealed that the one-year stability of three of the five work orientations was greater between T2 and T3 (after the transition to work) than during the transition year (between T1 and T2). Specifically, for calling ( $r_{T1-T2} = .52$ ,  $r_{T2-T3} = .71$ ), job ( $r_{T1-T2} = .63$ ,  $r_{T2-T3} = .72$ ) and social embeddedness ( $r_{T1-T2} = .39$ ,  $r_{T2-T3} = .51$ ) orientations. The stability of the career ( $r_{T1-T2} = .47$ ,  $r_{T2-T3} = .45$ ) and busyness ( $r_{T1-T2} = .65$ ,  $r_{T2-T3} = .58$ ) orientations slightly decreased after the transition. The ipsative stability, estimated using the within-person Spearman rank-order correlation, revealed that the relative salience of the pattern of orientations remained quite high; however, it was greater between T2 and T3 (median  $r_s = .87$ , inter-quartile range = .53-.90) than during the transition, i.e., between T1 and T2 (median  $r_s = .70$ , inter-quartile range = .41-.90). Interestingly, it was higher between T2-T3 than between T1 and T2 for 60% of the participants with data at all 3 points. To further test the nature of the changes in graduates' work orientations, we performed a series of paired t-tests. The results revealed that during the college-to-work transition (from T1 to T2) four of the orientations decreased: calling ( $d = -0.20$ ), social embeddedness ( $d = -0.44$ ), career ( $d = -0.43$ ), and busyness ( $d = -0.26$ ). However, a year after the transition no such changes emerged.

The results revealed the developmental nature of the purpose of work and how volatile it may be during the college-to-work transition. Thus, they have implications to career counseling. Specifically, career counselors, helping individuals navigate this challenging transition, may focus on identifying the purpose that individuals are seeking in their work, and thus possible work environments that will fit their orientations. Since the present study focused only on the few years after the transition from college, the long-term implications are yet to be uncovered. However, the study illuminates the possible impact of the changing world of work on the purpose individuals seek in their work. Individuals in today's work world are taking on increasing numbers of career transitions, and the college-to-work transition can be used as a case study to investigate this larger phenomenon.

*Keywords: WORK, PURPOSE, CAREER*

## Poster P084

### **The mediating role of leadership style in the relationship between span of supervision and multiple outcomes in business setting**

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science

Research goals and why the work was worth doing

While early research primarily focused on size, i.e., optimal span of supervision (Davison, 2003), more recent studies are investigating various consequences of span of supervision. While the link between wider span of supervision and various outcomes has been documented in numerous studies, research focusing on mechanisms causing these effects has received little attention (Zoller & Muldoon, 2020). Researchers have recently suggested that leadership activities, that may help or hinder functioning in larger teams, should be an area of exploration for future research. The present study aims to expand on existing research using leadership as a potential mediator between a novel antecedent, that is, span supervision in relation to various outcomes through leadership behaviors.

Theoretical background

Social scientists have identified various outcomes of increased span of supervision such as physical proximity between leaders and followers facilitates the communication process and quality of exchange (Yammarino and Bass, 1990). In contrast, with larger span of control leaders can appear distant to followers and maintain infrequent contact. Furthermore, leaders, with a wide span of supervision, have more constraints on their time than do leaders with fewer followers (Schriesheim et al., 2000; Anand, Vidyarthi, & Park, 2016) Larger span of supervision can also limit leaders' opportunities to display supportive behavior, to respond positively when followers experience setbacks, to offer help and assistance, and to advise how to overcome specific difficult situations. In accordance with social exchange theory, when leaders maintain infrequent contact with followers, treat them in an interpersonally less sensitive manner (Antonakis & Atwater, 2002), and limit their directive and supportive behavior.

Design/Methodology/Approach/Intervention

Our data comprised of actual pay provided by the organization, as well as survey data provided by the employees at two points in time. At Time 1 ( N = 237), we collected data on controlling effects and informational effects. Of these, 163 employees (69%) also responded at Time 2, where they provided data on their intrinsic motivation. The company provided actual data for several control variables. Regression analyses was used the test the hypotheses.

Results obtained

Specifically, (1) the present study found how span of supervision of various sizes influence the extent to which leaders actively engage in supportive and directive behaviors. Larger span of supervision limits leaders' capability to calibrate their directive actions to elicit the desired response from their followers. In addition, larger span of supervision reduces leaders' opportunities to display supportive behavior such as provide help and assistance and give positive feedback. As such, span of supervision changes the dynamics of the influencing process between leader and followers, which fluctuate with the size of span of supervision. Furthermore, (2) our study found support for the notion that large

span of supervision limits leaders' ability to perform supportive leadership behavior, with decreased follower performance, increased social loafing as well as increased propensity to quit as outcomes.

*Keywords: Span of supervision, leadership behavior, performance*

## Poster P085

### **Focused attention meditation and well-being: tapping into relative strength, timing, and changes in effects**

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science&practice

**Research goals and theoretical background:** This study aims to answer three research questions: does focused attention meditation affect different dimensions of employee well-being differently? When do these effects occur and do they change over time?

Meditation practice can be categorized as a personal resource within the Job Demands-Resources Model (Demerouti et al., 2001) explaining employee well-being. Although the study of meditation and employee well-being is on the rise, there are still multiple knowledge gaps this study aims to fill. First, focused attention meditation has received less research attention than popular mindfulness meditation. Both represent different techniques that produce different neurofunctional and cognitive outcomes (Fox et al., 2016; Lippelt et al., 2014). Focused attention meditation is considered a starting point for meditation novices, while mindfulness meditation is more advanced. Second, by adopting a multidimensional approach to well-being, we disentangle the potentially different meditation effects on different dimensions of well-being. Third, our time window of six months allows for investigating the timing and changes in longer-term meditation effects, while most studies only examine the presence of short-term effects.

**Intervention/Design:** The meditation technique was taught online as COVID-19 inhibited on-campus training. Participants practised meditation with their pupils for a few minutes every school day. A six-month longitudinal, three-wave study was conducted, and latent growth modelling was used to monitor changes in teacher well-being in comparison to a waitlist control group.

**Results:** Meditation practice lead to well-being improvements in intervention group participants: emotional exhaustion, negative affect, concentration problems, and musculoskeletal problems decreased, and positive affect increased. Waitlist control group participants consistently reported opposite evolutions (i.e., increases in emotional exhaustion, negative affect, concentration problems, and musculoskeletal problems, and a decrease in positive affect). No effect was found for sleep problems. The strongest effect was found for concentration problems, followed by negative affect, emotional exhaustion, musculoskeletal problems, and positive affect in order of decreasing effect size. The effects were observed after three months of meditation for each of the well-being dimensions. Emotional exhaustion, positive and negative affect continued to improve during the last three months of the study. For concentration and musculoskeletal problems, the last three months of meditation only preserved the increased level of well-being that was already reached.

**Limitations:** Attrition rates were high, but additional analyses showed no attrition bias. The self-selection of participants might have an impact on the generalizability of our findings to work contexts in which meditation practices are not voluntary but imposed.

**Implications:** Three months of focused attention meditation practice produces benefits for different dimensions of well-being. Benefits are preserved or even expanded in case of prolonged practice. Focused attention meditation is an accessible, quickly implemented and low-cost intervention that enhances employee well-being.

*Keywords: meditation, well-being, longitudinal*

## Poster P086

### **Balance is not something you find, it's something you create: The development of a work-life balance intervention**

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**INTRODUCTION:** Work-life balance, defined as the individual perception that work and non-work related activities can be combined, is a topic that can no longer be ignored in today's society. Scientific studies show that a poor work-life balance has negative consequences for employees (e.g., lower job satisfaction), organisations (e.g., more absenteeism), and society (e.g., costs related to absenteeism). Scholars argue for interventions that support employees in creating work-life balance and stimulate employers to create policies facilitating work-life balance. To our knowledge, today's interventions mainly focus on either individual-, team- or organisation level. However, it is important to develop interventions at all levels of an organisation. The overall aim of this study was therefore to develop a multi-level intervention that contributes to creating a good work-life balance. The Job Demands Resources model is used as theoretical framework for the development of the intervention, and explains the causes (e.g. role overload, low autonomy) and consequences of a poor work-life balance.

**METHODOLOGY:** The intervention was developed thriving on the PATHS-principle of Buunk and colleague's, and the Human Design Thinking approach. In order to define the needs of Flemish employees and identify the causes of a good work-life balance, qualitative and quantitative data were collected on three different manners (i.e., methodological triangulation) among Flemish employees in 2019: two focus groups with seven participants, 21 semi-structured interviews, and an online questionnaire completed by 142 employees. Data were analysed using qualitative methods (i.e. clustering and identifying themes) and using quantitative methods (i.e. correlational associations).

**RESULTS:** The results showed the need for an overall service that focuses on optimising employees' work-life balance: the focus groups and interviews suggest both offline and online services that focus on the level of the individual (i.e., coaching sessions and online training tool), the team (i.e., team coaching) and the organisation (i.e., clear policy, group report regarding work-life balance). Via co-creation workshops (i.e., prototyping and testing), a service was developed consisting of several elements: workshops on "work-life balance" policy, employee needs analysis, awareness materials, online training tool, group coaching and individual coaching sessions.

**LIMITATIONS:** Although the intervention was developed based on different types of data, its effectiveness has not yet been proven through an intervention study. Therefore, the next step within this project will focus on testing the effectiveness of the developed service regarding work-life balance by means of an experimental research design (e.g. RCT).

**RESEARCH/PRACTICAL IMPLICATIONS:** Through the BalanceCrafter service, work is done to achieve a good work-life balance at the level of the organisation, the team and the individual. In follow-up research, it is important to measure the impact of this service through an experimental research design.

*Keywords: Work-Life Balance, Intervention, Human Design Thinking Approach*

## Poster P088

### Team Adaptability in the Context of Human-Autonomy-Teaming: A Theoretical Framework

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science&practice

Fast-paced developments within Industry 4.0, particularly in Artificial Intelligence (AI), encourage the increasing application of so-called Human-Autonomy-Teams (HATs) in the near future. These systems represent a paradigm shift from technology as a sole tool to technology occupying the role of a formal teammate. Accordingly, AI takes up specific tasks and responsibilities which are interdependently embedded in the overall team activities while maintaining a degree of agency, characterized by independence and proactivity of actions.

Although recent research has started to highlight factors that influence the effectiveness of HATs, its insights remain bounded to static settings and thereby its transfer to real-life applications is hampered. Furthermore, HATs are often constrained by technological issues such as design or function allocation to only work effectively across a limited span of scenarios. However, since it is expected that the application of such systems progresses into inherently dynamic contexts (e.g., health care, aviation, or military), HATs may suffer from rigidity, inflexible coordination patterns, and subsequently, lack of adaptability when confronted with changes to the task environment. Considering the domains of applications and the associated costs of not being able to maintain effectiveness when routinized actions are not appropriate anymore, it is crucial to guide research into a more ecological valid direction by acknowledging the significance of adaptability.

In the present paper, we try to tackle this gap and develop a framework for team adaptability in the context of HATs by building on findings from all-human teams and integrating research from different research areas, including ergonomics, human-AI interaction, and psychology. We begin by reviewing the theoretical background of HATs in general, then specify what it means for AI to function as a teammate and make adaptability possible and further discuss specific requirements for AI development. Following this, we transfer the Team Adaptation Cycle (Burke et al., 2006) to HATs and simultaneously elaborate on multilevel influences from the perspective of an Input-Mediator-Output Model.

We envision to finalize the framework in Spring 2023 to provide testable propositions for interdisciplinary future research which further can help to inform practice on how to apply robust and effective HATs. Although the framework represents a first step towards projecting HATs in a dynamic environment, the approach still needs to be transferred to the real-world and further validated, including tests of its generalizability.

With the forthcoming presentation, we contribute to research revolving around the changing world of work by acknowledging and strategizing about future technological developments and their interaction with humans. Consequently, we do not only contribute to Sustainable Development Goals (SDGs) which encompass high-quality work (SDG 8 and 9) but also allow more successful partnerships to achieve other SDGs by enabling advanced synergies between AI and humans (SDG 17).

*Keywords: Human-Autonomy-Teaming, Team Adaptability, Artificial Intelligence*

## Poster P089

### **Vigorous or happy worker? A Diary Study on the Interaction Between Vigor and Positive Affect on Job Performance**

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science

Research goals and why the work was worth doing/ Theoretical background

Job performance can be considered a dynamic construct, which fluctuates within persons on a daily base. Research has shown that daily internal states such as vigor can predict daily fluctuations in job performance. The substitution hypothesis of conservation of resources theory postulates that personal resources are substitutable for one another (Hobfoll, Freedy, Lane & Geller, 1990). However, the literature's focus has been dominated by research on the impact of single personal resources on work outcomes. This study includes both employee's daily vigor and positive affect to test their separate effects on daily self-reported task performance. Most importantly, however, we investigate a potential compensation effect between the two personal resources.

Design/Methodology/Approach/Intervention

We conducted an online diary study on ten consecutive workdays with 110 participants. Directly at the end of the workday, participants had to indicate their state vigor and affect at the workplace and additionally estimated their task performance.

Results obtained or expected (if not available, it must be made clear when they will be)

Multilevel analyses showed that daily vigor positively predicts self-reported task performance. The negative interaction between vigor and positive affect was significant. Results indicate that high positive affect can compensate for low energetic states – and vice versa.

Limitations

Common method variance might confound the results because all variables were self-reported and measured at the same time same measurement point.

Research/Practical Implications

Looking at the interplay between personal resources at work might offer a valuable starting point for individual - tailored interventions that allow people to unfold their full potential.

*Keywords: dynamic performance, vigor, positive affect*

## Poster P090

### Sustainability of work in the life cycle: a research project in a manufacturary plant in Italy

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science&practice

The issue of work sustainability takes on even greater importance when one considers the progressive aging of the workforce, and the amount of time individuals spend at work. This challenge is critical, not only for businesses, but also for society.

Over the past decade, sustainability has increasingly been understood not only in terms of the ecological and socioeconomic environment, but also in terms of improving the quality of life of each individual. The perspective of sustainability and resource conservation in the context of working life underscores the fact that work should not „wear out” individuals in the long run, but should guarantee workers to maintain their health status, preserve (if not improve) their motivation/satisfaction, balance work and personal life, and keep their skills from becoming obsolete.

The qualitative data will be collected in November 2022 and will refer to all employees of a northern Italian manufacturing company in the automotive sector. The qualitative data will be collected through interviews, conducted by PhD student responsible of the project, during working hours, aiming to investigate workplace sustainability, critical aspects of workplace sustainability both from a psychological and physical point of view, and to identify which factors can be considered as risk factors and protective measures for work sustainability both from a personal and organizational point of view. Will be conducted approximately 25 interviews with employees with different task in the company.

The expected outcomes of this project relate to the creation a questionnaire that will investigate of a map of risk factors (as work shifts or physical demands) and protections of well-being and work ability (as reward or support from superiors), and the development of a questionnaire to further explore perceptions of work sustainability from a primary prevention perspective in this organizational context. From a general perspective, the expectation is to test a monitoring system that is fully operational in the factory and can be exported to other organizational contexts in the future.

Regarding the limitations of this study, we must point out that it was conducted in a manufacturing context, so generalization to other contexts may require further study

The implications of this study concern the possibility of creating a monitoring system that can be used to evaluate the effectiveness of ordinary and extraordinary interventions for labor sustainability, which could be exported to other contexts with the appropriate measures.

*Keywords: Work sustainability*

**Poster P092**

**Work Intensification and Its Effects on Mental Health: The Role of Workplace Curiosity**

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science

Work intensification is a psychosocial risk that has been increasing in recent decades and may have been accentuated after the COVID-19 pandemic. Its effects on health are negative, but they can be moderated by contextual and personal factors. The aim of this study was twofold: to analyze the effect of work intensification on workers' stress, anxiety, and depression and to explore the role of workplace curiosity in these relationships. The study design was cross-sectional, and a total of 766 Spanish workers (58.9% female) with different occupations completed the survey. The results showed that work intensification was associated with the symptomatology of stress, anxiety, and depression, with a medium effect size. Women workers showed higher work intensification, but its association with mental health was equally strong for both genders. Workers with higher levels of the workplace curiosity dimension "stress tolerance" showed less impaired mental health in the presence of work intensification. However, workers with higher levels of the workplace curiosity dimension "deprivation sensitivity" showed more symptoms of stress, anxiety, and depression when faced with high work intensification. The results were discussed in terms of their contributions to the field of study of work intensification, the future research they could inspire, and the prevention and intervention measures they could motivate.

*Keywords: Work Intensification, Workplace Curiosity, Mental Health*

## Poster P093

### Self-Actualization: A Systematic Review and Meta-Analysis of Work-Related Findings

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science

Relevance, goals, background. Self-actualization is a popular concept in academia and culture, often referring to people's experience of realizing their potentials (Maslow, 1943). It has had a rich history of empirical research as a work concept because the workplace is one of the primary domains where people can actualize and apply their talents (Baumeister, 1991). With almost 80 years of research, the literature on self-actualization is still growing and has branched out into different fields. Within disciplines that are concerned with work, such as leadership, human resource management, nursing, and education, a variety of research has been published. Thus, findings are now scattered in different fields and information about relations to other concepts is cluttered. A systematic overview of quantitative findings is missing. This study aimed to provide a systematic overview of findings and knowledge gaps.

Design, methodology . We conducted a systematic literature review following PRISMA guidelines (Page et al., 2021). We searched the databases: Scopus, Web of Science, Pubmed, PsycINFO, and Proquest Dissertations for the keywords: self-actualization, self-fulfillment, and self-realization, and additional keywords that ensured capturing work-related studies. We reviewed 92 articles, which provided 276 effect sizes. With good interrater agreement ( $\kappa = .84$ ), we grouped effect sizes into 27 synthetic constructs and performed separate two- or three-level random effect meta-analyses for each construct with different robust variance estimation procedures (Pustejovsky, 2022).

Results. Self-actualization was significantly, positively related to (1) age, (2) job position, (3) leadership characteristics, (4) social support at work, (5) social relations at work, (6) job resources, (7) job satisfaction, (8) mental health, (9) flourishing, (10) individual and group performance, and (11) job retention. In addition, self-actualization was significantly negatively related to (12) burnout.

Limitations. The meta-analysis is limited by our choices to aggregate the constructs. Some constructs were grouped from the same concept, but others were grouped of related concepts or sub-dimensions, which may limit the generalization of results and explain the overall high heterogeneity. The explorative review approach limits the ability to demonstrate directions of effects and make causal claims. Finally, systemic publication biases might have confounded the true effect sizes.

Conclusions. The quantitative review documented a rich body of research that extends our knowledge of relations of self-actualization. We conclude that work offers ample opportunities for employees to actualize talents and abilities. Moreover, self-actualization is related to several important psychological, health, and performance constructs and thus has positive implications for employees and organizations.

Relevance to SDG. Self-actualization is an essential component of the concept of eudaimonic well-being (Ryff, 2018), it is also related to several important psychological and health concepts and therefore an important indicator for the SDG Good Health and Well-Being.

Relevance to congress theme. Organizations that improve the conditions for experiencing self-actualization at work provide meaningful goods to individuals and society. Self-actualized employees engage in personally meaningful and health-promoting activities, which is a desirable state for contemporary workplaces.

*Keywords: self-actualization, systematic review, meta-analysis*

## Poster P094

### Digital Work: Theoretical model and Questionnaire Validation in the Field of Public Administration

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science&practice

Digitalization transforms the conditions, nature and experience of work at an increasing rate. To describe the ongoing transformations and quantify and explain their impact on humans at work, we need a model of digitalized work. The aim of the present research was to conceptualize digital work and develop a respective measure using the example of public administration. Hertel et al. (2017) summarized five core characteristics of internet-based work: (1) accessibility of information within organizations and beyond, (2) interactivity of communication, respectively direct interaction with other users including other multi-directional interaction, (3) reprocessability of information, (4) automatization and (5) boundary crossing. Utilizing dialectic inquiry (Berniker & McNabb, 2006) we fused these characteristics with the e-government maturity stages information, communication, transaction, integration and political participation enriched by horizontal and vertical integration (Hiller & Bélanger, 2001; Layne & Lee, 2001) into a five-dimensional construct, namely information, interaction, integration, data processing, and transaction (Kaesmayr, Schorn, & Steidle, 2021). 85 items were derived according to Rossiter's (2008) approach, assessing the degree of availability and use of analog and digital work tools, i. e. technology. They were content validated by expert interviews. 518 public agents answered the questionnaire in a version adapted to administrative work. For 17 aspects of non to digital work e. g. interactions with customers, a single index was computed. This was achieved by using contrast-coding on objective technical digital criteria derived from communication, information security, and semantic processing concepts. The resulting indices of digital work aspects were then assorted to their corresponding dimension and averaged. Exploratory factor analyses indicated a five-factorial structure, showing slight variations opposed to the theorized dimensions which confirmatory factor analysis supported. The assessment of digital work in the examined agencies painted a heterogenous picture. The dimensions information and interaction showed promising efforts of progress while the dimensions integration, data processing and transaction were lacking behind considerably. Reliability of the construct was sufficient. Item difficulty and homogeneity showed satisfying results. The instrument is yet only available for administrative action. Seizing self-administration and restricting application to the state of Baden-Wuerttemberg, Germany with a focus on municipalities however, posed a calculated risk which was remedied by adapting the application to different types of agencies. The proposed measure of degree of digitization of administrative action is expected to predict administrative outcomes by shaping public servants' work and consequently their work behavior. Given the evidence of such predictive validity, long-term research could provide additional practical insight into public servants' job demands and resources. This research endeavor adds to insights into internet-based work (Hertel et al., 2017) and job demands and resources (Demerouti et al., 2001) research in the field of public administration. The results contribute to the body of literature of behavioral public administration (Grimmelikhuisen et al., 2017). By combining internet-based work and administrative action, ramifications of digitalization can be incorporated and balanced.

*Keywords: digital work, instrument, validation*

## Poster P098

### **A theory of not-so quiet quitting and Firing: a Psychological Contract and Leader-Member Exchange perspective.**

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science

#### Research goals

As quiet quitting and firing gain relevance in the media as new perceptions and attitudes towards work of employees, no scientific publication has tried to operationalize them.

Here, we propose a study to try and translate these two concepts by using already known concepts in the work and organizational psychology literature.

Moreover, we propose to investigate whether the two phenomena are complementary by trying to verify if following a feeling of being “quietly fired” employees reacts with the “quiet quitting” of their jobs.

#### Theoretical background

Quiet firing is defined by the media as the perception of the employee of a lack of appreciation, support and rewards from managers and company, this feeling could be translated by two concepts: Psychological contract breach (PCB) and the quality of Leader-Member Exchange (LMX).

Quiet quitting on the other hand is an attitude of the employee corresponding to doing ‘the bare minimum’, refusing to do more than what he/she is rewarded for. This perception might correspond to a transactional psychological contract, which includes a narrowed view of tasks and responsibility (Rousseau & McLean Parks, 1993).

Both quiet quitting and quiet firing seem to have a lowering of work engagement and an increase of turnover intentions consequently.

#### Methodology

Based on the proposed theoretical background, our variables of interest are LMX, measured with the LMX-7 (Scandura & Graen, 1984 ; Graen & Uhl-Bien, 1995), PCB measured with Robinson & Morrison's (2000) scale, Work Engagement as measured by the UWES (Schaufeli et al., 2002), turnover intentions as measured by the TIS-6 (Bothma & Roodt, 2013) and an adaptation of the PCI (Rousseau, 2000) to measure transactional psychological contract expectations.

The study will be carried out between March and February 2023, we aim to collect cross-sectional data from approximately 300 French white collar workers from different sectors.

The data will be analysed through structural equation modelling to allow a better view of the overall model and assess indirect effects.

#### Expected Results

Since both quiet quitting and firing seem to have as a consequence a loss in engagement and an increase of turnover intentions, we expect to find that a low LMX quality will lead to feelings of PCB (Hill et al., 2016) which in turn will lead to lower engagement and higher turnover intentions (Bal et al., 2013). We further propose that transactional psychological contract beliefs will moderate the

effect on work engagement and turnover intentions: transactional beliefs might in fact intervene as a defence following breach, a posture the employee takes in order to be able to stay in the job.

#### Limitations

The present study stems from concepts not yet researched scientifically and represents an attempt at translating them into research terms.

#### Research Implications

However, the present research might offer a first base of comparability in the event that fellow researchers decide to codify quiet quitting and firing in a psychometric scale.

#### Relevance to the Congress Theme

This research aims to better understand the current trends in the changing work relationship. An enhanced awareness of employees of their value in the world of work demands for organizations to change how they see the work relationship, to create a better work environment that fosters not only economic growth but also employee flourishing.

UN SDGs : Decent work and economic growth

*Keywords: Psychological Contract, Leader-Member Exchange, Work Engagement*

## Poster 099

### Does One Size Fit All? Individual Differences and Reactions to Feedback: A Meta-Analysis

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science

One of the organizational processes relevant to those who are particularly interested in increasing efficiency in the organizational environment is feedback (Rummler & Brache, 2012). Research has focused on both internal and external factors that could have a major impact on individuals' reactions to feedback. In terms of external factors, extensive research has been conducted on the valence of feedback (Brett & Atwater, 2001; Elicker et al., 2006), the characteristics of those who provide feedback, participation in the feedback process, and time of receiving feedback (Elicker et al., 2006; Nathan et al., 1991; Lechermeier & Fassnacht, 2018). Regarding internal factors, in his seminal feedback reaction model, Ilgen (1979) emphasized that feedback is also influenced by internal variables (â€œrecipient's frame of reference or personalityâ€; Ilgen et al., 1979, p. 355). Studies show that personality traits (e.g., Five Factor Model), demographic variables, and other individual differences (e.g., feedback orientation) influence individuals' response to feedback (Corwin et al., 2019).

Even though there are various empirical studies that attempted to explore the relationship between individual differences and feedback reactions, to our knowledge, no research aimed to quantitatively analyze the results of these studies. Therefore, the current study (i.e., being grounded in feedback reaction model; Ilgen, 1979) will meta-analytically investigate the relationship between individual differences and reactions to feedback (e.g., both positive and negative perceptions, intentions, emotions, and behaviors). Our search strategy resulted in a total of 5.741 articles. After the removal of duplicates and screening, 56 reports, with 72 independent samples/studies were included.

The results section of the paper is in progress (we estimate that it will be completed by the end of November 2022). Even so, at the moment some of the results have been analyzed. In our meta-analysis, we found significant medium effect sizes between: self-efficacy ( $g = .536$ ;  $p < .001$ ), learning goal orientation ( $g = .508$ ;  $p < .001$ ), feedback orientation ( $g = .614$ ,  $p < .001$ ), and positive feedback reactions. Further, we found significant small effect sizes between: self-esteem ( $g = .436$ ,  $p < .01$ ), agreeableness ( $g = .477$ ,  $p < .01$ ), conscientiousness ( $g = .357$ ,  $p < .001$ ), openness to experience ( $g = .265$ ,  $p < .05$ ), and positive feedback reactions; self-esteem ( $g = -.273$ ,  $p < .05$ ), narcissism ( $g = .296$ ,  $p < .001$ ), and negative feedback reactions. From a theoretical standpoint, our study will consolidate an important tenet of the feedback reaction model (i.e., feedback reactions are influenced by recipients' individual differences). From a practical standpoint, if individual differences are related to recipients' feedback reactions, practitioners should consider both the person and the situation when developing feedback interventions. This study also has some limitations: the low number of samples for some relationships (hindering the performing of subgroup analyses), the reactions to feedback conceptualized dichotomously as positive and negative.

This study is relevant for the facets mentioned in the congress theme. Whether we are talking about Contribution (e.g., we can develop new competences and collaborate using feedback as an important leverage), Urgency, Delivery, the intersection of these will have feedback as an important tool in the world of work.

*Keywords: feedback, individual differences, feedback reactions*

## Poster P100

### **The relationship between team leader coaching behaviours and collective efficacy: evidence for explanatory mechanisms**

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science&practice

Coaching as a development intervention has been increasing rapidly aiming at higher performance and well-being not only in employees, but also in teams and entire organisation. There is growing empirical scientific evidence that team leader behaviours play a critical role in team outcomes. However, a lack of clarity remains as to how team leader coaching behaviours (TLCB) predict team dynamics. Also, collective efficacy has been often studied as a mediator or predictor for performance and effectiveness in working teams. This study provides new empirical evidence about the influence of TLCB on team processes - according to the conceptualisation by Marks et al. (2001) - and collective efficacy. In addition we aim at testing if team size matters in the level of collective efficacy. A random sample of 46 teams consisting of 202 employees participated in the study. The following scales for data collection were used: TLCB scale developed by Rousseau et al. (2013); team processes scale developed by Mathieu et al. (2019) and collective efficacy scale developed by Salanova et al. (2003). Individual data were aggregated at the team level and the indices met the cutoff criteria for agreement and consistency. Data analyses were conducted with the macro PROCESS v4.1. (Hayes, 2022). The findings reveal that the paths from TLCB to collective efficacy through team coordination as an action process was statistically significant ( $R^2 = .433$ ,  $p < .001$ ). The moderation analyses indicate that the high number of team members decrease the association between TLCB and collective efficacy. However, the team size does not affect the relationship between TLCB and team coordination. Following the same conceptualization of team processes, we a posteriori explored the mediating role of other team action processes and we found support for monitoring progress towards goals as a mediator between TLCB and collective efficacy. The statistically nonsignificant direct effect of TLCB on collective efficacy show that team members, following their coaching interactions with their team leader take on the task of coordinating and their perception of the team's ability to achieve a certain task also increases. Consequently, when the team takes on one of the functions of a leader (i.e. team coordination which is especially vital for teams with high interdependence), it becomes a motivating phenomenon for teamwork and leads to positive perceptions of the team's ability to fulfil its tasks. Furthermore, the team leader can "handle" other activities and develop strategic capabilities in the team. This preliminary evidence sheds light on the importance of TLCB in team dynamics, namely, team coordination and monitoring and shared motivation in teams. The study also provides suggestions for research on team dynamics and team management.

*Keywords: coaching; collective efficacy; team processes*

## Poster P101

### **The influence of leadership on employee's work-nonwork interface and wellbeing: A scoping review**

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science

Research goals and why the work was worth doing: Employee wellbeing (EWB) is pivotal for individuals and for business and societal concerns, including sustainable development. Leadership (LS) is core for EWB. Existing research focuses mainly on narrowed EWB at work. A dynamic process-perspective inherent to current working conditions with blurred boundaries between work and nonwork is often missing. EWB needs to expand to a more holistic perspective, including employees' work-nonwork interface (WNWI). Research goals: Firstly, get an insight in concepts and mechanisms that relate positive and negative LS to sustainable EWB focusing on the dynamic WNWI, including spillover and recovery. Secondly, expand the understanding of the LS-EWB relationship, including the nonwork area, and shaping the EWB concept towards sustainability. Thirdly, analyze limitations of the applied methodologies. Finally, to provide recommendations for future scholarly work.

Theoretical background : Sustainable EWB may be defined as feelings of pleasure and/or experiencing fulfillment and purpose related to work that can be sustained over time (Di Fabio, 2017; Sonnentag, 2015) . Leaders have a significant impact on EWB, especially in times of crisis (Rudolph et al., 2021). LS behavior must manage the WNWI and related dynamic processes of physical energy, dynamic recovery, and emotions for a sustainable EWB. The WNWI can be referred to as 'the interaction of employee work experiences and [nonwork] lives' (Allen, 2012, p. 1163), where positive and negative spillover effects can happen in various forms. So, adverse impacts of one domain may come with pervasive impact across the entire work-life system.

Design/Methodology/Approach/Intervention : Following the PRISMA Extension for Scoping Reviews and building on recent LS-EWB reviews and emerging trends in recovery and emotion research, we apply a narrative synthesis to organize the 21 selected studies and integrate them across the WNWI.

Results obtained: The review of 21 articles shows that LS plays a dominant role in sustainable EWB representing perhaps the most impactful contextual macro variable. We (1) provide a framework consisting of LS, EWB, and WNWI approaches to cluster theoretical approaches used. We identify two categories of investigated mechanisms: bolstering/hampering and buffering/ strengthening. We (2) identified limitations of the used methods e.g., selective samples, incentives affecting data quality, and (3) offer recommendations for future research.

Limitations: We examined only empirical published manuscripts. This did not allow us to analyze unpublished studies. Our results are only up to date as of February 2021.

Research/Practical Implications:

We propose the circumplex model of affect (Russell, 1980) as a starting point for integrated (EWB, LS, WNWI) theory development.

We recommend theorizing LS as a stand-alone factor that influences job characteristics using the job demands-resources-recovery model (JD-R-R; Kinnunen et al., 2011) representing a situational perspective.

We reinforce calls for studies researching resources when investigating LS and dynamic sustainable EWB.

We call for research on the influence of passive forms of negative LS on employees' WNW and dynamic sustainable EWB.

Relevance to the Congress Theme: The contribution is: Informing Human Resources for leadership training and development.

*Keywords: Leadership, Work-Nonwork Interface, Wellbeing*

## Poster P102

### Presence and Learning in VR: What can Human Behavior Tell?

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The market for virtual reality applications in education and workplace learning is growing rapidly. According to the Cognitive Affective Model of Immersive Learning (CAMIL) presence, the feeling of „being there“, is a psychological affordance of learning in virtual reality-based education and training lessons (Makranski & Petersen, 2021). Therefore, to ensure training success, it is essential to detect or even predict users' presence . Using additional sensory hardware (eye-tracking, hand-tracking), virtual reality applications can record users' behavior in detail. It is to be assumed that behavior changes when users feel present in the environment vs. when they do not. Therefore, behavioral indicators could be suitable to surveil and predict users' presence. The current study tries to answer two main questions: can behavioral data prior to a task (exploration and tutorial phase) predict users' presence? Can users' behavior during a task (task-sequences) explain differences in presence? One hundred and twenty-four participants first explored a virtual factory environment in a test room (exploration phase), then played through a tutorial followed up by three task-sequences in different rooms, during which participants had to interpret signaling of different collaborative robots (cobots), in randomized order. To test our hypotheses, the following predictors were calculated: eye-movement indicators (which objects participants looked at), spatial movement indicators (how much and how far participants moved), hand usage indicators (how much participants' hands got used) and head rotation indicators (how much participants moved their head). The relationship between behavioral predictors and presence was analyzed using regression analysis and mixed effect models. Results suggest that behavioral data (specifically head-rotation) can be linked to presence. Current research can act as impetus for future research analyzing objective behavioral data. If presence can be detected using behavioral indicators, educational- and workplace- learning applications will get more adaptable. Our article fits into the conference theme in multiple aspects. One is that the implementation of virtual reality applications into education and workplace learning is a great example of how the world of work is changing. Additionally, in order to allow future usage of learning applications in vr, research has to be done now (the future is now). This work was funded by the Austrian Research Funding Agency FFG under grant number 872590 (CoBot Studio).

*Keywords: virtual reality, presence, behavioral data*

**Poster P103**

**Role of Technostress in Work Engagement and Job Satisfaction in People Working with Information and Communication Technologies**

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science

Today's working environment becomes very stressful due to the rapidly changing information and communication technologies (ICT) used in the work process. As part of this survey, measures were taken to verify the relationship between technostress creators and technostress inhibitors, and job satisfaction and work engagement of employees. To this end, 349 employees using ICT at work were surveyed. Polish versions of the following scales were used in the survey namely Technostress Creators and Technostress Inhibitors Scale (Kot, 2022), Job Satisfaction Scale (2003) and Utrecht Work Engagement Scale (Schaufeli at al., 2006 ). The survey used the method of Structural Equation Modelling to find the relation between the analyzed variables: Technostress creators, Technostress inhibitors and job satisfaction and work engagement. The results have revealed a relation between technostress creators and technostress inhibitors. Additionally, these variables turned out to be important for shaping job satisfaction, and ultimately also for explaining employee work engagement. Technostress may have a negative effect on employee satisfaction and work engagement, so action should be taken to reduce technostress creators in the workplace and to support technostress inhibitors.

*Keywords: Technostress, Job satisfaction, Work engagement*

## Poster P105

### The Dark Core at Work: Development and Validation of a Contextualized Measure

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science

The aim of this project is to develop and validate a measure of the Dark Core for use in a work specific context. The Dark Factor of Personality (D) has been a recent topic that has arisen in dark trait literature and has received little attention in organizational contexts. Many negatively connoted personality traits (often termed “dark traits”) have been introduced to account for ethically, morally, and socially questionable behavior. D is the basic tendency underlying dark traits. Specifically, D captures individual differences in the tendency to maximize one’s individual utility—accepting, disregarding, or malevolently provoking disutility for others—accompanied by beliefs that serve as justifications for these actions. The current research has three objectives. Based on previous research the current study is developing a measure of the Dark Core based on a five-factor model comprised of callousness, vindictiveness, narcissistic entitlement, deceitfulness, and sadism. Therefore, the first objective of this study is to validate the structure of the new scale and correlate scores on the scale with another measure of the Dark Core and organizational outcomes (e.g., counter-productive work behaviours). The second objective is to establish a relationship between leaders’ scores on the Dark Core at Work scale and important organizationally relevant outcomes related to leaders (e.g., toxic leadership). The third objective of this study was to assess whether the Dark Core at Work scale provides incremental prediction in organizationally relevant outcomes compared to the other personality measures (e.g., Dark Tetrad at Work, Big-Five). The study is recruiting participants through Prolific, an online survey platform. The current study expects that the Dark Core at Work measure will be comprised of 5-factors (callousness, deceitfulness, vindictiveness, sadism, and narcissistic entitlement) and be positively related to negative organizational outcomes (e.g., toxic leadership, counter productive work behaviours, bullying). It is also expected that the Dark Core at work measure will provide incremental prediction of organizationally relevant outcomes over the Dark Tetrad at Work measure. Results for the study should be obtained in December 2022. The current study is limited in that data is collected solely from an online source which relies on self-report data. This may distort the results due to socially desirable responding. Establishing a context specific measure of the Dark Core provides researchers of workplace behaviour with a measure to assess traits of the Dark Core at work. By screening individuals who have elevated levels of the Dark Core, organizations can create more productive and healthy working environments with less risk of violent behaviours, bullying and toxic leadership. Additionally, by using this workplace-specific scale, organizations would not have to worry about the inappropriate and potentially jarring items relating to sexual preferences (e.g., psychopathy: I enjoy having sex with people I hardly know) or religious beliefs (e.g., I would like to make some people suffer, even if it meant that I would go to hell with them) that are currently in other measures of the Dark Core.

*Keywords: Extreme Personalities, Psychometric Tests, Abusive Leadership*

## Poster P106

### **Dance-movement therapy as the holistic body-mind approach in organizational practice: Building the foundation for expressive therapeutic interventions**

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science

A study in a phase of a progressed literature review aims to determine whether dance-movement therapy (DMT) or other body-mind interventions are viable for stress management and the general well-being of the staff. The underlying research focuses on enhancing stress management programs in organizations and supporting HR managers in building more in-depth well-being-related interventions at the workplace. We believe that bringing more body-mind-focused interventions can enrich the importance of employees' well-being, especially managers and leaders because emotional intelligence is also critical in the field of management (Ashkanasy & Daus, 2002).

DMT is defined by the American Dance Therapy Association (ADTA) as the psychotherapeutic use of movement to promote the individual's emotional, social, cognitive, and physical integration to improve health and well-being. The DMT is one core approach that focuses on body-mind interventions, stress management, and stress reduction (Bräuninger, 2014; Wiedenhofer & Koch, 2017). Supporting stress management allows one to orient in life roles, find work/life balance, understand stressors and defense mechanisms to express affect safely, learn to understand coping mechanisms (Richardson & Rothstein, 2008), and discover new and healthy ones. That all builds personal stress management and prevents burnout (Shaufeli, Desart, & Witte, 2020), which again has a positive impact on organizational performance (Bräuninger, 2014; S. Koch, Kunz, Lykou, & Cruz, 2014; Mala, Karkou, & Meekums, 2021).

The most extensive survey of the arts therapies submitted by (Millard, Medicott, Cardona, Priebe, & Carr, 2021) done by National Health Services in the UK shows that 60% of respondents of the survey would be interested in group arts therapies with expectations of enjoyment, helpfulness, impact on mood and social interaction. However, only 2,8% of the general population sample tried DMT, and 16,3% preferred other art therapies (Millard et al., 2021).

The approach at this initial stage is a systematic literature review focused on the studies from 2012-2022, which aims to narrow down the evidence for using body-mind therapeutic intervention, especially DMT, in organizational practice. The core findings will be highlighted in the EAWOP congress 2023.

The review of resources and theories shows an immense amount of literature relevant to the general topic of workplace well-being and related body-mind approaches. However, not so many intersections with DMT. So the main limitation is the small number of studies meeting the inclusion and exclusion criteria and the lack of rigorous empirical data on using the DMT intervention as part of stress management and/or self-development programs in the workplace.

The main research implications are a theoretical contribution by including DMT as a therapeutical intervention in the workplace, that at the current state of the art, seems to be a missing piece that will be validated by experimental research. The practical implication is resulting tool allows the use of DMT in the workplace by practitioners from the field of managerial psychology.

We believe that current and future workplaces will largely benefit from enhanced stress-management programs based on DMT and other holistic therapeutic body-mind interventions.

*Keywords: Dance movement therapy, body-mind intervention, workplace well-being*

## Poster P108

### Financial implications of perceived unfairness in selection

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#### Importance

The organizational literature is abundant in questions of accountability, and the request for more accountability has never been stronger in society, also putting pressure on other domains, such as school/educational psychology. Simply stating that a phenomenon has an impact is no longer accepted enough; not even effect sizes continue to appease critics - researchers are expected to articulate clear links between a phenomenon or practice and individual or organizational performance and this articulation is subsumed under the heading of utility analysis. We will follow this important call by investigating the financial impact of perceived unfairness during the assessment process under the precepts of utility analysis. We argue, in consensus with Cascio&Boudreau (2011) that measurement of a phenomenon (in this case concern about perceived unfairness)is only valuable if it improves decisions, and that such an objective "requires not simply more or better measures, but an integrated approach that combines those measures with logic, analytics, and knowledge processes" (p. xvi).

We will therefore draw on the LAMP framework for econometric analysis and outline logic diagrams to explain the links between fairness perceptions, employee behaviors, and operational and financial outcomes at the organizational level.

#### Objective

we will conduct a utility analysis by constructing a logic diagram for the utility analysis of candidate reactions. To this end, we will use the LAMP framework (Cascio & Boudreau,2011), which has been previously used with significant success for econometric analyses in applied psychology in general and the human resources literature specifically. The LAMP framework emphasizes the importance of the 4 components of logic, analytics, measures, and process in utility analysis. We will therefore draw on insights from psychology, sociology, economics, accounting, and finance to construct the logic diagram, outline the analytics, delineate the measures (actual formulas), and describe the process needed for a lucid communication of results to decision makers or policymakers in the organization.

#### Methodology

We will follow this route by first establishing a defensible theory-driven mechanism through which to evaluate how unfairness reactions produce financial costs. This will reflect in a formula constructed based on the principles of the LAMP model (Cascio & Boudreau, 2011). We will then use that model in order to conduct Monte Carlo simulations on the formula, updating the variance of the various variables according to the principles of Bayesian inference, i.e. based on evidence-informed lower- and upper-bound estimations of marginal likelihood (i.e., model evidence). Simulated data will be generated with the simTool package in R, and Monte Carlo simulations will be conducted with the Monte-Carlo package in R.

#### Expected results

This work is in progress and will be finished by the end of the year. We expect that the econometry utility study will offer logical (and science-driven) descriptions of the mechanisms through which a psychological phenomenon impacts a business and reflects in Return on Investment (ROI) - and ultimately in business profit, as a function of relative costs and gains.

We believe that this research is related to at least two objectives from UN Sustainable Development Goals (2015): Justice and Partnerships for the goals.

*Keywords: financial implications, perceived unfairness, selection*

## Poster P109

### **„Alexa, how do we break the glass ceiling?“ How voice assistants affect gender stereotypes about career and family**

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science

This study aims to lay a foundation for research on how technologies like voice assistants can affect users' gender stereotypes, especially in the business context, and how to subsequently use technology as a tool to break the glass ceiling for women. According to the "Computers are Social Actors" paradigm, people often treat computers the same way they treat other human beings. This includes perceiving technology as male or female, depending on its features like design or voice, and ascribing different traits and competences to female- or male-connotated technologies. According to Eagly's biosocial-role-theory, gender stereotypes do not only mirror biological differences, but mostly social role perceptions of women and men. Studies show that automatic stereotypes can be reduced when people are being exposed to counter-stereotypes. Therefore, perceiving more women working as financial advisors, which is a rather male-dominated occupation, should help reduce the gender bias in financial consulting. To combine the findings regarding the biosocial-role-theory, the effectiveness of counter-stereotypes and gender attributions to voice assistants, two voice assistants of different gender were used to examine to what extent counter-stereotypic voice assistants can reduce participants' gender-career stereotypes. A quantitative online experiment with 259 participants was conducted, with the intervention consisting of two conditions: in the counter-stereotypical participants listened to a female voice assistant, allegedly being employed as a business consultant and giving workshops about investment strategies, whereas the control group listened to a male voice assistant in the same position. At first, the extent of people assigning gender-stereotypic characteristics to the voice assistant was measured. Implicit association tests before and after the intervention were used to measure associations between gender and career. The results showed no significant effect of the voice assistant's gender on the implicit associations between gender and career after the intervention compared to before and no moderating effect of the gender-stereotypic traits of the voice assistant. Furthermore, the implicit associations had no significant effect on the intention to use the technology. However, people who had listened to the female voice assistant showed significantly lower implicit gender associations after the intervention than people who had listened to the male voice assistant. Moreover, results showed that implicit associations between gender and career still exist today. The main limitations were that the study only measured a short-term effect, the counter-stereotype only consisted of a female voice and people did not attribute gender-stereotypical characteristics to the female voice. Practical implications include to end the practice of making voice assistants female by default and to track the gender balance of AI devices in companies. Future research should include several interventions and measurement times and a more interdisciplinary approach, e.g. developmental psychology, by addressing the influence on children, who grow up with such devices from early on. Implementing new technologies in the work context and breaking the glass ceiling for women are both topics, which are highly relevant in the changing world of work. The study also contributes to the SDG of promoting gender equality.

*Keywords: voice assistant, glass ceiling, gender roles*

## Poster P110

### The link between work engagement and job performance: a meta-analysis

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This study addresses the link between WE, task and contextual performance, providing a systematic review of our knowledge on the topic of WE and JP. Firstly, it paints a complete picture of JP, by addressing both contextual and task performance. Secondly, we also focus on the two main measures that are habitually used to measure the job engagement: the Utrecht Work Engagement Scale (UWES), versus the Job Engagement Scale (JES). By comparing the two measures directly, this paper investigates whether the JES is a viable alternative to UWES, to be used in organisational practice, and examines some of the theory around the conceptual models on which the two scales are built.

Thirdly, by including participant occupation as a moderator we reveal whether the relationship between WE and JP could be different for customer-facing versus non-customer facing roles. The burnout literature suggests that employees who have to deal with emotional demands on their jobs, such as facing irate customers, or having to caretake a number of patients while faking positive emotions are more vulnerable towards developing burnout. Given that some authors view WE as a direct opposite of burnout we investigate whether these assumptions hold true for the positive end of the spectrum as well. Following a systematic literature review, we identified 174 unique studies. Studies had to be set in an organizational environment, to include a measure of WE, an objective or subjective measure of performance and offer information concerning the link between WE and JP, irrespective of whether it was the main aim of the study or not. Following a random-effects model, we obtained meta-analytic correlations of  $r = .36$  (  $N = 33$  independent samples),  $r = .36$  (  $N = 26$  independent samples),  $r = .38$  (  $N = 29$  independent samples) between vigour, dedication, absorption and job performance, respectively. For the overall WE and JP, we report a correlation of  $r = .37$  (  $N = 166$  independent samples). Further, potential moderators were examined. The findings highlight the importance of WE research, for improving organizational performance.

The main limitation of the current meta-analysis is tributary to the nature of this kind of study design and refers to it unavoidably taking over some of the limitations of the primary studies included in the analysis. Because these articles included cross-sectional designs, we cannot draw any causal inferences from our findings. A valuable contribution of this paper lies in the importance of the examined moderators. By examining the average correlations among the WE facets for both measures, we found that only the link between dedication and vigour (and not any of the JES scales) was statistically significant, yielding a very high correlation coefficient ( $r = .91$ ). The type of participant occupation is another promising moderator that we considered. We have pursued the expectation that WE is boosted by the immediate feedback one gets from human interactions, and therefore would be more strongly associated with client-facing roles. Our findings seem to oppose that, as we found stronger associations for non-client-facing roles, in the case of absorption.

In the context of The Future is Now, our paper is relevant to the Changing World of Work as it provides an overview of our current knowledge on the WE and JP literature, which could be used by both academics and practitioners as a starting point to subsequently better tackle this phenomenon in the workplace.

*Keywords: work engagement, job performance, meta-analysis*

## Poster P111

### Work Environment and Stress – Moderating Role of Extraversion and Emotional Stability

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Research goals and why the work was worth doing

Currently, increased health issues due to stress at work are being recorded. Particularly, the context of work environment has become more important since the outbreak of the COVID-19 pandemic, with more knowledge workers having to relocate from the office to the home office, assuming that home working ratio will not decline to pre-pandemic levels (Bogenstahl & Peters, 2021). Stressful environmental conditions may result in different stress perceptions due to different coping mechanisms. There is an empirical evidence that working at home is associated with additional stress (Oakman, Kinsman, Stuckey, Graham & Weale, 2020; Palumbo, 2020) on the one hand, but also with relief (Rothe et al., 2017). The present study aims to shed more light on the interaction between work environments (office vs. home office) and personality traits (extraversion vs. emotional stability) in order to better understand individual stress perceptions at work. Our study contributes to the development of targeted and tailored interventions for improving employee health.

Theoretical background

Based on the differential reactivity model of Bolger and Zuckerman (1995), the present study posits a moderating role of extraversion and emotional stability (low neuroticism) in the relationship between work environment and stress.

Methodology

Using a cross-sectional design, our data were collected online from German full-time office workers (N = 82). To test our hypotheses, we conducted hierarchical regression analyses controlling for children and other persons in household.

Results

The empirical tests partially confirmed our hypotheses. Emotionally unstable workers perceived lower stress in their home office compared to the office. Emotionally stable workers showed an opposite pattern: Their stress level was higher in the home office. Furthermore, they perceived lower stress than emotionally unstable individuals in both examined work environments. Contrary to our expectations, we did not find any moderation effect of extraversion.

Limitations

The survey data were collected at a single point in time and therefore, fluctuations in stress perceptions over time cannot be considered. The validity of the work environment instrument needs further examination.

Research and practical implications

The need to integrate hybrid working into the future work models is indispensable for modern organisations (Vartiainen, 2021). The present study contributes to the knowledge of interactions between personality differences and environmental stressors. The findings suggest working at home vs. in the office having more negative effects for some employees. Future research should shed more light on the long-term consequences of working at home compared with the office.

Relevance to the congress theme and relevant UN SDGs

This study is designed to supplement approaches for promoting health and well-being of office workers by increasing the person-environment fit from a psychological perspective. This does not only benefit the individuals, but also companies that possibly can count on a lower absenteeism rate due to illness among employees. Furthermore, working at home saves office space, reduces general costs and technical services, increases flexibility in office use, and also the flexibility to reach employees geographically (Grunau et al., 2019).

*Keywords: Work Design, Home Office, Personality*

## Poster P112

### **A Piece of Humble Pie: The Role of Relational Humility on Performance and Leadership (Emergence and Effectiveness)**

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science

While humility has been investigated since the early 2000s, relational humility (RH) has only recently been introduced to the literature. RH can be deconstructed into three components: a) global humility b) superiority and c) accurate view of self. Thus far, the association of RH with organizational variables is largely unknown. The present study addressed existing gaps by investigating the relationship between RH and several well-known organizational variables including leader emergence, leader effectiveness, organizational citizenship behaviors directed towards individuals (OCB-Is), and counterproductive workplace behaviors directed towards individuals (CWB-Is). Thus, the present study provides a novel contribution that establishes the beginnings of a nomological network for understanding the role that RH plays in the workplace.

We searched the extant literature regarding humility to inform our hypotheses. To summarize: those who are low in humility tend to be less likely to be perceived as leaders (leader emergence). Humble leaders are more likely to create bonds with their teams through social exchange theory, whereby teams may respond with stronger commitment and performance (leader effectiveness). Further, humility is linked to generosity and being kinder to others, including enemies (OCB-Is). Finally, there is ample evidence that those who score low on humility are more inclined to engage in harmful behaviors, like cheating, stealing, and sexual harassment (CWB-Is).

Given the nature of RH as a perceived character judgment, we gathered other-report data from 556 undergraduate students who were randomly assigned to answer questions based on their most (n = 285) or least humble coworker (n = 271). This experimental manipulation ensured variability in levels of relational humility. Two-step hierarchical regressions demonstrated that RH is indeed a key contributor to leader emergence, leader effectiveness, OCB-Is, and CWB-Is.

Study limitations included: 1) the use of student samples which may impact the external validity of the study, though we determined our sample had robust work experience prior to participating, and 2) the fact that participants placed in the least humble condition may select an individual who is more humble than the colleague chosen by a participant placed in the most humble condition, though we partially addressed this with random assignment.

By increasing our understanding of the role that RH plays in the workplace, the present findings have significant implications for organizations looking to develop effective leaders, promote OCB-Is, and reduce CWB-Is. Thus, this submission is relevant to this year's theme in that high RH in the workplace leads to more emergent and effective leaders, as well as a kinder, more cohesive environment (increased OCB-Is, decreased CWB-Is), which may be especially important as we negotiate a new normal in the workplace after the pandemic. RH is a trait that makes organizations a more friendly, positive place to be – especially following a period of isolation and loss of human connection. Thus, we align this paper with the UN SDG of peace, justice, and strong institutions.

*Keywords: relational humility, leadership, organizational citizenship behaviors*

## Poster P113

### **Are All Craving for Appreciation? A Cross-Lagged Analysis of Leaders' Appreciation at Work and its Interplay with Employee Well-Being**

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science

**Research goals:** Since employees spend a great part of their daily life at work, the effects of work conditions on health should not be underestimated. As it is central to maintain employee health and well-being, resources need to be identified to do so. One promising approach might be to focus on appreciation; a construct which has found little attention in the past and which was mainly analysed as part of other constructs (e.g. social support). Appreciation at work is more than positive feedback or positive reinforcement, as appreciation “implies recognition of one’s qualities and achievements, signals acceptance, and acknowledgment, and thus responds to the need to belong and boosts self-esteem” (Pfister et al., 2020, p. 63). Recent research confirms that appreciation is worth to be researched on its own (Semmer et al., 2019). Thus, this study analyses which effects leaders’ appreciation has on employee well-being and moreover raises the question if this relation should be regarded as a one-way street.

**Theory:** Stress-as-Offense-to-Self theory (Semmer et al., 2019) outline that appreciation at work is an important resource for employee health and well-being. Missing appreciation can result in a threat to self which, in turn, can result in stress or depressive mood. On the other hand, research could reveal positive effects of perceived appreciation on job satisfaction and well-being (Pohrt et al., 2022; Stocker et al., 2019). Commonly in occupational health psychology, job resources are seen as influencing factors shaping employee well-being (Bakker & Demerouti, 2007). But Ford et al. (2014) could show multidirectional effects in their meta-analysis: Not only work conditions can affect well-being, well-being can influence conditions at work and employees’ perceptions of these as well. Regarding appreciation, reversed effects might occur because generally people prefer to interact with people high in well-being and they appear more efficient and in control to them. Therefore, this study focuses on the multidirectional effects of appreciation and well-being.

**Methodology :** A two-wave study with a time lag of six weeks is carried out among German employees (expected n = 120). Leaders’ appreciation and well-being, i.e. job satisfaction, will be analysed via cross-lagged paths.

**Results:** Results will be available in March 23. The analysis is expected to reveal multidirectional effects, that leaders’ appreciation (T1) can shape job satisfaction (T2; regular causation), but also that job satisfaction (T1) determines if employees are vulnerable to the effects of leaders’ appreciation (T2; reversed causation).

**Limitations and implications:** This study only focuses on leaders as sources of appreciation and does not distinguish between different forms (e.g. praising, saying thank you). Given that appreciation is easy to show and trainable, it is a low budget but effective resource to promote employee well-being.

**Relevance to congress theme :** In a world where employee health and well-being is coming to the fore as the numbers of psychical-health-related absences are increasing and employees are facing new challenges (e.g. Covid), it is important to identify resources for employee well-being. Granting and receiving appreciation at work can be seen as a promising approach.

Relevant UN SDGs: Our study aims to clarify the role of appreciation at work which might be an effective resource to facilitate and maintain good health and well-being.

*Keywords: Appreciation, Well-Being, Multidirectional Effects*

## Poster P114

### Associations of job demands and burnout symptoms at baseline with adherence in a web-based cognitive ergonomics intervention

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science&practice

**Research goals:** Online platforms are increasingly used in workplace learning and development activities. However, adherence to online interventions is often poor and attrition rates are high. Current research has not widely studied which factors are associated with continued participation in web-based workplace interventions. The aim of this study was to examine whether contextual factors related to self-reported demands of work and burnout symptoms are associated with adherence in a web-based intervention.

**Theoretical background:** Previous literature has shown that process evaluation is necessary in the evaluation of complex workplace interventions as it helps to understand why an intervention succeeded or failed in achieving the desired outcomes. One key area of focus in process evaluations is intervention context, which refers to anything external to the intervention that might affect its implementation or effects. In this study, we focused on the associations of certain contextual factors with online adherence.

**Design:** The data were derived from an intervention study that sought to improve cognitive ergonomics at work. The 73 participants from three public sector organizations worked in various specialist jobs. Before the intervention, a baseline survey with questions about job demands and burnout symptoms was conducted. In the intervention phase, the participants completed an online coaching programme that lasted for 10 weeks. After the intervention, each participant's activity on the online platform was examined from three perspectives (number of modules completed, number of days with visits, number of comments and likes). Quasi-Poisson regression analyses were used to study if the frequency of five cognitive demands (learning, unclear instructions, distractors, multitasking, and time pressure) and indices of quantitative job demands and burnout (COPSOQ-II) at baseline predicted the three measures of adherence in the intervention phase.

**Results:** Quantitative job demands (IRR 0.86, 95% CI 0.77–0.96,  $p < .01$ ) and the frequency of time pressure (IRR 0.88, 95% CI 0.79–0.98  $p < .05$ ) and distractors (IRR 0.88, 95% CI 0.79–0.99  $p < .05$ ) at baseline were associated with less modules completed during the intervention. Predictions based on these models indicated that there was a difference of about one completed module for low and high ( $\pm 1$  SD) quantitative job demands, time pressure and distractors (1.2, 1.0 and 1.0, respectively). Burnout symptoms were not associated with the measures of adherence.

**Limitations:** The main limitations of the study are the small sample size and the focus on specialist work in office environments, which limit the generalizability of the findings.

**Practical Implications:** Our results indicate that high job demands may form a barrier to adherence. To improve adherence, and thus the effectiveness, of web-based workplace interventions, these demands need to be considered, and sufficient time for completing the intervention needs to be ensured.

**Relevance to the Congress Theme:** The study is highly relevant as workplace learning and development activities are increasingly carried out online and means for improving adherence in

these activities are needed. Furthermore, the studied intervention targeted improving work practices and conditions that relate to digitalization, intensification, and fragmentation of work, all of which are common phenomena in the changing world of work.

*Keywords: online intervention, adherence, context*

## Poster P115

### On Being Open to Change the World: Boundary Conditions for the Relationship between Openness and Performance

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science

#### Research goals

This study addresses a relatively understudied topic in personality and work psychology: the processes through which openness to experience and workplace context predict distinct facets of work performance.

#### Theoretical background

Openness to experience has been shown to predict performance criteria only inconsistently. However, previous meta-analytical studies emphasized that openness might be of great importance for a new category of organizational citizenship behaviors: change-oriented citizenship. By and large, there is limited empirical evidence on this topic. In addition, the results were inconsistent, leaving enough room for moderators. Drawing on Trait Activation and Situation Strength theories, this study proposes that two variables (organizational climate and innovation requirements) simultaneously moderate the relationship between openness as a predictor and the two criteria of task performance and change-oriented citizenship.

We propose the following hypotheses:

H1: Openness to experience will be a better predictor for change-oriented citizenship.

H2: The relationship between openness and change-oriented citizenship behavior will be jointly moderated by climate for initiative and requirements for innovation, such that change-oriented citizenship behavior will be highest when all three (i.e., openness, climate for initiative, and innovation requirements) are high.

H3: The relationship between openness and task performance will be jointly moderated by climate for initiative and requirements for innovation, such that task performance will be highest when all three (i.e., openness, climate for initiative, and innovation requirements) are high.

#### Method

The foreseen end of the project is on April 2023. For the current study, a cross-level design was used. The final sample will include approximately 200 participants. The targeted population consisted of employees and their direct supervisors. The only criteria for inclusion were the employment status and the duration of the employee-supervisor relationship. The employees assessed their personality traits and their jobs in terms of creativity requirements and participative climate. The supervisors provided performance ratings for their employees (task and change-oriented citizenship).

#### Results expected

Relationships of different magnitudes are expected between openness and the two facets of performance, and these relationships might change depending on situational cues.

#### Limitations

Some limitations need to be acknowledged. The cross-sectional design impedes causal inferences. The moderating variables are based on self-report and thus represent a subjective perspective on situational cues.

#### Research/Practical implications

The present study adds to our understanding regarding the association between openness and performance, and (a) makes a clear distinction between two facets of performance, and (b) specifies some situational cues that change the link between openness and performance, simultaneously. Understanding how situational cues within the organization imprint the link between openness and performance provides a powerful tool by which organizations could facilitate desirable outcomes.

#### Relevance to the congress theme

Change-oriented citizenship is a key concept in this study and it shows how employees can actually change the world of work.

*Keywords: openness to experience, organizational climate, change-oriented citizenship behavior*

## Poster P116

### Exploring Generational Stereotypes in the United States and China: Comparing Millennials and Bailinghou

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science&practice

#### Research goals

Generational stereotypes are pervasive despite consistent empirical evidence that generational differences tend to be overstated (Costanza & Finkelstein, 2015). The use of generational stereotypes may lead employees to seek employment elsewhere. Further, there has been little research comparing generational perceptions between cultures. For example, China has a considerably larger population of Millennials (i.e., the bailinghou ). The purpose of this study is to explore perceptions and stereotypes of Millennials in the United States and China and to see if the prevalence of these stereotypes in the workplace turnover intentions in both populations.

#### Theoretical background

Generational stereotypes in the United States can negatively impact stigmatized workers (Cox, Young, Guardia, & Bohmann, 2017). While these results have demonstrated some impacts on American employees, it is important to note that generational labels exist in other cultures as well. In particular, China labels the generation born after 1980 as being "Bailinghou." Whether these stereotypes are similar in China and whether they negatively impact Chinese Millennials has yet to be explored.

#### Design

Using MTurk and other survey tools, 800 working individuals from across a range of industries (400 in China and 400 in the United States) are being recruited. All measures are established and validated.

#### Results

Data collection is currently underway and 150 responses from the United States have been collected.

Our factor analysis indicated an eight factor solution that accounted for 75% of the variance best fit the data. Millennials in the United States are viewed as privileged, idealistic, materialistic, distrusting, expressive, eco-friendly, sociable, and immature.

Our data indicates that perceived discrimination towards Millennials is actually associated with greater organizational commitment and job satisfaction in our sample. However, Millennials perceived more Millennial discrimination,  $t(81) = 1.80, p = .04$ , and had greater intention to turnover,  $t(92) = 2.09, p = .04$ . Further, perceived discrimination fully mediated the relationship between Millennial status and intention to turnover. This provided some evidence that the presence of these stereotypes in the workplace can lead employees to seek work elsewhere.

#### Limitations

The data is all self-reported and cross-sectional, which raises issues of common method bias. However, our findings with regards to age (i.e., Millennial status) should be less susceptible to this bias as age is an objective measure.

## Conclusions

This is the first study to demonstrate that generational labels in the workplace can lead to individuals leaving the organization. Second, our findings suggest that stereotypes about Millennials are complex. Millennials are viewed as entitled, casual, uncommitted and self-expressive. Finally, our findings will include the first examination of stereotypes of Chinese Millennials and whether these stereotypes impact workplace experiences.

## Relevance to the Congress Theme

This work is most relevant to the fourth theme, Diversity and Inclusion.

## Relevant UN SDGs

This work is most relevant to decent work and economic growth as well as peace, justice, and strong institutions.

*Keywords: Millennials, stereotypes, bias*

## Poster P120

### Company's Cyberexposition and the Employees' risk propensity.

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#### Aims of the project:

The increasing number of attacks exploiting the human factor has been observed due to the fact that breaking through technological barriers becomes a resource-intensive process, because of their cumulative complexity and sophistication (Ani, He & Tiwari, 2019). Our studies were aimed at finding how companies are exposed to cyberthreats by employees' remote working habits. In study 1 the scale based upon Fishbein's (1967) expectancy model of attitudes towards actions was constructed. Study 2 was aimed at testing the hypothesis of the influence of employees' individual risk propensity on the company's exposition to the cyberthreats.

#### Results:

The list of 26 items - potentially risky habits elicited in preliminary qualitative studies - was subjected to factor analysis, (principal components, Varimax rotation, N=548). The analysis revealed three factors accountable for 67% of variance explained. The employees' habits may be categorised as posing (1) the environmental threats, (2) the credentials -related threats, and (3) the behavioural threats on the company's cybersecurity. The expectancy model we applied allows to calculate the indices of risk posed by the employee's habits on the company's cybersecurity.

In study 2. DOSPERT (Weber, Blais & Betz, 2002) scale was used to measure the individual's propensities towards taking risk in various domains together with our cyberexposure scale. The preliminary results show that cyberexposure correlates with financial and ethical but not with social risk taking.

#### Practical Implications:

The cyberexposure scale measures separately two parameters of the habits/behaviours related to cybersecurity: (a) the valence i.e. severity of a threat posed and (b) the probability of being performed. This expectancy based approach allows the users to separately assess the cybersecurity beliefs/knowledge of the employees, their habits and the overall value of the risk posed by the employees. The severity of the behaviours may as well as the subjective probability of being performed may be perceived as lower or higher, which produces four types of cyberexposure attitudes: low perceived threat and low probability of doing, low perceived threat and high probability of doing, high perceived threat and - low probability of doing, and high perceived threat together with high probability of doing. As can be seen, this approach allows the cybersecurity officers to adjust their policies: sometimes the education on severity of threats will be effective (low perceived threat) but sometimes, in high threat cases, the different policies will be not needed.

*Keywords: Cyberexposition, Risk propensity, Cyberthreats*

## Poster P121

### **Women's Careers: The influence of Resources on Resilience to achieve Subjective Success.**

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science&practice

The aim of this research is to explore resources that can boost women's career development in light of the gender inequalities which still persist in today's work environment. Firstly, we are interested in identifying what leads women to face career challenges and achieve their career ambitions. We look into the influence of both personal and contextual resources on women's resilience in overcoming career setbacks. Secondly, we delve into the concept of resilience and its impact on achieving subjective success. Thirdly, we deepen the relationship between resources, resilience, and subjective success, investigating a mediation between them. This research is important as the role of resilience is still missing in studies on women's careers (Jogulu et al., 2022).

The research findings can inform both researchers and practitioners concerned with equity and inclusion to better support women in their professional development. Using the conservation of resources theory (Hobfoll, 1989) as a theoretical lens, lack of support is a career-related stressor in a shared social context. The theory posits that resources allow individuals to increase their coping capabilities. The insights of modern career theories are also considered in this research. Specifically, Savickas' (2005) career construction theory delves into individuals' successful adaptation to their environment by considering personal resources in persisting towards setbacks (i.e., career adaptability).

The research sample consists of Italian women having a work career. We used a cross-sectional design with snowball sampling. Data were collected with a survey, using measures from previous research on career satisfaction. Data collection and analyses will be finished by the end of 2022.

The results of this research include the distinction between personal and contextual resources needed for overcoming career barriers. In addition, the results highlight women's resilience and its relationship with achieving subjective success. In exploring the results, the importance of certain forms of support is deepened when considering women's achievement of their career goals. Some limitations that need to be considered in this research include the cross-sectional design, the measures used and the convenience sampling.

This research has implications for fostering career resilience leading to subjective career success. It contributes to the expansion of knowledge regarding the role of resilience in women's career development, and it provides further insights into women's subjective success. The research also has practical implications for companies, especially in developing support strategies and creating a safe environment of sharing and networking for women.

In line with the congress theme, this research delves into women's careers as they are still discriminated against in work environments. This study invites scholars and practitioners to essentially act in implementing solutions and interventions that benefit the achievement of women's career ambitions.

This research contributes to Sustainable Development Goal 5, Gender Equality, highlighting the different contextual resources women and men have in workplaces, and to Sustainable Development

Goal 8, Decent Work and Economic Growth, in light of the projected global unemployment rate that disproportionately impacts women.

*Keywords: women, subjective career success, career resilience*

## Poster P122

### **A mixed-method investigation of workload and job satisfaction among air traffic controllers: the key roles of work-family interface and resilience**

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science&practice

**Research goals.** The travel restrictions introduced by European countries to contain the spread of the COVID-19 virus have severely affected international air traffic demand (ICAO, 2021). Italian airlines have witnessed alterations in air traffic volumes, resulting in substantial changes in workload. Nevertheless, little is known about the psychological challenges that Italian air traffic controllers (ATCOs) faced during the pandemic. This research aimed to examine whether workload would be directly and indirectly (through work-family conflict) related to job satisfaction among ATCOs and whether this relationship could be conditional on resilience levels.

**Theoretical background.** Workload is one of the main causes of stress among ATCOs (Triyanti et al., 2020) and has adverse effects on work-related outcomes, including job satisfaction (Jou et al., 2013). Job dissatisfaction can threaten ATCOs' productivity (Qureshi et al., 2019) and team cooperation (Kuang et al., 2020), which may increase the risk of compromising the efficiency and safety of air traffic management (Kuang et al., 2020). Thus, it is crucial to analyse how and when workload can be negatively related to job satisfaction.

**Design.** A total of 168 ATCOs operating throughout the Italian territory completed questionnaires that measured workload, work-family conflict, job satisfaction, resilience, and Covid-19-related exposure. Descriptive statistics and moderated mediation analyses were performed. To deepen the quantitative results, ten semi-structured interviews were conducted and analysed using thematic analysis.

**Results .** When ATCOs perceived a high workload, they were more likely to develop work-family conflict. As a result, they became less satisfied with their work. Resilience buffered this relationship, suggesting that ATCOs with high and moderate resilience levels were at lower risk of experiencing job dissatisfaction related to work-family conflict under heavy workload conditions than those with low resilience. Six core themes were identified from the interviews: the impact of the Covid-19 pandemic; double-edged job characteristics; job-related risks stressors; protective resources; work-life interface; and consequences.

**Limitations.** The cross-sectional study merely relied on self-report measurements.

**Research/Practical Implications.** By addressing the call for more research on the workload-job satisfaction link (Inegbedion et al., 2020), this study suggests the need for flexible work arrangements and family-friendly policies to allow ATCOs better managing workload and balancing work and family demands. Additionally, given the protective role of resilience, organizations could provide ATCOs with psychological resilience training. These programs could be integrated with courses on coping skills on how to balance work and personal life (e.g., time management strategies) and on how to set boundaries between these two domains (e.g., cognitive-emotional segmentation strategies).

**Relevance to the Congress Theme.** This study deepens the topic of wellbeing by revealing how and when workload is related to job satisfaction among ATCOs.

Relevant UN SDGs . Good health and wellbeing.

*Keywords: Job satisfaction, work-family interface, resilience*

## Poster P123

### Development of a Framework to Examine Expectations in Human-AI-teamwork

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science

#### Research Goals

The current literature discussing AI in Teams is mostly concerned with questions of how an artificial agent should be designed to be positively perceived by humans. However, little research has been done into what humans expect from AI colleagues compared to human colleagues. There seems to be something inherently different in how AI agents compared to humans are perceived, especially with regard to expectations. Therefore, the goal of the present work is twofold: first, to show that AI colleagues are perceived differently from human colleagues; second, to examine if expectations towards an AI colleague can be managed.

#### Theoretical Background

Applying the Expectation States Theory to the context of human-agent teams, we first propose that the status characteristic of being human compared to AI (i.e., nature) might result in different expectations towards a colleague and thereby to differences in team-related factors such as trust. Building on the Expectation Disconfirmation Theory, which has been widely used to study the relationship between expectations towards a technology, we then propose how to manage and alter these different expectations towards AI colleagues and in turn improve collaboration and satisfaction.

#### Method

To do so, we start by investigating differences in perceptions between having a human and an AI colleague. Specifically, we recruited 106 subjects for an online between-subjects experiment. Participants were assigned either to a human or an AI colleague as part of a medical team. Then, they read different team scenarios and rated the extent to which they perceived their colleague to be a teammate and a tool.

#### Results

Preliminary results showed that participants in the AI-colleague condition perceived their colleague more as a tool and less as a teammate than those in the human-colleague condition.

#### Limitations

Despite the importance of these first findings, the present study has some limitations, such as the use of scenarios instead of real-world teamwork situations. Future studies should overcome this issue and continue investigating differences in expectations associated with the characteristic nature and how they can be managed to enable the integration of AI into teams.

#### Implications

Our results indicate that while all other factors remained equal (role, skills, experience), the perception of the colleague changed depending on its nature (AI vs. human). Even though the nature of the colleague was not pertinent to a specific task or situation, it led to differences in perceptions. This indicates that the status characteristic “nature” exists, is salient, and can impact the perceptions of humans when integrating an AI as a colleague. This might also indicate that expectations about a

colleague's performance differ when the characteristic nature is salient, resulting in differences in team dynamics.

#### Relevance to the Congress Theme

For companies who seek to introduce AI as part of a team, this means that they will first need to change the expectations associated with a colleague when being artificial. This is especially important, as the world of work is changing rapidly and the integration of AI into the workplace is becoming a reality.

#### Relevant UN SDGs

We adopt a human-centred perspective of human-AI teamwork that can help to sustainably and ethically introduce AI into the workplace, improve working conditions and promote economic growth while simultaneously relieving the human workforce.

*Keywords: artificial intelligence, teamwork, expectations*

## Poster P124

### **The interplay of meaningfulness and money in momentary work performance: an experimental approach**

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science&practice

We tested how task meaningfulness affects performance, using a novel online procedure that built upon previous studies (Ariely, Kamenica, & Prelec, 2008; Chandler & Kapelner, 2013). Participants were asked to either count white dots on a black background, or, in the meaningful condition, to count stars on sky maps as part of an alleged program that monitors illumination pollution. Participants could decide on how many tasks they wanted to complete. We conducted three pre-registered studies (N = 471) where we showed that counting stars was perceived as a more meaningful task. In the first two studies we paid participants a fixed amount of money regardless of the time spent on the task. We found no main effect of experimental manipulation on the number of tasks. We found an exploratory indirect effect in that task meaningfulness played the role of the mediator. In the third study we offered additional remuneration for every completed sky map/photo. The payoff dropped after each task. We found that individuals performed more tasks in the meaningful condition. There was no significant indirect effect through subjective task meaningfulness. These results suggest that when performance is not rewarded with external benefits, subjective meaning ascribed to a task can drive the performance. Interestingly, even slight financial reward per task boosts performance in the meaningful condition. Taken together, the findings suggest that the interplay between meaning and money may be not only compensatory, but also complementary.

*Keywords: work meaningfulness, performance, work engagement*

## Poster P125

### Older workers' decisions to stay at work: The role of self-efficacy and perceived occupational opportunities

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science&practice

**Research Goals and Theoretical Background.** Recently, the Covid-19 pandemic has drastically changed working environments, which could cause uncertainty among (older) workers and affect work-related outcomes, like retirement. Despite the societal importance to prolong working lives, previous research indeed showed an increase in the number of (early) retirees during the Covid-19 pandemic (Davis, 2021).

According to the uncertainty regulation model (Griffin & Grote, 2022), endogenous/perceived uncertainty (i.e., uncertainty over which individuals have control) is affected by personal and environmental factors (Downey & Slocum, 1975), which can influence decision-making. Individuals who have more perceived control over their retirement decisions, for example, have stronger retirement intentions (van Dam et al., 2009). Further, opening behaviors, which are actions directed towards new goals (e.g., focusing on new occupational goals), can affect endogenous uncertainty. In this study, we focused on self-efficacy to work longer (i.e., until the legal retirement age) as endogenous uncertainty, and we investigated whether there is a positive relationship between older workers' self-efficacy and intentions to work longer. Further, we investigated whether perceived occupational opportunities (as opening behavior) mediates this relationship. Finally, since leadership support is an important factor in retirement decisions (Woźniak et al., 2022), we investigated whether the effect of self-efficacy on intentions to work longer via perceived occupational opportunities differs depending on levels of leadership support (i.e., moderated mediation).

**Methods.** A longitudinal study was conducted among employees aged 50 years or older that worked in a large Western-European government organization. Data include participants from the fourth and fifth wave (  $N$  total = 967;  $M$  age<sub>T4</sub> = 55.0,  $SD$  age<sub>T4</sub> = 3.4; 67% women).

**Results.** First, a mediation analysis using PROCESS macro (Hayes, 2013) showed a significant direct effect ( $\beta = .31$ ,  $p < .001$ ) of self-efficacy on intentions to work longer,  $R^2 = .12$ ,  $F(2, 964) = 65.89$ ,  $p < .001$ , as well as a significant indirect effect via perceived occupational opportunities, 95% CI [.01, .04]. However, a moderated mediation analyses showed no moderation effect of leadership support ( $p = .22$ ) on the relationship between self-efficacy and perceived occupational opportunities. The overall moderated mediation model was not supported, index = .00, 95% CI [-.02, .00].

**Limitations.** First, this study focused on intentions, but did not capture actual retirement behavior. However, this study is part of a larger longitudinal research project, hence, we will accommodate this limitation with additional analyses. Further, we focused on leadership support and perceived occupational opportunities. No effect was found of leadership support; other work (like work complexity) and personal characteristics (like health) might have a stronger impact on older workers' uncertainties and push them to retirement.

**Research/practical Implications.** Uncertainty among older workers and how it affects retirement decisions is underresearched. Organizations might focus on older workers' self-efficacy and occupational goals, for example by organizing coaching sessions, to motivate older workers to work longer.

Relevance to the Congress Theme. Given global aging and shortages in the labor market, it is highly relevant to investigate uncertainties older workers may experience.

*Keywords: Retirement, self-efficacy, occupational opportunities*

## Poster P128

### **South African Organisations on the Couch. Exploring unconscious dynamics in organisations. A post pandemic view**

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science&practice

Research goals and why the work was worth doing

This longitudinal study argues that the present conscious and rational discourse on the identity of South Africa and its organisations, denies the underlying, deeper roots and causes, irrational and unconscious manifestations in the collective system. We realise that this could be because of the country's painful past and the difficulty to talk about such overly sensitive matters. Therefore, the approach suggested by this study is to imagine South African organisations on the metaphorical Freudian couch to study its systemic psychodynamic behaviour. Hopefully, this will provide an awareness and understanding of the nature and intensity of the underlying collective anxiety, as well as its manifesting defensive structures.

Theoretical Background

Systems Psychodynamics (SP) is conceived as a systems theory through which one understands the universe as a hierarchy of systems (Cilliers & Henning, 2014). SP originated at the Tavistock Institute for Human Relations in London and functions as a depth psychology organisational theory, consultancy stance and research domain (Cardona, 2020). SP studies organisations as consisting of complex micro, meso and macro systems with cognitive, affective, motivational, and relational behaviours manifesting consciously and unconsciously (Armstrong, 2005).

Design/Methodology/Approach/Intervention

Hermeneutic Phenomenology (Kafle, 2013) allowed for an emerging qualitative approach within an interpretive framework (Creswell & Poth, 2018). The research approach was orientated towards exploring participants lived experiences of being members of South African organisations and interpreting the context (Creswell & Poth, 2018).

A Listening Post (LP) (Long, 2013) served as the data gathering approach. Listening posts are centrally associated with OPUS (Organisation for Promoting Understanding in Society) in the United Kingdom. An unstructured group method based on the notion that a group of people (8-12) convening to study the unconscious behaviour of a system, act as a representation the larger system.

Results obtained or expected

Results of this research are currently being refined to be presented in journal articles in 2023.

Preliminary results obtained from three LP convened in 2020 and 2022 are integrated to reveal the following themes:

Metaphor – Rhinoceros and Tom and Jerry (cartoon).

Survival – personal, organisational, and societal.

Government – not taking care of citizens, threatening citizens.

Coping mechanisms – smoking and alcohol during prohibition.

Hypervigilance

Post traumatic experiences after Covid-19 restrictions lifted

Disconnection, dissociation

Control – Leaders and followers

Limitations

The researchers were aware that the LP as a qualitative instrument, does not require a stratified random sample of employees of South African organisations. It served as a snapshot (Khaleelee and Stapley, 2018) of unconscious dynamics which may be manifesting in some organisations at a particular point in time.

Research/Practical implications

Behavioural Practitioners in organisations are made aware of members of organisations lived experiences of the prevailing climate and culture. Based on LP findings practitioners may develop their own hypotheses of conscious and unconscious dynamics manifesting in their work groups and the organisations

*Keywords: Covid-19, Listening Post, Systems Psychodynamics*

## Poster P130

### **How to support the realization of sustainability preferences in self-service online investments? – An integrative literature review on digital nudges**

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Research goals and why the work was worth doing – The growing emergence of online-based financial self-service platforms provides new access to investment opportunities for individual investors (Chaudhry & Kulkarni, 2021; Graham & Henman, 2019). Simultaneously, these platforms offer a new approach to strengthen funding for sustainable projects and organizations (Horn et al., 2020). However, individual investors are subject to behavioral biases (Sahi et al., 2013) often prohibiting effective translation of sustainable preferences into congruent behavior (Alemanni, 2022). Hence, the choice architecture available to the individual plays an important role in the decision-making process (Pilaj, 2017). Organizations and platform designers should pay close attention to include supportive mechanisms for guiding individuals towards preference fulfillment. For identifying potential support mechanisms an integrative literature review is conducted aiming to provide an overview of existing digital nudging mechanisms and their potential to support individual decision making.

Theoretical background – Decision making in online contexts is significantly dependent on informational and physical design aspects and affected by implicit cognitive and emotional processes (Michalek et al., 2015). Hence, the choice architecture available to the individual and associated biases substantially affect the decision-making process (Kahneman, 2012, Smith & DeCoster, 2000). Nudging can change the way in which choice relevant information is presented to individuals (Thaler & Sunstein, 2008). By altering interface design elements via digital nudges decision making can be subtly guided towards individual preference fulfillment (Weinmann et al., 2015).

Design/Methodology/Approach/Intervention – The integrative literature review was conducted based on 643 sources of which 82 were considered for an in-depth analysis of digital nudges in online decision-making contexts which were systemized based on outcome and type of behavior change (Oinas-Kukkonen, 2013).

Results obtained – The resulting conceptual framework consists of 42 digital nudges in 15 online decision-making contexts. The digital nudges differ in terms of their goals regarding the outcome (act of compliance, behavior change, attitude change) and type of behavior change (forming, altering, reinforcing).

Limitations – Besides typical limitations arising from the methodological approach of the review, the study specifically focused on digital nudges in online decision-making contexts. This focus limits the amount of nudges which could have been identified by including broader nudging research from other contexts .

Research/Practical Implications – This study contributes to research on the effect of choice architecture and interface design on the ability to promote sustainable decision making in line with individual preferences. For practice this review provides a systematic overview of digital nudges and their potential to aid specific types of behavior change.

Relevance to the Congress Theme – The study relates to the changing world of work in investigating the impact of different forms of online presentation on sustainable decision-making which can be particularly valuable in the area of public relations and influencing skills.

Relevant UN SDGs – The study investigates digital nudges as a means to support sustainable consumption and production patterns via individual investment, thus promoting sustainable economic growth.

*Keywords: Sustainability; Digital Nudge*

## Poster P131

### **Towards an integrative approach to work-life flow and wellbeing: a systematic review of stable and dynamic influencing factors**

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science

Research goals and why the work was worth doing : Work-life balance and flow (WLF) is important for wellbeing (WB) at work. The COVID-19 pandemic created new hybrid working conditions impacting on employees' WLF and WB. As hybrid work in ongoing post pandemic times is further present, its impact on the work-nonwork Interaction (WNWI) and WB remains important. There is nearly no research on a comparison between pre- and pandemic research on this field but a need. The research goal is collect, analyze and compare information on pre- and pandemic research.

Theoretical background: This review builds a theoretical framework, with two organisational behavior theories: Human System Audit and IGLO Model, and four theories explaining WNWI: Job Demand-Resource Model, Role Theory, Work-Family Spill Over and Boundary Theory. It compiles the literature search, coding scheme, inclusion criteria, and data extraction, with the subsequent quality of evidence, including the high and moderate results. We classify protective resources and risk factors/stressors from work from home (WFH) in a VUCA environment at all organizational levels that contribute to employee WB and WLF.

Method: Article compilation was done by two independent researchers based on PRISMA (Bossuyt et al., 2020) using the following databases: CINAHL Complete, MEDLINE, APA PsycInfo, APA PsycArticles and Keywords: work-life\* OR work-9 nonwork\* OR work-home\* OR work-family AND flow\* OR balance\* OR conflict OR enrichment OR enhancement OR depletion AND remote work or virtual work or telework or WFH or telecommuting or virtual office or remote employees. The first level of inclusion criteria was: articles published between 2020-2021, peer-reviewed, full text available, written in English. A total of 113 articles were screened in this first level. At a second level of inclusion criteria a coding scheme was introduced. Once all articles were classified, those who had assigned the numbers 1, 2 and 3 were revised. 27 articles were included. A measure of internal reliability of the process of literature search was computed using Fleiss' Kappa. Data extraction criteria noted author, year, methods used, variables studied, results and limitations of each article. Methodological parameters concerned target group, sample size, location of work and study design. Variables studied concerned the theory framework, resources, stressors, and the perspective regarding WNWI, classified as balanced, negative, or positive (Beigi et al. 2019). Lastly, the impact on positive and negative WB was included. After data extraction, a quality appraisal was made using Grade Approach.

Results: Dominant topic is the approach to WFH as a tool for positive WLF and helping to improve WB, autonomy, flexibility a frequently found resource helping to reconcile work and nonwork responsibilities. The integration of roles arises stressors, resulting in a negative impact on WNWI. Pandemic studies faced the issue of the abnormality of events raising concerns about the extrapolation of results.

Limitation : Our systematic review does not include more years of pre-pandemic research.

Conclusions : We contribute with important information on working conditions and their impact on pre- and pandemic WFL. Main limitation of reviewed articles is the subjectiveness of measures as data was self-reported and based on perception rather than actual behaviors. Future research is required on psychosocial processes (leader, group level) relevant to WB.

*Keywords: Work-life flow, COVID working conditions, Systematic Review*

## Poster P132

### How parents' subjective economic situation affects their environmental uncertainty perceptions across Slovakia, Germany and Great Britain

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The study aimed to verify how parents' subjective economic situation, and objective demographic variables (gender, country, number of children, employment status) contributed to their environmental uncertainty perceptions, namely job insecurity, fear of Covid-19 and parents' subjective assumptions of children's quality of life across Slovakia, Germany and Great Britain. The mental health of parents during Covid-19 were studied in many countries among those in Slovakia (Vargová et al., 2022), Germany (Christner et al., 2021) and the United Kingdom (Cheng et al., 2021). Many children and parents experienced lockdown-related stress during the Covid-19 pandemic (Christner et al., 2021), and working parents, in particular, had worse mental health and experienced financial insecurity (Cheng et al., 2021). The caring of parents for their children because of Covid-19 and their own difficulties doing or keeping their job (job loss) went sometimes along with a lower income (Anant & Gassman-Pines, 2020).

Data of parents aged at least 18 with at least one child aged from 4 to 24, for which the parents are financially responsible were collected online from August to October 2022. The final sample consisted of 499 parents (353 women, 146 men). Job insecurity scale (De Witte, 2000) contained four items (Cronbach's alpha = .859). The fear of Covid-19 and parents' subjective assumptions of quality of life of children were measured each with one question. We conducted multiple hierarchical linear regression analyses separately for each dependent variable (job insecurity, fear of Covid-19 and quality of life of children) in SPSS 23.0. Independent variables were divided into two blocks and dummy-coded: in Step 1, gender (men, women), country (Slovakia, Germany, Great Britain), the number of children (one, two, three and more), and employment status (part-time, full-time, other) were entered, then in Step 2, the subjective economic situation (without difficulties, some difficulties, difficult/very difficult) was introduced. At first, we found stronger job insecurity in parents living in Slovakia and lower job insecurity was experienced by those evaluating their economic situation as without difficulties or with only some difficulties. Secondly, parents with part-time jobs experienced greater fear of Covid-19. Finally, fathers, parents living in Slovakia and those without economic difficulties subjective evaluated their children's quality of life to be better. In contrast, parents with difficult/very difficult economic situations subjective evaluated their children's quality of life as worse.

Our study clearly demonstrates the significant role of the subjective economic situation in terms of job insecurity and the parents' subjective evaluation of their children's life. The employment status was only significant in fear of Covid-19 whereas gender was important in terms of the parents' subjective evaluation of the quality of life of children.

The lower number of fathers in our research sample as well as the sole use of self-reported data might be seen as limitations. Overall, our findings contribute to clarifying antecedents of job

insecurity, fear of Covid-19 and evaluation of children's quality of life of employed parents. Poverty might be a serious threat to parents and families modifying perceptions of one's present environmental conditions and future options.

This study was supported by APVV-20-0319 and VEGA 1/0719/20.

*Keywords: job insecurity, fear of Covid-19, subjective assumptions of employed parents of children's quality of life*

## Poster P133

### **“I like you, AI, but I don't want to work with you!” - A closer examination of the effect of AI-assisted feedback on work engagement**

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science

**Research goals** Artificial intelligence (AI) is an increasingly important topic in organisational context. 64% of more than 8000 respondents prefer a robot over their own supervisor, according to a study by Oracle (2019). These results stress the emerging importance of technologies like AI in the workplace, specifically in leadership positions. Thus, the goal of our study is to examine the underlying psychological mechanisms that contribute to the cooperation of employees with an AI in a managerial role.

**Theoretical background** In 2022 we aimed to further examine the perception and acceptance of artificial intelligence in an organisational context. Our experimental design focused on assessing the effect of feedback given by either an AI versus a human manager on employees' work engagement. Our research group found that feedback from human managers leads to a higher work engagement than the same feedback from an AI. This poster takes a closer look at possible mechanisms related to this effect. Specifically, the focus is on whether the subjects' attitudes towards AI, affinity for technology and previous experiences with AI and human managers moderate the relationship between the source of feedback (AI vs. human manager) and work engagement.

**Design** In a 2x2 online-based study, participants (n=357) were asked to imagine a work-related scenario, in which they had held the leading position of an important project in their company. After its completion, the participants were now to receive feedback on their performance, which was presented to them randomly varied in source (AI vs. human manager) of feedback. Afterwards, individual work engagement was assessed as a dependent variable. Furthermore, the aforementioned moderator variables were surveyed.

**Results** A moderation analysis was conducted to determine whether the interaction between the moderator variables and the independent variable source of feedback significantly predicts work engagement. Results show that the effect between source of feedback and work engagement was not significantly moderated by affinity for technology ( $p = .512$ ), attitude towards AI ( $p = .815$ ), previous experiences with AI ( $p = .761$ ) or previous experiences with human managers ( $p = .577$ ).

**Limitations** As our study was based on an imagination-based scenario, the results might lack external validity. A replication in real-life organisational context could be beneficial to verify the results.

**Conclusion** As shown in our study, receiving feedback from a human manager leads to more work engagement than receiving the exact same feedback from an AI. Subjects' high affinity for technology, positive attitude towards AI, positive experiences with AI or negative experiences with human managers did not mediate this effect. This indicates that even subjects that had a more positive opinion on AI technology did not benefit from AI feedback in terms of their work engagement. Thus, it might be beneficial to rely on human feedback rather than AI technology due to its detrimental effect on work engagement.

Relevance to theme “The changing world of work” is going to involve various advanced technologies, such as AI. Even though many participants of the Oracle study (2019) would rather work with “robots” than human supervisors, AI is not always superior to traditional leadership.

*Keywords: artificial intelligence, employee communications, human-machine systems*

## Poster P136

### **Be mindful=be able to handle critical incidents: A mixed-method study among Italian air traffic controllers**

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science&practice

**Research goals.** Air traffic controllers (ATCOs) are among the most high-risk groups for critical incidents (CIs). Facing such incidents may hinder professional activity, undermine affected individuals' well-being and cause company financial losses. Shedding light on how and when ATCOs feel capable of managing CIs is crucial to formulate preventive measures that help companies reduce future incidents. This study aims to examine the mediating processes – i.e., problem-focused coping tendencies – and boundary conditions – i.e., previous experience with CIs and training on CI management – associated with the impact of mindfulness on self-efficacy in managing CIs.

**Theoretical background.** Mindfulness – the intentional and non-judgmental attention to present events (Brown et al., 2007) – is a personal resource for ATCOs (Kearney et al., 2016) as it enables them to make timely decisions (Li et al., 2018), be aware of and attentive to ICs (Li et al., 2014) to find solutions to address them (Liang et al., 2022). Although the link between mindfulness practices and self-efficacy has been proven (Charoensukmongkol, 2013), little is known about the factors enhancing self-efficacy in managing CIs among ATCOs. Based on the social cognitive theory (Bandura, 1989), prior experience with ICs and training in CI management are mastery experiences that can foster self-efficacy.

**Design.** A total of 168 Italian ATCOs completed questionnaires that measured mindfulness, self-efficacy in assessing and deciding about critical incidents, problem-focused coping tendencies, prior experience with CIs, training on CI management, and COVID-19-related experience variables. Descriptive statistics and moderated mediation analyses were performed. To deepen the quantitative results, ten semi-structured interviews were conducted and analysed using thematic analysis.

**Results.** High-mindful ATCOs were more problem-oriented and then self-confident about their ability to manage CIs, especially when they had prior experience with CIs and received training on CI management. Three core themes were identified from the interviews: decision-making as a core job aspect; environmental facilitators (training, social support); personal resources (prior experience, coping strategies, situational awareness).

**Limitations.** This cross-sectional study merely relied on self-report measurements.

**Research/practical implications.** This study moves a step forward in both the air traffic management and mindfulness literature, as it is the first to clarify how and when mindfulness can promote self-efficacy in managing CIs in the understudied population of ATCOs during the pandemic. ATCOs could benefit from on-the-spot mindfulness interventions, CI management, and problem-focused coping strategies training. Mentoring and sharing sessions could also help less experienced aviation personnel build skills.

Relevance to the Congress Theme. This study sheds new light on the personal and environmental factors that promote ATCOs' beliefs in their ability to manage ICs. This has implications for ATCOs' and air passengers' well-being and security.

Relevant UN SDGs . Good health and well-being.

*Keywords: Air traffic controller, mindfulness, critical incident management*

## Poster P138

### Untying attachment and commitment relationships in dual study programmes – A longitudinal investigation

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science&practice

**Research goals:** Developing strong commitment ties with dual students is of great interest to cooperating companies, as commitment is associated with lower turnover intentions and lower actual turnover (e.g., Meyer et al., 2002). However, dual students are newcomers in their cooperating companies and research has shown that commitment of newcomers is quite easily lost (e.g., Vandenberg & Self, 1993; Maia, Bastos & Solinger, 2016). We suggest that an attachment perspective building on the „propensity of human beings to make strong affectional bonds“ (Bowlby, 1977, p. 201) can offer a conceptual lens to better understand the formation of commitment over time. Following calls for greater emphasis on individual factors, multi-target-approaches, and longitudinal designs for a deeper understanding of commitment (e.g., van Rossenberg, Cross & Swart, 2022), the study aims to examine the relationship of attachment and commitment of dual students in their first year of study and employment.

**Theoretical background:** A growing body of research has taken the route of applying an attachment perspective in the organisational context and analysing attachment avoidance and anxiety as antecedents of commitment (e.g., St. Clair, 2010; Yip et al., 2018; Feeney et al., 2020). Therefore, this study builds on the attachment theory of Bowlby (1969) and on Meyer and Allen’s (1991) 3-component model of commitment. Employing a multi-target-approach (e.g., Reichers, 1985), both the cooperating company and the in-company trainer are important targets for dual students’ attachment and commitment. We assume that relationship-specific attachment to these targets will affect the commitment of dual students. More specifically, we will distinguish how both central attachment dimensions (Bartholomew, 1990), namely attachment avoidance (model of the target) and attachment anxiety (model of the self) will have an influence on how dual students experience commitment.

**Design and methodology:** A three-wave panel design was used to collect data from dual students in their first year of study and employment. We employed the Organisational Attachment Scale (Engel & Straatmann, 2017) for measuring organisational attachment, a short version of the Experience in Close Relationships Scale (Brennan, Clark & Shaver; 1998) to capture in-company trainer attachment, and the COMMIT Scale (Felfe & Franke, 2012) to assess commitment.

**Results:** The results will be presented at the conference.

**Limitations:** Despite careful measures, the reliance on self-report data holds the potential of common-method variance.

**Research and practical implication:** The results are expected to advance our understanding of the interrelationship of attachment and commitment by clarifying the ambiguity about changes in commitment over time and the direction of influence between attachment and commitment. Further, the results may enhance dual study training practice by providing insights to develop initiatives for increasing the commitment of newcomers.

Relevance to the congress theme: The results are likely to lift the curtain on how cooperating companies and in-company trainers can better respond to the attachment needs of dual students to support the formation of beneficial relationships in a changing world of work.

*Keywords: Commitment, attachment theory, dual study programmes*

## Poster P139

### Predictors and outcomes of Decent Work among non-European migrants

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Over the last decade, an increasing number of migrants has been arriving in Europe looking for better opportunities (Migration Governance Indicators Profile, 2020). However, they tend to work in low or unskilled jobs that are insecure (EUROSTAT, 2018; Piper et al., 2017) with unfair pay and undesirable work hours (Binggeli et al., 2013; de Castro et al., 2006; Marfleet & Blustein, 2011). For this reason, this research project aims to investigate the Decent Work (DW) experiences of non-European migrant workers. Based on the International Labor Organization's standards, Duffy et al. (2016) developed the Psychology of Working Theory which focuses on the experiences of people who are marginalized in the workplace. The theory highlights the importance of considering the broader social, economic, and political contexts in which people work, as well as the individual's own psychological experiences and development. For this reason, migrant workers are an important and relevant population in this framework due to their vulnerable status in society. Three studies are outlined to achieve the research goals. First, a qualitative study in Italy will investigate migrant workers' experiences from different stakeholders' perspectives through semi-structured interviews with migrant workers (individual level), employers (organisational level), and experts (national level). Second, a comparative study will explore the DW experiences of migrant workers in two European national contexts (Italy and Germany) through an online survey which will be disseminated in both countries. This study will include specific demographic variables that are related to the migrant group population (e.g., residency status), as well as work-related variables such as DW Questionnaire (Ferraro et al., 2018), Organizational Justice Perceptions (Moliner, 2004), Employee Performance (Koopmans et al., 2014) and Employee wellbeing (Bartels et al., 2019). Finally, a quantitative longitudinal study (3 waves) will be conducted in Italy through a questionnaire to investigate differences in the predictors and outcomes of decent work between migrant and Italian workers operating in the same company. Variables included in this study will be further specified, and studied in depth, in a later stage, following the results of the interviews conducted in study 1. The qualitative study results may be available in June 2023 (study 1), and the comparative survey's results (study 2) in May 2023. The longitudinal study in a company will be conducted next year. One limitation of the research project is that Study 2 uses a cross-sectional design that does not perfectly fit the PWT model. However, the project has several implications: Study 1 will offer important insights for employers and Civil Society Organizations in the region to improve DW conditions for migrant workers. The cross-country comparison of decent work in Italy and Germany (Study 2) highlights the importance of contextual factors (e.g., national legislation). Finally, Study 3 situates migrant workers' perceptions of DW with respect to their Italian (local) coworkers. This will reveal any potential disparities between both groups and call for organizational interventions to reduce such inequality. Migrant workers are often underrepresented in the WOP scholarship and research. This project answers the urgency aspect of the congress: "The future is now!" by addressing the SDG on Decent work and economic growth for all- migrants included.

*Keywords: Decent Work, Migrants, Psychology of Working Theory*

## Poster P141

### **Not too few, not too many – A validation of the situational judgment test measuring five key leadership competencies**

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Research goals and why the work was worth doing

Situational judgment tests (SJTs) can be a useful tool for selection and development of leaders. However, most traditional leadership SJTs have questionable construct validity. At the same time, newer, construct-driven SJTs might not be as appealing to practitioners and candidates as they can be long and assess a large number of overlapping dimensions. The goal of our research was to design a leadership SJT that would be both construct based and appealing to HR practitioners and leaders.

Theoretical background

Based on critical incidents methodology, literature review and interviews with managers, and guided by the “not too few, not too many” principle we identified five key leadership competencies that appeared across all sources: motivating subordinates (MS), developing subordinates (DS), teamwork management (TM), relationship management (RM) and decision-making (DM).

Next, we developed a construct-driven SJT to measure the procedural knowledge (Motowidlo et al., 2006) related to these competencies. The content of our item responses draws on three well-known psychological constructs that conceptually align with the five competencies – transformational leadership (MS and DS), political skill (RM and TM) and actively open-minded thinking (DM). Each competency was assessed with four situations each having three response alternatives that reflected different levels of a specific competency.

Design/Methodology/Approach/Intervention

To validate the SJT, we conducted an online survey of 197 supervisors (46.5% female) with the average of 9.25 years of supervising experience (SD = 6.83). The participants completed the SJT and self-reports of declarative knowledge related to the five competencies, transformational leadership, political skill, actively open-minded thinking and the Big 5. We also obtained data from their subordinates (on average, 3 subordinates per supervisor) who rated their supervisor’s transformational leadership and work performance and completed self-reports of burnout, psychological safety and perceived organizational support.

Results obtained

Monotrait-heteromethod correlations between supervisors’ SJT scores and declarative knowledge of the five competencies showed partial support for the convergent validity of the SJT-MS, SJT-TM and SJT-DM. When it comes to related constructs, only SJT-DM had a significant correlation with actively open-minded thinking. SJT-MS was the only dimension that predicted higher subordinate ratings of supervisors’ transformational leadership and work performance as well as their psychological safety after controlling for supervisors’ self-reported transformational leadership, political skill and personality.

Limitations

Internal consistencies of SJT dimensions were below the acceptable level.

Conclusions – research and or practical implications/Originality/Value

Our SJT aims to walk a fine line between the traditional and purely construct-based SJTs. The validation results are promising when it comes to dimensions of motivating subordinates and decision-making, but warrant further refinement of the test.

Relevance to the Congress Theme

Good bosses are leaders - they motivate employees, help them develop their talents and make important decisions. These leadership competencies, as well as their assessment will only become more important in the future dynamic work environment.

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*Keywords: leadership, situational judgment test, leadership assessment*

## Poster P142

### **Applicant reactions to selection methods in Romania: Fairness of the artificial intelligence-based interviews compared to other selection methods**

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science

The rapid adoption of artificial intelligence in organizational staffing practices amplifies the importance of applicant reactions, in general, and reactions to artificial intelligence-based assessments and interviews, in particular. In this context, our study compared artificial intelligence-based interviews (AI-based interviews) to other 21 selection methods (e.g., traditional interviews, curriculum vitae, work samples, general mental ability tests, online information, and others) in terms of process favorability and procedural fairness.

Although literature comprises numerous empirical and theoretical works on applicant perspectives and reactions, our study concentrates upon a relatively newer digital selection procedure for organizational staffing, and extends the knowledge about applicant reactions to digital interviews and AI-based interviews. Our study can contribute to a more fine-grained understanding of the generalizability and situational specificity in applicant reactions to selection methods, mainly in Eastern Europe. In addition, this study can inform the improvement of the AI-based interviews use as an assessment tool in selection.

This study builds on the large body of applicant reactions, in general, and on Steiner and Gilliland's (1996) selection fairness theoretical framework and research, in particular. In this framework, process favorability refers to how fairly people think they have been treated using a particular assessment method, while procedural justice includes the following seven dimensions: face validity, scientific evidence, opportunity to perform, interpersonal treatment, propriety of questions, invasion of privacy, and widespread use of the assessment method. These dimensions are believed to form the basis for fairness perceptions.

Our sample comprised 427 undergraduates enrolled in a semester course on work and personnel psychology. Thereof, 22.01% were also employees. Data was collected online with an adapted version of Phillips and Gully's (2002) questionnaire.

We expect that AI-based interview will have a significantly lower process favorability compared to most of the selection methods (e.g., interview, situational judgment tests). It will be more favorable only than graphology and ethnicity and similar to personal contacts and unproctored Internet testing. On all seven procedural justice dimensions, AI-based interviews will be a significantly less fair method than most of the selection methods examined.

As limitations, we did not differentiate between types of AI-based interviews (with and without a human-like avatar). Not all the participants were human resource professionals or employees. Data collected were cross-sectional.

This study extends the relatively small and inconsistent body of knowledge on applicant reactions to AI-based interviews using a well-established methodology to investigate applicant reactions that permits us to maximize the comparisons between our findings and those of the previous studies. Our findings signal that organizations should pay attention to how to use AI-based interviews in selection processes and manage applicant reactions.

Our study investigated the fairness of a relatively new selection method that transformed the landscape of today's personnel selection. As AI-based interviews might threaten the fairness of personnel selection, this topic is relevant for the future of work, in particular, for staffing sustainable organizations.

*Keywords: process favorability, procedural justice, artificial intelligence-based interviews*

## Poster P144

### Psychological Capital and Creativity in the Workplace: Gaming habits as an antecedent

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#### Research goals

Video games play a big part in many people's lives, and adults are not exempt. This begs the question of the potential effects of playing video games. Here, we examine whether playing more video games leads to higher Psychological Capital (PsyCap) and higher creativity in the workplace.

#### Theoretical background

PsyCap can be defined as a higher-order construct consisting of four positive psychological resources: hope, efficacy, resilience and optimism. Creativity corresponds to the ability to achieve a production that is both original and adapted to the context in which it occurs. Creativity can be applied to various domains and settings, the workplace being of particular importance.

PsyCap is a strong predictor of creativity in the workplace, as all components have been linked to it. For instance, creative endeavors are difficult and often lead to failures or setbacks. Resilient individuals are likely better equipped to pursue creative goals. Optimism also helps in that way, as optimistic individuals are less likely to give up and more likely to persevere through adversity.

Playing video games requires, as well, a certain mindset, as encountering adversity is a core aspect of the game experience. In games, people are often faced with difficulty and loss, and it can be tempting to just give up. Being optimistic is helpful in this sort of situation, as optimism helps see negative events as temporary and thus surmountable. Hope and resilience are also highly required to play and go through many video games.

Video games have also been linked to creativity, in many populations and ages, although no study has examined creativity in the workplace specifically.

We hypothesized that playing more video games would lead to higher PsyCap and higher creativity in the workplace. Furthermore, we hypothesized that the relationship between video games habits and creativity in the workplace would be mediated by PsyCap.

#### Design/Methodology

Using a questionnaire-based online study ( N = 370), we measured whether participants played video games, the amount of time players dedicated to video games, PsyCap, and Creativity in the Workplace. PsyCap was measured using the French version of the PCQ, and Creativity in the Workplace was measured with a 13-item self-report scale.

#### Results

Video game frequency of play correlated positively with three components of PsyCap: efficacy, resiliency, and optimism; it correlated with overall PsyCap as well. Furthermore, creativity correlated positively with gaming frequency, albeit to a lower degree. PsyCap correlated with creativity, as expected. After performing a mediation analysis, our results indicated a full mediation of the effects of gaming frequency on creativity, through overall PsyCap.

#### Limitations

The main limitation concerns the use of self-report measures for creativity, which can be debated. We argue their use was justified in this study, as they can yield satisfactory and valid results. Future studies could implement creativity rating by superiors or colleagues, or more objective measures such as divergent and convergent thinking tasks.

#### Conclusions & Relevance to the Congress Theme

This study furthers the idea that video games have positive effects, and is among the first to link video game habits with PsyCap and creativity in the workplace. These results suggest that video games could prove to be an interesting and effective avenue to help develop creativity in the workplace, possibly through PsyCap improvement.

*Keywords: video games, creativity in the workplace, psychological capital*

## Poster P145

### How much psychology can you find in cybersecurity research? A scientometric analysis of the field

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#### Research Goals:

Many organizations have reported cyber-attacks, particularly by fraudster and scammers who try to breach organizational security mechanisms to extort money. There has been an increase in research in the last years that tries to better understand end-users' cybersecurity perceptions and their use of cyber-safe systems. Whilst it seems obvious that the involvement of experts of human behavior (i.e., psychologists), is key to research that tries to understand human behavior, many studies in the field of cybersecurity seem to be conducted by computer scientists only who borrow psychological methods and theories. More recently, some psychology researchers have been drawn to this research field, but there is no systematic understanding of the characteristics of psychologists interested in this work and of the ways how psychological models and theories inform the field of cybersecurity. Therefore, this study takes a data-driven approach of systematically exploring the role of psychologists in cybersecurity through conducting a scientometric analysis over 200.000 papers.

#### Theoretical background:

Whilst in the past organizations focused on primarily trying to protect themselves from cyber-attacks by improving their technological solutions, it has become increasingly evident that such a perspective has its limitations, as systems are only as safe as their users. Therefore, organizations and researchers alike have understood that mitigating cyber-risks necessitates to involve focusing on human behaviors when using digital systems. For human-centered cybersecurity research questions psychological theories (e.g., theory of planned behavior) are increasingly being used and are likely to help to work towards a better understanding of human behavior. Nevertheless, there is need for a more systematic understanding of how psychology and cybersecurity are linked.

#### Methodology:

We conduct a scientometric analysis, using a dataset of more than 200.000 journal and conference articles related to cybersecurity. Abstracts of these articles are scanned using psychological keywords to identify psychological topics, theories and methods. Furthermore, we analyze authors' affiliations and augment the data by looking up CVs of authors in order to assess whether the number of psychologists in this research field as well as their characteristics.

#### Results obtained:

A comparatively low amount of research articles were found to be specifically related to human security aspects in cybersecurity. Psychologists represent a tiny fraction of researchers who publish in most of the high impact cybersecurity journals and conferences. Furthermore, the field seems to be dominated by WEIRD populations (White, Educated, Industrialized, Rich, and Democratic), creating a challenge for the generalizability of findings.

#### Limitations:

We focus on high impact journals and conferences solely.

#### Research/Practical implications:

There is a need for more psychologists engaging in human factors related cybersecurity research.

Relevance to the Congress Theme

Cybersecurity is a key challenge of the 21 st century and has a strong impact on the future of digital work.

*Keywords: cybersecurity, IT security, human security*

## **Poster P146**

### **What does transformation look like at a Group Relations Conference: A South African case study**

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#### **Research goals and why the work was worth doing**

Transformational Group Relations Conferences provide adult learners opportunities to study above and below the surface dynamics of organisational and community life. An effective pedagogy in developing complex world views when exploring challenges of managing different social systems. The literature suggested there is a hatred of learning by experience and lack of faith in such learning. What prompted this research was to study experiential learning and transformation at GRC.

#### **Theoretical Background**

Systems Psychodynamics (SP) integrates social, cultural, and historical factors at a conscious level, yielding information about unconscious motivations and defences (van Eeden, 2010), revealing the function of dysfunction (Petriglieri & Petriglieri, 2015). The focus is on the interplay between psychological and social forces that shape organisations and the experiences of people within them, taking phantasies seriously as products of unconscious wishes which open the possibility of an alternative to conformity and resistance (Petriglieri, 2020).

#### **Design/Methodology/Approach/Intervention**

Hermeneutic Phenomenology allowed for emerging qualitative approach applied within an interpretive framework, in the meta theoretical post-positivistic paradigm of Critical Realism. A non-probability sampling strategy enabled a multi-method research strategy of face-to-face interviews and a focus group (Interactive Qualitative Analysis). To analyse the data, the Braun and Clarke six-step thematic analysis method and IQA were applied.

#### **Results obtained**

A hidden story of working at the edge of knowing and not knowing emerged, where a multitude of defences against learning by experience informed how much awareness and attention participants paid to truth/reality in the here and now. In defence against knowing there was a wish from some for the container to break so it could be escaped from. For others, the defence against knowing manifested in experiencing adulation and narcissistic omnipotence of the self (de Goldstein, 2015) in a safe container. Yet some risked working uncontained in a good enough container trusting the container to hold experiences allowing for choice to transform or to transmogrify.

Dynamics manifested as above the surface dynamics when some participants allowed themselves to not feel excessively contained, experience some loss and not defending against thought and development. Participants transformed in a known, discernible, and planned way. Participants who worked with the unknown and complexity, tolerated feeling uncontained, risked annihilation seemed to transmogrify.

#### **Limitations**

The concept of transmogrification in the social sciences is extremely limited. The use of this model requires Industrial and Organisational psychologists, psychologists, and consultants to understand the below the surface unconscious dynamics of groups. Further research is required to test whether it can be operationalised.

**Research/Practical implications**

A new concept of preservation, transformation and transmogrification was conceptualised to extend the body of knowledge of what transformation may look like at GRC. The conceptual model of transmogrification is new in Psychology, Industrial and Organisational Psychology and Group Relations Conferences, which can be used to work with psychodynamic material. The model can be used as a coaching and consultation framework for leaders to learn about dynamics in organisations.

*Keywords: Group Dynamics, Transformation, Systems Psychodynamics*

## Poster P151

### **A qualitative investigation of teleworking during Covid-19 times through the lenses of supervisors and subordinates**

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science

The Covid-19 pandemic brought difficulties, uncertainty, and worries, challenging the working life of both supervisors and employees in organizations. Following the preventative measures imposed by governments, employees at all levels had to rapidly cope with teleworking in order to ensure the activity in companies. Despite the growing use of telework, an effort to understand the phenomenon from different perspectives – supervisors and employees - is welcome. Using a social constructivist approach, this study investigates how employees at different hierarchical levels experienced challenges associated with teleworking during the Covid-19 context. How did the changes shape the virtual work characteristics and what are the mechanisms underlying the performance during telework?

A sample of sixty-two employees in an IT company was included in this study. The participants were almost evenly distributed into three categories: supervisors, full teleworkers, and partial teleworkers. Semi-structured interviews were conducted to reach an in-depth understanding of work-related changes of the participants during the first months of the Covid-19 pandemic. Transcribed data were analyzed using thematic analysis and content analysis following both inductive and deductive approaches. Two independent coders analyzed the data and the values of interrater reliability met the cutoff criteria. The findings revealed that employees reported changes during the Covid-19 pandemic in terms of communication (i. e. quality, frequency) with other employees and clients, social isolation, individual differences regarding telework, work conditions, social support, informal learning, work productivity, coping with telework, self-management skills, and job characteristics. Overall, the endeavor to maintain the level of productivity was mentioned by all participants. Furthermore, participants showed concern regarding their professional development (i.e. mentoring, formal learning) which had to be reconsidered. Social isolation, lack of provocative tasks, and voluntary overtime emerged as negative aspects of telework. In addition, the lack of technical equipment or task interdependence impaired the performance while teleworking. Despite the difficulties reported by the participants, the remote support provided by the organization buffered the impact of the pandemic context on the work outcomes.

At the supervisors' level where work pressure is usually higher, telework has been experienced significantly differently on a few dimensions. Supervisors' expectations regarding telework and adaptation to telework were seen as more important by the supervisors than the employees. However, unlike the employees, supervisors referred less to tasks suitable for office work, social isolation, task-focused communication, delay in problem-solving, and monotonous tasks.

By providing in-depth views into how supervisors and employees experienced teleworking during the Covid-19 pandemic, the results offer avenues for further research on the factors influencing not only performance but the quality of working life while teleworking. With regard to practical implications, the study guides the implementation of flexible working arrangements in the future.

*Keywords: teleworking, Covid-19, work conditions*

## Poster P156

### **Mindfulness and Psychological Capital to Reduce Workers' Stress and Enhance Health and Well-being**

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This study aims to test the combined effect of mindfulness and psychological capital (PsyCap) on reducing stress, burnout, and improved perception of health (psychological and physical). While developing PsyCap has shown effectiveness for workers, some evidence suggests that its effect on positive health and well-being outcomes may be stronger if PsyCap is combined with self-regulatory resource strategies, such as mindfulness (Roche & Haar, 2019). Based on the JD-R model assumption of personal resources as a key aspect to preventing stress and promoting health through the mobilization of resources (Bakker & DeVries, 2021), and drawing on the COR theory elements of “resources caravans,” we consider mindfulness a condition for resources sustenance, buffers the relationship between PsyCap and stress and burnout, and enhances the effect on the perceptions of health. Mindfulness equips individuals with a healthy cognitive process and emotional regulatory strategies that allow individuals to remain resilient (Tomlinson et al., 2018). Therefore, we argue that mindfulness is a key resource to understanding the effect of PsyCap in reducing negative health outcomes and improving positive health outcomes. We hypothesized that individuals with higher levels of PsyCap and mindfulness would show reduced stress and burnout and improved perception of health.

To test our hypothesis, we used a sample of 398 workers (94.5% females; ( M age = 44.29, SD = 11.07) from a public organization in Puerto Rico dedicated to providing services to families and their children as part of an occupational health assessment with an online survey (61% response rate). The questionnaire was available for four consecutive weeks; participants received an incentive of a \$30 gift card to complete the survey. We performed a series of moderated regression analyses using PROCESS with SPSS to test our hypothesis.

Results indicate that mindfulness was related to stress (  $b = -.587, p < .001$ ) and burnout (  $b = -.539, p < .001$ ), but not PsyCap (stress:  $b = -.132, p = .074$ ; burnout:  $b = -.063, p = .353$ ). The interaction effect of mindfulness and PsyCap on stress (  $b = -.259, p = .016$ ) and burnout (  $b = -.184, p = .013$ ) was significant, indicating that a high level of mindfulness and PsyCap reduces burnout and stress. Mindfulness and PsyCap were positively related to physical (Mindfulness:  $b = .634, p < .001$ ; PsyCap:  $b = .345, p = .001$ ) and psychological health perceptions (Mindfulness:  $b = .087, p < .001$ ; PsyCap:  $b = .202, p = .031$ ). The interaction effect was also significant for psychological health (  $b = .231, p = .003$ ), but not for physical health (  $b = .154, p = .05$ ).

These results suggest that mindfulness provides the necessary condition that fosters mobilization of other personal resources (i.e., PsyCap) during stressful situations, instigating actions toward greater well-being. In addition, the study highlights the multiplicative effect of personal resources on stress and health. Future intervention strategies should consider combining various personal resources to increase their effectiveness in reducing stress and promoting well-being. The study was conducted in one organization with mostly females, thereby limiting our ability to speculate on the interactions of mindfulness and PsyCap in male workers.

This project aligns with the sustainable development goal of ensuring healthy lives and promoting well-being by identifying mechanisms that promote psychological and physical health.

*Keywords: psychological capital, mindfulness, interaction effect*

## Poster P157

### Testing the Theory of Good Thinking and Deciding in Organizational Setting: Some Benefits of Leader's Actively Open-minded Thinking

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science

#### Research goals

Decision-making is one of the core things a manager does and one of the core skills he or she must possess (e.g. Bartram, 2005; Hogan Assessment Systems, 2009; Tett, Guterman, Bleier & Murphy, 2000). Yet, research shows that managers are notoriously bad at decision-making (e.g. Nutt, 2002). The errors leaders make when making decisions generally fall under three categories: a) rushing to conclusions without considering wide enough array of possibilities or evidence; b) searching for and overweighting evidence that is in line with favorite position or idea, while simultaneously avoiding and downplaying evidence that counters it; c) overconfidence in one's own conclusions and decisions (Ketchen & Craighead, 2022; Nutt, 2002; Sibony, 2020).

#### Theoretical background

According to Baron (2000) who developed the theory, AOT describes what a good thinking should look like, and it consists of three things: a) search of information that is sufficient and thorough in proportion to the importance of the question b) active search for and fair treatment of possibilities other than the one decision-maker initially favors c) confidence that is appropriate for the amount and quality (direction) of thinking done. From this definition of AOT, it is immediately clear that this kind of thinking is the direct antidote to the three mistakes in managers' thinking that underpin majority of bad strategic decisions. Our goal was, thus, to test this theory in an organizational setting by examining whether the leaders' AOT would be reflected in their subordinates' perceptions of their decision-making quality (DMQ), intellectual humility (IH), and performance in leadership role (PLR).

#### Methodology

We recruited a sample of  $N = 177$  managers (49% female;  $M_{age} = 42.86$ ,  $SD_{age} = 7.38$ ) with the average of 9.14 years of supervising experience ( $SD = 7.00$ ). Among other things, they completed AOT self-report questionnaire and IPIP-50 and were also rated by their subordinates (on average, three subordinates per manager) on disposition to think in AOT way, DMQ, IH and PLR.

#### Results

Managers' AOT was significantly correlated with subordinate ratings of managers' propensity to think in AOT way ( $r = .22$ ), indicating that managers' AOT is reflected in their behavior and thus perceived by their subordinates. Furthermore, managers' AOT was positively correlated with ratings of their IH ( $r = .17$ ) and PLR ( $r = .17$ ), while its correlation with perceived DMQ did not reach significance ( $r = .10$ ). At the same time, the five personality dimensions were practically unrelated with measured outcomes, except for agreeableness which correlated significantly with perceptions of IH ( $r = .21$ ).

#### Limitations

There are two notable limitations: this was a cross-sectional study, preventing us from making any conclusions about causality, and AOT is a self-report measure susceptible to socially desirable responding which skews its distribution and limits its response range.

## Conclusion

While the obtained correlations were not spectacularly high, results indicated that AOT is a desirable leader characteristic that could be related to many beneficial individual and organizational outcomes. We hope our results would motivate further investigation of AOT in organizations, currently missing from the literature.

## Relevance to the Congress Theme

In the future dynamic work environment, good leadership will be of utmost importance. Decision-making is one of the key leadership tasks, and AOT underpins good decision-making.

*Keywords: leadership, decision-making, actively open-minded thinking*

## Poster P158

### **HUMAN RESOURCE (HR) SYSTEMS IMPLEMENTATION FROM A RESOURCE ORCHESTRATION PERSPECTIVE: DO TOP AND MIDDLE MANAGERS' HR PHILOSOPHIES MATTER?**

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science

Why the work is worth doing : Researchers are increasingly recognizing that successful implementation is a necessary condition for a relationship between HR and firm performance as, if not well implemented, good HR policies and practices can still get bad results. Although the recognition of the importance of effective implementation for the bottom line is increasing and research on the topic is on the rise, the nature of HR implementation and how HR content on the books is implemented, remains poorly understood. To gain a deeper understanding of how HR practices are implemented, we need to grasp the mechanisms through which espoused HR policies are translated into actual practices.

Theoretical background : Drawing on Sirmon et al.'s (2011) Resource Orchestration Model , that successful HR implementation requires consensus and commitment across organizational levels, we examined the roles and values of top and middle managers. Specifically, we tested whether top and middle managers' HR philosophies influenced HR implementation as perceived by employees. In addition, we explored the boundary conditions under which HR philosophy may more strongly affect implementation of HR practices and systems.

Methodology : Organizations were recruited through Proff Forvalt, a database containing information about Norwegian companies in private and public sector. 5.7% of the companies that received our invitation to participate provided us with data from all three levels of the organization, hence being included in our final dataset. At T1, CEOs from 30 organizations and 218 middle managers reported on commitment-oriented HR philosophy. At T2, 647 employees reported on commitment HR system . Data was analyzed using multilevel polynomial regression and response surface analysis.

Results: Data showed that top and middle managers' HR philosophies in isolation had limited effect on how well commitment HR systems were implemented, while increasing consensus between the two levels was associated with greater HR implementation. Furthermore, the effect of consensus varied across sectors, with a significant effect in private sectors, while no effect in public sector was found.

Limitation/future direction : First, this study was conducted in Norway and the results may not be generalized to other contexts. Second, top management response rate was low, reducing the number of organizations included in the study. Third, future research should also explore the roles of other actors (HR specialists, senior professionals, and trade unions) in the effectiveness of implementation, and in particular any potential role conflicts between them.

Practical Implications : One obvious implication is that top managers considering implementation of HR systems should ensure support and commitment across organizational levels. Another implication is the importance of selection of middle managers.

Originality/Value : The extant HR implementation literature has been gravitated toward a single managerial level, exclusively focusing on middle managers as key actors in HR implementation, known as “the middle management perspective”. Our study highlights the importance of consensus between top and middle managers and its impact on HR implementation.

*Keywords: Strategy Implementation, HR Systems, Resource Orchestration Perspective*

## Poster P159

### **Closeness or close-Bias?: Work-family conflict and the importance of parental proximity for children's physical health in Germany, the United Kingdom**

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Jaroslava Babjáčová, University of Presov

science

The aim of the study was to find out cross-culturally which occupational context-related variables influence the child's health status of working parents. In addition, it was explored to what extent parents' proximity to the child favors the connection.

So far numerous studies have already shown that work-family conflict has a significant impact on parents' physical and mental health. However, very limited research has been conducted on the effects of work-family conflict (WFC) on children. Moreover, previous parent-child studies have focused only on the relationship between work-family conflict and children's mental health (e.g., the Australian sample of Dinh, Cooklin, Leach, Westrupp, Nicholson & Strazdins (2017)). Little attention, however, was paid to children's physical health or even psychosomatic problems.

In a Portuguese sample, it was also shown that the parent-child relationship plays a supportive role in the association between WFC and behavioral problems characterized by internalizing and externalizing behaviors (Vieira, Matias, Ferreira, Lopez & Matos, 2016).

Since proximity to the child is considered a crucial feature of the parent-child relationship, this study raises the question of whether proximity to the child should be attributed a mediating role between WFC and the child's physical health status in different cultures.

Second, it raises the question of whether the relationship between parental proximity and child physical health status is further mediated by child mental health.

Our sample consisted of 498 employees. Of these, 148 were from Germany, 200 from the United Kingdom, and 150 from Slovakia. Data were collected online from August to October 2022. Variables were collected using the Work-Family Conflict Scale (Carlson et al., 2000) and the Child-Parent Relationship Scale (Driscoll & Pianta, 2011). The child's physical and mental health status was assessed with one item. Data were analyzed using SPSS 23.0. Regression analyzes were calculated to test the mediation hypotheses. The results showed significant cultural differences: While an indirect and a total effect were found for the first question in the Slovak sample, only the total and the direct effect could be confirmed in the German sample. In the English sample, there was neither a direct nor an indirect nor a total effect. The mediating effect of mental health on the association between parental proximity and physical health could be determined by an indirect and a total effect in both the Slovak and German samples. In the English sample, there was also an indirect and a total effect, but also a direct effect of parental proximity on children's physical health.

The results show that especially in the Slovak culture, which is characterized by a high family orientation, WFC negatively influences parent-child closeness, which in turn has a significant impact on the child's mental health and, consequently, physical health. Limitations of the study (e.g., cross-sectional study design, sample size, age of children, and questionnaires) and future research opportunities are critically discussed. The study contributes to explaining which measures are useful in which country to combine occupational and family well-being in a meaningful way.

*Keywords: work-family conflict, closeness, children's mental and physical health*

## Poster P160

### **For the sake of safety: Towards pinpointing day-to-day leadership behaviors that matter in relation to employee safety behaviors**

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science&practice

#### Research goals & value

This study investigates the importance of four categories of managerial leadership behaviors (i.e., planning, safety priority, safety positive feedback, and active listening) for three categories of employee safety behaviors (i.e., compliance, participation, and voice), both cross-sectionally and longitudinally.

#### Theoretical background

The construction industry is affected by severe occupational accidents, and the leadership of site managers has been identified as critical in relation to safety. Most of the literature in this field is cross-sectional and concerns broadly defined meta-categories of behaviors. The theory of operant learning is a well-established theoretical framework for understanding, influencing, and predicting behavior. Leadership can be defined as the management of behavioral contingencies in work settings (Komaki, 1998; Podsakoff et al., 2006); involving both antecedent and consequential leadership behaviors (Gravina et al., 2017; 2018; 2019; 2021; Komaki, 1998; Komaki et al., 2011). Change initiatives based on this approach involve identifying, analyzing, and modifying environmental stimuli that influence the targeted behaviors (Choi & Johnson, 2021; Gravina et al., 2021; Tuncel et al., 2006; Vance et al., 2022; Wilder et al., 2009; Wilder et al., 2019).

#### Design/Methodology/Approach

A two-wave longitudinal study with 4 months between the waves was conducted among construction site employees in Sweden. Employees rated their managers' leadership behaviors and their own safety behaviors on two occasions using an electronic questionnaire. Data was analyzed cross-sectionally as well as longitudinally (  $n = 123$ ). Three cross-lagged panel models were tested, one for each category of employee safety behaviors.

#### Result

The cross-sectional results support positive associations between all categories of leadership behaviors and employee safety behaviors, with bivariate correlation coefficients ranging between .25 and .55. The longitudinal data support a prospective influence of safety priority leadership behaviors on employee safety voice behaviors (  $r = .34$ ,  $p = .05$ ), but do not support prospective influence on employee safety behaviors for planning, safety-specific positive feedback, or active listening leadership behaviors. Indications of reversed causality were found, as employee safety compliance behaviors predicted managerial listening behaviors.

#### Limitations (main)

Common method bias. Several circumstances may have contributed to masking the hypothesized prospective effects (e.g. time interval, magnitude of employees' exposure to their managers' leadership, the organizational safety contingency system).

#### Conclusions

The cross-sectional results support positive associations between all categories of leadership behaviors and employee safety behaviors. The longitudinal data support a prospective influence of safety priority leadership behaviors on employee safety voice behaviors, but not for the rest of the behaviors investigated. Several circumstances may have contributed to masking the hypothesized prospective effects. Indications of reversed causality were found, as employee safety compliance behaviors predicted managerial listening behaviors.

#### Relevance

Safety-leadership is a key component for organizations to maintain high occupational safety and long-term overall success. Understanding what specific day-to-day leadership behaviors matters for employee safety is vital.

*Keywords: leadership, leadership behavior, occupational safety*

## Poster P162

### The relative importance of predictors of turnover intention

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science&practice

Understanding reasons for job turnover has been a crucial research area for applied psychology. Several theoretical models propose distal (e.g., job characteristics) and attitudinal antecedents (e.g., job satisfaction) of turnover (Hom et al., 2012). Research has identified numerous predictors such as organizational context variables (e.g., support), job characteristics (e.g., workload), job attitudes (e.g., job satisfaction), individual attributes (e.g., tenure), and other personal conditions such as stress, engagement, or coping (Rubenstein et al., 2018). Despite progress, no previous study has examined the relative importance of these predictors on turnover intentions beyond determining effect sizes with meta-analytical techniques. Examining standardized coefficients alone provides misguided interpretations of the relative importance of predictors. This study applied a dominance analysis (DA) technique to elucidate the relative importance of job demands, resources, attitudes, and well-being indicators on turnover intention.

The sample included 1379 employees (77% female) from a public child welfare agency in Puerto Rico. Participants completed a paper-and-pencil organizational assessment. Most reported having a permanent position (91%) with a mean tenure of 18.05 years (SD =8.09). Employees were highly educated (80% completed a bachelor's or graduate degree).

We measured the following variables: Time pressure (5 items,  $\alpha=.81$ ; Potter et al., 2016); Role clarity (3 items,  $\alpha = .84$ , Salanova et al., 2012); Role conflict (3 items,  $\alpha = .69$ ; Salanova et al., 2012); Organizational support climate (4 items,  $\alpha = .83$ ; Gonzalez Romá et al., 2009); Transformational leadership (15 items,  $\alpha =.95$ ; Rafferty & Griffin 2004); Job satisfaction (1 item; Moncada et al., 2014); Organizational commitment (3 items,  $\alpha =.65$ ; Salanova et al. 2012); Organizational justice (4 items,  $\alpha =.85$ , Moncada et al., 2014); Exhaustion (5 items;  $\alpha =.76$ ), Cynicism (4 items;  $\alpha=.94$ ) and Efficacy (6 items;  $\alpha=.94$ ) (Salanova et al., 2000); and Turnover intention (3 items,  $\alpha =.86$ ; Cho & Song, 2017).

Overall, 37.2% of the variance in Turnover is explained by the MLR model. DA revealed that exhaustion (.101 [.077,.123]), cynicism (.094 [.073, .123]), and job satisfaction (.050 [.032,.083]) have the highest influence on turnover. These predictors showed complete dominance over transformational leadership (.018 [.012, .029]), organizational support climate (.023 [.013,.037]), organizational justice (.013 [.008, .019]), conflict (.010 [.005, .020]), clarity (.012 [.007,.022]), and efficacy (.005 [.003, .010]) suggesting the incremental validity was always higher for exhaustion, cynicism, and job satisfaction across all possible subset models.

These results offer theoretical contributions suggesting the need to incorporate well-being factors in the path process to explain turnover. Practically, this study implies that interventions to reduce burnout and improve well-being constitute relevant building blocks to prevent turnover intentions. Despite the contributions of this study implementing a novel analytical technique with a large sample, the results need further cross-validation across different organizational sectors.

This project aligns with the sustainable development goal of employment and decent work. We identify key factors to promote safe and secure working environments and decent job creation that retains and stimulate workers' quality of life.

*Keywords: turnover intention, dominance analysis*

## Poster P163

### Qualitative assessment of job experiences for support to self-development

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science&practice

Goal. Consulting on workplace development needs valid and sensitive methods to assess individual differences in the process to support effective coping with job demands. This study tested a simple qualitative assessment technique as part of a project about how individuals can recall and use their job experiences to value and cope with challenges at work.

The theoretical purpose was to elaborate on the concept of personal coping. This study explored how individuals' systematic reflections and qualitative judgements of significant personal job experiences were related to their reports concerning coping with challenging job demands.

Methodology. In the first testing phase, 25 professional business and public service participants rated their present job experiences on 5-point bipolar scales of mental workload, task difficulty, control, and general job satisfaction. Next, in the main session, each participant recalled and briefly noted the most significant experiences of four work states: mental workload, task difficulty, organisational change, and innovative demands. For each state, the participant then judged the occurrence of expectancies (the risk of psychological stress and the possibility of an engaging task) and moods (intense negative pressure and positive emotions). At the end of each tested work state, the participant reflected and reported spontaneously whether it was coped with and how. Two independent judges categorised states' judgements in binary terms (yes/no) and the reports of coping by binary categories of eight attributes.

The Results to be presented in the e-Poster:

substantiate how quantitative ratings of work conditions can be supplemented and interpreted by the simple qualitative assessment technique,

show that networks of reported associations between experienced states, expectancies and moods can suitably represent the diversity among participants,

include alternative ways of categorising attributes of perceived coping.

Limitations . The sample of participants was from a population of people 25-55 years old with various professional jobs and enrolled on an introductory university course in applied Work and Organisation Psychology. None worked in the same workplace as any other in the sample.

Research and practical implications. Focusing on reflection about the previous coping at work indicates that qualitative methodology is suitable when individual diversity is crucial. This assessment technique can be a simple but valuable tool for consulting when it involves individuals deeply in work environment problems and development.

Relevance to the Congress Theme : Research Methods (Qualitative methods). Well-being (Coping and social support).

Relevance UN SDGs: Good health and well-being. Decent work and economic growth.

*Keywords: Qualitative methods, Job experiences, Coping*

## Poster P165

### **Are We a Good Temporal Fit? Examining Synchrony Preference Fit Between Supervisors and Supervisees on Temporal Outcomes**

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science

How well do supervisees and supervisors match? This question matters because person-supervisor (PS) fit positively predicts key outcomes like performance and job satisfaction. Whereas previous research has examined fit on values, personality, and goals, PS fit studies generally ignore time. This omission is regrettable because poor temporal fit between supervisors and supervisees can cause coordination breakdowns, missed deadlines, and unfinished tasks. To fill this gap, we examine PS temporal fit in terms of synchrony preference: the tendency to adjust one's temporal rhythm to match that of others. Synchrony preference has been shown to positively predict flexible pacing, interpersonal facilitation, and job dedication. Despite its importance, synchrony preference has received little research attention. Based on social entrainment theory, supervisees often adapt to the pace of their supervisor. However, the consequences of such adaptation are understudied. For example, how does the synchrony preference of the supervisor interact with that of the supervisee? Does fit or misfit affect supervisees' confidence in their ability to complete tasks on time (higher temporal self-efficacy)? In addition, does temporal efficacy reduce time pressure?

Drawing from social entrainment and PS fit theories, we examine the effect of synchrony preference fit between supervisor and supervisees on temporal efficacy and subsequent time pressure, as moderated by two contextual variables: coordinative complexity (the degree to which information from each of the steps in a task must be applied to other steps in the task) and temporal ambiguity (uncertainty regarding the time frame to finish tasks). We expect that supervisee temporal efficacy will be lower when levels of synchrony preference are similar. The PS synchrony preference-temporal efficacy relationship will be stronger when supervisees have higher synchrony preference than supervisors. Temporal self-efficacy will negatively predict time pressure, and the higher the coordinative complexity and temporal ambiguity, the stronger the negative relationship.

Dyadic-level data were collected from 23 supervisors and 255 supervisees in the Chinese banking industry. We will examine immediate and subsequent outcomes of synchrony preference PS fit using polynomial regression and mediation analyses. Analyses will be completed in spring 2023, before EAWOP. Although using dyadic-level data is a strength, it would be ideal to survey across different time points instead of just one. Also, future research should test these relationships beyond one Chinese organization.

This study expands the PS fit literature base to include how supervisees and supervisors fit temporally regarding synchrony preference. We also expand synchrony preference research from the individual level to supervisor-supervisee dyads. Building on social entrainment theory, we also examine two contextual influences of the temporal efficacy-time pressure relationship that can serve as intervention points for practitioners to increase temporal efficacy and decrease perceived time pressure. The results of temporal PS fit have the potential to inform supervisor-supervisee working relationships with implications across domains like selection, mentorship, and managerial practice.

*Keywords: Person-Supervisor Fit, Synchrony Preference, Temporal Self-Efficacy*

**Poster P166**

**A Pedagogy of Empowerment in the Mexican Educational System**

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science&practice

The paper shares the qualitative discovery of the Education System in Mexico taking particular interest in the UNESCO-awarded efforts of the Instituto Nacional para la Educación de los Adultos (INEA) which has made incredible strides over the past century to build and sustain high rates of adult literacy in Mexico and the influence of Paulo Friere upon this system for what is described as transformational learning . Mexico has grown 300% in literacy over the past 100 years which is a higher rate of growth than any other nation in Latin America. This study shares key findings and themes of empowerment from interviews with teachers and students in INEA. The goal of the researchers is to generalize the themes to Latinos in the American University system to raise Latino graduation rates by orientation of new students and training of professors. The gap between Latino and White graduation rates in the USA, California, and many Hispanic Serving Institutions are respectively 8.9%, 10.5%, and 20%. Similar retention challenges are seen among communities of color in the American workplace particularly in higher education. Generalizing the themes of empowerment to a global context, the researchers hope to empower communities of color using new employee/student orientation and manager/professor training integrating the same themes shown to be effective in the collectivist context of Latin America.

*Keywords: education, empowerment, latino, retention*

## Poster P167

### Are Risk Takers More Likely to be Self-Employed?

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science&practice

#### Research goals

The current research sought to explore if and how aspects of personality relevant to risk taking could predict participants' likelihood to be self-employed.

#### Theoretical background

Why do people choose to be self-employed? The opportunity to work unsupervised outside an organisational structure may feel exhilarating and liberating. For others, the increase in risk and uncertainty will prove too daunting. As personality psychologists, we were interested in the following question: Are there elements of personality that predict these preferences and influence the decision to pursue self-employment?

Chan et al. (2015) recruited two Undergraduate samples to explore whether personality could predict those who are motivated or aspire towards entrepreneurial careers. The analysis incorporated risk-related traits, the Big Five, and a 'proactive personality' construct.

The analysis found that risk-related traits, the Big Five (primarily Openness to Experience and Extraversion), and proactive personality predicted participants' desire for entrepreneurial careers. Conversely, increased risk aversion predicted reduced interest in an entrepreneurial career path.

Research like this provides an intriguing insight into the aspects of our personality that are likely to predict a desire to be self-employed. However, reliance on student samples can limit generalisability to working populations. Will these findings translate to the working population?

#### Design

The research obtained access to participants who had completed the Risk Type Compass (RTC) personality assessment. The RTC incorporates risk-relevant elements of the Big Five to predict how individuals perceive, react to and manage risk. Participants are placed into one of eight 'Risk Types' using data from twenty personality 'subthemes'. Participants were divided into two groups dependent on whether they indicated they were self-employed (n = 596) or non-self-employed (approximate n = 20k).

#### Results

Analysis demonstrated clear and significant differences in the prevalence of personality traits between the self-employed and non-self-employed samples. 'Excitable' Risk Types, who demonstrate a preference for spontaneity and flexibility, were 50% more likely to reside in the self-employed sample. At subtheme level, the largest difference could be found in the 'conforming' facet, indicating that self-employed participants were less likely to conform to rules and procedures compared to the non-self-employed sample.

#### Limitations

The research design did not determine whether participants resided in self-employment due to choice, which is something future research could address.

## Implications

In conclusion, personality has a clear impact on the preference for being self-employed. Risk Types predict a preference for the stability that organisations provide and a greater need for 'permission to act' that can be fulfilled by managers and supervisors. In contrast, Risk Types lower on the desire for stability are more likely to crave the flexibility and autonomy afforded by self-employment and may be more negatively impacted in job roles that fail to provide this.

Understanding these personality-driven propensities may shed light on professional discomfort and identify alternatives more strongly aligned with individuals' underlying tendencies and preferences.

## Relevance to the Congress Theme

The form of work has changed significantly since 2020. Understanding the role personality plays in individuals' response is crucial.

*Keywords: Personality, Self-Employed, Risk-Taking*

## Poster P168

### Strengths Use at Work: A Meta-Analysis

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science

#### Research goals

Research on strengths use at work has rapidly accumulated over the last decade. Despite the construct's increasing popularity, we lack a quantitative synthesis of research on strengths use at work. Such a synthesis could inform the (re)development of theory, future research, and the implementation of interventions to encourage strengths use in the workplace.

#### Theoretical background:

Character strengths refer to the idea that individuals possess relatively stable patterns of different positive unique traits, characteristics, and abilities, such as creativity, zest, or self-regulation. Awareness of one's strengths is distinct from their use, which is thought to be energizing and promotive of wellbeing and other positive outcomes. Numerous interventions and programs have been designed with the goal of promoting strengths knowledge and use, reasoning that optimal development occurs through investment in an individual's strengths rather than a focus on their shortcomings.

#### Methodology:

We conducted a meta-analysis (  $K = 89$  independent samples; total sample  $N = 34,163$ ) examining the relationships between strengths use and relevant workplace outcomes.

#### Results obtained:

We found significant meta-analytic relationships (  $p < .05$ ) between strengths use and wellbeing ( $r_{xy} = .59$ ), performance ( $r_{xy} = .45$ ), and work-engagement ( $r_{xy} = .56$ ).

#### Limitations

Importantly, the results summarized above include only measures of strengths use assessing the construct generally (i.e., with items such as "I always play to my strengths") rather than those assessing the use of individual strengths. As this project is ongoing, findings including these additional measures will be available by the time this poster is presented.

#### Research / Practical Implications

These initial results support assertions that strengths use is closely linked to important work outcomes and, from a practical perspective, are a valuable starting point for employee development.

Moreover, these results have implications for the continued development of this research. Our next steps for this project include meta-analyzing additional strengths use relationships (e.g., with work-related flow), elaborating on relationships between strengths use and subdimensions of our outcomes (e.g., burnout subdimensions), exploring the relationship between different strengths use measures and our constructs of interest, and the inclusion of additional non-published findings and correlations received from contacted authors.

Next steps beyond the scope of the current project include synthesizing research on strengths use interventions, exploring the boundary conditions of strengths use (e.g., when and for who is it most effective), and exploring what individual strengths may matter the most for workplace outcomes.

#### Relevance to the Congress Theme

This meta-analysis is relevant to the conference theme of “the future is now: the changing world of work.” It offers a contribution insofar as our findings highlight the relevance of strengths use for employee wellbeing and performance. In terms of urgency, our results suggest that focusing on strengths may help promote employee wellbeing, performance, and motivational outcomes. Finally, in terms of delivery, this work suggests that in the future emphasis should be placed on employees’ strengths at work, rather than their deficits.

#### UN SDGs

- Good health and wellbeing

*Keywords: Strengths, Wellbeing, Performance*

## Poster P170

### **Artificial intelligence at universities - a qualitative and quantitative study regarding the use of humanoid robots**

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science&practice

#### Goals

In recent years, incredible progress has been made in the field of artificial intelligence. Digitization is bringing about a multitude of changes that are also reflected in higher education (Barton & Müller, 2019). Digital and alternative learning formats, as well as individualized student support, are becoming increasingly important. This raises the question of what the university of the future might look like (Dittler & Kreidl, 2017). Humanoid robots could provide added value through their ability to interact socially by supporting teachers and also students in different areas. The goal was to identify possible areas of application for a humanoid robot in higher education by means of a qualitative and quantitative study, as well as to adapt the technology acceptance model with regard to the factors influencing acceptance.

#### Theoretical background

The special feature of humanoid robots is that they can establish an interpersonal relationship on the basis of language, gestures and facial expressions due to their human-like shape and the possibility of social interaction (Dautenhahn, 2007). The use of humanoid robots has so far been primarily investigated in the marketing sector as well as in the healthcare sector. In the field of adult education, only a few studies have been found so far. When using new technologies, technology acceptance is also of great importance. For the following studies, the technology acceptance model (Davis, 1989) was adapted. The working model includes perceived usefulness, intention to use, and was supplemented by other potential influencing factors.

#### Design

The qualitative survey was conducted in the form of semi-structured interviews supported by an interview guide that included open exploratory questions. A total of 24 students from different disciplines were interviewed. In addition to a task analysis, potential areas of use and students concerns about use were recorded. Based on this, a quantitative survey in the form of a questionnaire study was conducted with 183 students. With regard to the areas of use, various cases of use were derived from the qualitative study and evaluated with validated scales in terms of their perceived usefulness and intention to use. Potential influencing factors such as scales on concerns and technology affinity were also surveyed.

#### Results

The qualitative study was evaluated using IPA. It was found that students can imagine humanoid robots in different areas of use. This was confirmed in the quantitative survey and it was possible to further differentiate the application areas. Students could imagine a humanoid robot as an organizational assistant, as a trainer and personal assistant, and in the library. This also showed that a humanoid robot in an assistance function is perceived as more useful than a robot that replaces complete human activities. In addition, it was possible to evaluate various factors (privacy concerns, social interaction, equal treatment, ...) influencing technology acceptance.

### Limitations

The technology acceptance model also includes other variables such as perceived ease of use and actual use. These could not be taken into account within the studies, as no actual application took place in practice.

### Research

The combination of the qualitative and quantitative approach has already yielded a great increase in information. It would make sense to carry out a field study in the next step in order to be able to check the practice-related variables as well.

*Keywords: artificial intelligence, humanoide robots, technology acceptance*

## Poster P172

### Corporate Stakeholder Responsibility in Germany: A Translation and Validation of a Measure

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science

Research on Corporate Social Responsibility (CSR) disproportionately neglected the employee's role over the past decades. As members of an organization, employees perceive and react to CSR and thereby contribute to the overall success of CSR practices. How employees evaluate CSR serves as the ultimate antecedent to how they are affected by organizational activities. Due to the acknowledgment that CSR also needs a micro-foundational perspective, authors increasingly published suitable measurement instruments to account for that deficit. However, these research streams are predominantly tested in English-speaking countries, leading to a lack of comparability between different nations. Testing the micro-foundational differences of CSR across countries may help to delineate why some cultures are more engaged with CSR than others. The lack of comparability slows down CSR research and measuring constructs in a non-native language introduces a risk of biased assessment, leading to a need for valid and comprehensive scales in other languages. Therefore, the present study translates and validates the corporate stakeholder responsibility (CStR) scale originally proposed by El Akremi et al. (2018) in German to enable a more thorough analysis of CSR in other countries. We committed to a German translation since German is one of the most prevailing languages across Europe, trying to establish its forerunner role in CSR despite evident local differences in CSR appreciation and implementation. Considering CSR from the stakeholder theory perspective structures CSR around a framework of activities that impact entities with high value to the organization, both internal (e.g., employees) and external (e.g., community). Accordingly, CStR is not narrowed down to a purely environmental dimension but considers the distinguishable focus on human and social aspects through a multi-dimensional concept. The proposed second-order construct establishes how employees generally perceive and evaluate CSR activity in companies by considering diverse stakeholder groups related to an organization.

Within a longitudinal study across two time points, we established the validity of the multi-dimensional construct as a German version of the Corporate Stakeholder Responsibility Scale (CStR-G). The scale consists of six subdimensions considering different stakeholder groups of an organization, including community, natural environment, employee, supplier, customer and shareholder. Using 412 participants from a diverse sample from companies across Germany, we tested the psychometric quality of our questionnaire. We derived satisfactory internal reliability using Cronbach's alpha. In addition, we found adequate convergent and discriminant validity utilizing multiple CFAs and concurrent and predictive validity through regression analyses. Despite promising results, we found mixed results for the hypothesized second-order structure of the construct which we discuss considering the statistical evidence. However, the Corona pandemic and the Ukraine-Russia conflict limited our data collection. Companies were increasingly expected to act more socially responsibly. Nevertheless, our research contributes to how employees judge their corporate contributions to Sustainable Development Goals through CSR by illuminating the importance of different stakeholder groups. By offering a CSR scale in German, we provide a crucial step for more cross-cultural research on the individual level.

*Keywords: CSR, micro-foundations, psychometrics*

## Poster P173

### **The impact of servant and authentic leadership on job embeddedness: the moderated mediation of job crafting and overall justice**

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science&practice

Research goals and why the work was worth doing

This study aims to examine the relationship between servant leadership and authentic leadership as predictors of job embeddedness through the mediating role of job crafting. Besides, the study examines the moderating role of organizational justice - an individual's perceived fairness in the organization - in the underlying linkage. By doing so, we thoroughly investigate the impact of the conditions and underlying mechanisms of contextual and individual job characteristics on the relationships between leaders and employees.

Theoretical background

The study theoretically integrates servant and authentic leadership, the job demands-resources model and the social exchange theory, often disconnected theories, to predict the studied relationships. Prior studies corroborate that servant leadership offers more desired outcomes than authentic leadership, in particular in the job context. This is because servant leadership engenders autonomy to subordinates with respect to their jobs, ultimately influencing job crafting and job embeddedness. In addition, the study investigates the role of overall justice as a moderator variable, as justice and autonomy are intertwined.

Design/Methodology/Approach/Intervention

The study collects data using a cross-sectional design from employees working in the banking sector in Pakistan. A total of 217 completely filled questionnaires were used.

Results obtained

The findings suggest that both types of leadership positively influence job embeddedness. In addition, the impact of servant leadership on job embeddedness is more significant than that of authentic leadership on job embeddedness. Furthermore, the study finds the significant mediating role of job crafting in the underlying linkage. The moderating role of overall justice is not significant.

Limitations

The study uses a cross-sectional research design. However, it brings really interesting results on underexplored relationships. The study was also conducted in the Pakistani context, characterized by high-power distance and collectivism, so findings should take this into consideration. Nevertheless, the focus on non-Western countries significantly contributes to the literature in this area.

Research/Practical Implications

First, the study examines the distinctive role of Servant Leadership being more pronounced than Authentic Leadership on job embeddedness. This shows that if employees are given autonomy from their supervisors to control the facets of the job embeddedness, their staying intentions will more likely be enhanced.

Second, the study examines the understudied mediating role of job crafting in this relationship, showing that with the proactive support of their supervisors, employees are more likely to foster augmented levels of job embeddedness.

The study suggests that organizations should conduct leadership training by first focusing on employees' needs, and fostering a culture of autonomy in which employees are given the freedom to craft their jobs to enhance their embeddedness.

#### Relevance to the Congress Theme

Job embeddedness and job crafting are pillars in "future and changing way of working" themes, contributing to giving autonomy to employees in emergent crises and unexpected situations. These pillars can only be elevated by servant and authentic forms of leadership where leaders are close to their teams and communities and put the employee's needs first.

*Keywords: authentic leadership; servant leadership; job embeddedness*

## Poster P174

### Perceptions of the Functionality of Face-to-Face versus Virtual Formats in Medical Multidisciplinary Decision Teams

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science&practice

**Objectives:** Following COVID-19, Multidisciplinary Decisionmaking Team meetings (MDTs) have increasingly been conducted online. However, the shift from face-to-face (F2F) to Virtual conferencing (VC) formats may influence MDT processes including the ability to share clinical data, view imaging and the group processes of discussion & collective decision-making. This study aimed to compare F2F versus VC for MDT functionality using a mixed-methods design.

**Methods:** An online mixed-method questionnaire was employed. In-house clinicians, BCCA and SCTS members were contacted, and 78 participants completed the questionnaire: 57 Surgeons, 12 Cardiologists and 9 Other allied specialties. Eleven questions were answered on a 7-point Likert scale regarding pros and cons of VC compared to F2F on key aspects of the MDT process. Thematic analysis was used to analyse open-ended questionnaire responses regarding opinions on MDT format.

**Results:** Opportunity to attend and MDT efficiency were perceived as improved with virtual formats. Sharing clinical information and viewing imaging (Echo, Cross-section, and Catheter) was rated inferior with VC. Group processes of discussion, interaction, being listened to and contributing to decision-making were balanced between F2F and VC. Thematic analysis of responses developed six themes: attendance, efficacy, equality of participation, group dynamics and technology. These were perceived as important factors impacted by MDT format.

**Conclusion:** Virtual MDTs have the advantage of access but are compromised by inferior image quality when viewing clinical scans. Compared to face-to-face MDT, participation online creates structurally different group discussion and engagement. Appreciating these differences, with appropriate modification together with technology advance may address some current limitations of virtual MDT. However, future research is warranted to build upon current findings and importantly assess decision-making quality before online MDT can be recommended.

*Keywords: Decision-making, medical, Zoom*

## Poster P175

### The mediating effect of Personality on Impostor Phenomenon and Organizational Commitment

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science&practice

Title: The mediating effect of Personality on Impostor Phenomenon and Organizational Commitment

This study aimed to understand how the impostor phenomenon, neuroticism, and organizational commitment are related.

Note: The term neuroticism in the context of a non-clinical personality factor is incorporated in a personality psychometric that is a Registered Test with the British Psychological Society.

Impostor phenomenon (IP) and Organizational commitment (OC) have recently attracted the attention of researchers who are eager to delve deeper into the topic. Previous findings show that employee turnover and organizational commitment are correlated, meaning that less committed employees are more likely to leave the company (Kelly, 2015).

This study discussed these two important questions:

1. What is the relationship between the Impostor phenomenon and Organizational Commitment?
2. Do neuroticism mediate the relationship between the Impostor phenomenon and Organisational Commitment?

#### Methods

To ascertain and explore correlations among variables, a quantitative study and experimental research design are used. This research study especially focuses on young working professionals. To conduct the surveys, it was given to private sector organizations in India. We contacted organizations and young working professionals through personal contacts. Psy-Key (PCL platform) and JISC (Nottingham Surveys) questionnaires were used to obtain the data. A portion of the questionnaire was sent using the online platforms & Psy-Key from Psychological Consultancy Limited (PCL) and JISC Online Surveys (JOS).

#### Results

Research has demonstrated that young working professionals have a higher tendency for the impostor phenomenon. This study investigated the impostor phenomenon in the workplace and discovered that it is positively correlated with continuance commitment. The results of the correlation analysis showed a statistically significant moderately positive association between the continuance commitment and the impostor phenomenon (.338). It can also be inferred that high career instability among impostors motivates them to demonstrate greater dedication to their current position. The findings show that the impostor phenomenon plays a critical role in the formation of organizational commitment

#### Limitations

Because our data was gathered by questionnaires and the metrics employed were self-report, the results could be biased. Our findings might partially reflect under-reporting effects because

impostors tend to lower themselves given the characteristics of our key research variable (Vergauwe et al., 2015).

Cross-sectional studies are unable to examine changes over time. It does not determine cause and effect relationship. It has been suggested that a sample of participants for cross-sectional studies must frequently be chosen from a sizable and diverse study population.

#### Relevance

Impostor phenomenon and neuroticism may hinder professional advancement. As a result, it is crucial to study and raise awareness among individuals and organizations. Even if a corporation may give its employees organizational tools, it typically finds that there is a high percentage of employee turnover (Barza et al., 2022). The research is relevant to SDG 8 “Decent work and economic growth” and the future of work. Understanding the dynamics of personality and employee commitment works as a key factor for employee retention in the workplace.

*Keywords: Impostor, Personality, Organisational Commitment*

## Poster P176

### Investigating stereotype threat in developmental dyslexia: Implications for job selection processes.

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science

#### Theoretical background and research goals

Stereotype threat is a phenomenon that leads to decreased test performance and occurs when one deals with added pressure of being judged on the basis of their group membership. The effect has been previously investigated in many contexts but not in individuals with developmental dyslexia (DD) who are often stereotyped as less intelligent. Prevalent use of intelligence tests in job selection processes and employment gap between people with dyslexia and those without warrants this investigation. We aimed to investigate if stereotype threat extends to people with dyslexia. This investigation is important as understanding of this phenomenon would allow practitioners to design recruitment process in a way that would not trigger stereotype threat.

#### Methodology

Sixty-three participants (30 with DD and 33 without DD; mean age = 33.7; SD =13.7; 47 F, 13 M, 3 non-binary) were asked to complete intelligence test typically used in selection processes. Participants in both groups were randomly assigned to one of three test instruction conditions: 1) they were told the test was diagnostic of their intelligence (stereotype threat); 2) test was a measure of their problem-solving skills (reduced threat); 3) or they were simply asked to take the test (control).

#### Results

Results showed that participants with DD in stereotype threat condition performed statistically significantly poorer than those in other conditions and those in the same condition who did not have DD. This study provides evidence for diminishing effects of stereotype threat in DD and recommends job recruiters to use strategies to reduce it to assure fairness and inclusion.

#### Limitations

The sample size was relatively small which did not allow for more detailed analyses of the impact of educational level, occupational status, gender and dyslexia comorbidities (e.g., ADHD) on test performance. Further research is needed.

#### Research/Practical Implications

Research on use of intelligence tests for job recruitment processes should consider impact of situational factors such as what test instructions are used and whether stereotyped groups, such as people with developmental dyslexia, are included.

Practitioners designing selection processes should think through and pilot instructions that are to be used while administering intelligence tests making sure that they offer minimal instructions or frame the tests as measuring learnable skills rather than stable intellectual abilities. This will assure fairness of the assessment.

#### Relevance to the Congress Theme

As our future is indeed created by many professionals, we need to ensure that our practices are inclusive and that we recruit best people for the jobs. Individuals with dyslexia are often credited with many strengths (e.g., being able to see the 'big picture', being creative and 'out of box' thinkers, good problems-solvers; Nicolson & Fawcett, 2015; Reid & Kirk, 2001) that are highly valued in today's workplaces. By engaging in fair recruitment processes we stand a better chance in highly competitive market. Also, in ever-changing work environment and with multiple crises we need creative and novel solutions. This speaks to the themes of Contribution and Urgency.

*Keywords: equal opportunities, neurodiversity, recruitment*

## Poster P177

### Work-family relationship in remote workers differing with regard to social support and hours worked per week

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science

The purpose of this cross-sectional study was to examine the work-family relationship with regard to the number of hours worked per week and perceived social support in employees who had to switch to remote work due to outbreak of COVID-19 pandemic. Work-family relationship has been addressed in numerous studies (i.e. Allen et al. 2019). COVID-19 pandemic has been proven to be stressful and detrimental to health (Patel et al., 2022). There is however a great need of studying work-family interface in this context. The role of social support as a stress buffer has been widely documented (i.e. Ditzen, Heinrichs, 2014). It's combined effect with number of hours worked per week has been examined.

635 workers (19 to 70 y.o.,  $M=37,24$  years,  $SD=11,02$  years) took part in the online study. They had to have been working remotely for at least three months. There were 438 women (69%) and 197 men (31%). 6 groups of employees have been distinguished: (1)low social support and working less than 40 hours per week ( $N=77$ , aged 20-68,  $M=38,60$  years;  $SD=13,24$  years, 70% female), (2)low social support and working full time (40 hours per week;  $N=144$ , aged: 19-67,  $M=36,21$  years,  $SD=8,94$  years, 67% female), (3)low social support and working overtime (more than 40 hours per week;  $N=123$ ; aged: 21-64 years,  $M=36,23$  years;  $SD=8,96$  years, 67% female), (4)high social support and working less than 40 hours per week ( $N=73$ ; aged: 20-69 years,  $M=39,48$  years,  $SD=14,29$  years, 62% female), (5)high social support and working full time ( $N=118$ , aged: 22-70 years,  $M=36,31$  years,  $SD=10,98$  years, 74% female), (6)high social support and working overtime ( $N= 100$ , aged: 20-66 years,  $M=38,39$  ears,  $SD=11,30$  years, 73% female). Work-family interface was measured by 12-item scale comprising of 4 subscales: work-family facilitation-WFF, work-family conflict-WFC, family-work facilitation-FWF, family-work conflict-FWC (Cronbach's alphas: 0,709; 0,801; 0,821 and 0,768 respectively). Social Support was measured by Polish adaptation of Multidimensional Scale of Perceived Social Support (Zimet et.al., Polish adaptation: Buszman, Przybyła-Basista, 2017). The Cronbach's alpha of the general result was 0,956. One-way AVOVA analyses were performed. Statistically significant differences in average WFC ( $F(5,629)=7,041$ ;  $p<0,001$ ), WFF ( $F(5,629)=13,331$ ;  $p<,001$ ), FWC ( $F(5,629)=4,717$ ;  $p<,001$ ) and FWF ( $F(5,629)=30,055$ ;  $p<,001$ ) were found. Post-hoc analyses revealed that WFF was higher in the group of workers who had more social support regardless of working hours. The lowest WFF was experienced by employees working overtime and having low social support. Similar results were obtained with regard to FWF, however lowest FWF was observed in employees working less than 40 hours per week and experiencing low social support. Highest WFC and FWC were experienced by employees working overtime with low social support. Lowest WFC and FWC were reported by full time workers experiencing high social support. Limitation of this study is that there was uneven distribution of men and women in this study.

Remote work, although present in the job market before the Covid-19 pandemic, has become a reality for many people not used to it. Researching this area is very important as remote work can have both beneficial and detrimental effects on employees' health and wellbeing.

The results of this study contribute to better understanding of remote employees wellbeing and their health which is in line with UN SDGs.

*Keywords: work-family relationship, social support, telework*

## Poster P178

### Stress perception in remote workers differing with regard to social support and hours worked per week

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science

The goal of this research was to study perception of work stressors with regard to social support and hours worked per week in employees who had to start working remotely after the outbreak of COVID-19. Although telework has been known for decades, the coronavirus pandemic forced many employees to work remotely without training or preparation. This sudden change in working conditions was a serious stressor.

635 workers aged 19 to 70 years old ( $M=37,24$  years,  $SD=11,02$  years) took part in the online study. They had to have been working remotely for at least 3 months. There were 438 women (69%) and 197 men (31%). They were either working less than 40 hours per week ( $N=150$ ), full time (40 hours per week,  $N=262$ ) or more than 40 hours per week (overtime,  $N=223$ ). Based on social support results (Polish adaptation of Zimet's scale, Buszman, Przybyła-Basista, 2017, Cronbach's alpha: 0,956) the workers were split into 2 groups: workers with high social support ( $N=291$ ) and workers with low social support ( $N=344$ ). Six groups of employees have been distinguished: (1) low social support and working less than 40 hours per week ( $N=77$ , aged 20-68,  $M=38,60$  years;  $SD=13,24$  years, 70% female), (2) low social support and working full time (40 hours per week;  $N=144$ , aged: 19-67,  $M=36,21$  years,  $SD=8,94$  years, 67% female), (3) low social support and working overtime (more than 40 hours per week;  $N=123$ ; aged: 21-64 years,  $M=36,23$  years;  $SD=8,96$  years, 67% female), (4) high social support and working less than 40 hours per week ( $N=73$ ; aged: 20-69 years,  $M=39,48$  years,  $SD=14,29$  years, 62% female), (5) high social support and working full time ( $N=118$ , aged: 22-70 years,  $M=36,31$  years,  $SD=10,98$  years, 74% female), (6) high social support and working overtime ( $N=100$ , aged: 20-66 years,  $M=38,39$  years,  $SD=11,30$  years, 73% female). Stressors investigated were: exertion, mental burden of work, and the right to take up decisions.

One-way ANOVA analyses were performed. Statistically significant differences in average exertion ( $F(5,629)=9,053$ ;  $p<0,001$ ) as well as mental burden of work ( $F(5,629)=7,977$ ;  $p<0,001$ ) and the right to take up decisions ( $F(5,629)=3,117$ ;  $p=0,009$ ) were found. The exertion was highest in the group of employees working overtime with high social support when compared to other groups of employees. Mental burden of work was highest in employees working overtime regardless of social support. The right to take up decisions was highest in employees who were working less than 40 hours per week and experienced high social support. Mental burden of work was highest in employees working overtime regardless of social support.

Preliminary findings suggest limited role of social support in reducing the stress of remote work. It might mean that the stress of telework can only partially be buffered by perceived social support. Even employees with high social support were very stressed when compared to those experiencing low social support, especially when working overtime. The results of this study suggest that social support can be a stress buffer only in limited capacity in remote employees during the pandemic. Hours worked per week should be taken into account as one of the factors contributing to stress perception in remote workers. Further examination of these phenomena is needed. The specificity of remote work may be an important factor to be investigated closely in future research.

This study is relevant UN SDG: good health and wellbeing.

*Keywords: stress perception, social support, telework*

## Poster P179

### Wellbeing, sleep and health assessments in remote due to Covid pandemic workers depending on hours worked and gender - a prospective study

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science

A goal of this prospective study was to examine the dynamics of the impact of remote due to pandemic working arrangements on wellbeing, sleep problems, and physical health perception in a representative sample of remote due to pandemic workers in Poland. The outbreak of Covid pandemic resulting in implementation of remote work on a larger than earlier scale has a potential of creating not only the new opportunities but the new work stressors and their outcomes as well. The research have already showed negative impact of remote working during pandemic on wellbeing, sleep and health (Patel, Robertson, Kwong, Griffith, Willan, Green, et al. 2022). The question is whether and which of these effects change in the course of time of working remotely in times of pandemic.

The participants of the two wave study ( $n=477$ ; women= $311$ ; men= $166$ ) aged 19 to 70 years ( $M=37.24$ ;  $SD=11.02$  years) filled in online surveys two times, the first in January and the second in May of 2021. They were divided into 6 groups on the basis of hours worked per week (below 40h, 40h, more than 40h) and gender. The groups were as follows: (1) women > 40h per week ( $N=67$ ,  $M=36.62$  years;  $SD=11.11$ years), (2) women and 40h ( $N=133$ ,  $M=37.23$  years,  $SD=9.54$ year), (3) women and < 40h ( $N=111$ ,  $M=39.86$  years;  $SD=10.47$  years), (4) men and > 40hours per week ( $N=46$ ,  $M=45.22$  years;  $SD=13.49$  years), (5) men and 40h ( $N=72$ ,  $M=40.32$  years;  $SD=10.42$  years), (6) men and <40h ( $N=48$ ,  $M=39.54$  years;  $SD=9.17$  years,).

Well-being was assessed by WHO-5 Well-being Index (WHO, 1998), sleep problems were evaluated by usage of Athens Insomnia Scale (Soldatos, Dikeos, Paparrigopoulos, 2000), and subjective health was assessed by questions derived from Short Form Health Survey SF-36 (Ware, Sherbourne, 1992). Analysis of variance was performed on the data to find out differences in dependent variables between the first and the second measurement time in groups of workers differing with regard to hours worked per week and gender. Main effect of time of measurement was found on wellbeing assessment ( $F(1, 471)=355.6$ ;  $p<0.001$ ). There was a higher assessment of wellbeing in the first study at the beginning of pandemic than after four months of remote working during pandemic ( $x=16.52$ ,  $SD=5.07$ ;  $x=11.97$ ,  $SD=5.06$ , respectively). Main effect of time of measurement at the level of tendency have been found in a number of complaints about discomfort and pain felt in different parts of body ( $F(1, 471)=2.774$ ,  $p=.096$ ). There was an increasing trend in a number of complaints on discomfort and pain from the first to the second measurement time ( $x=5.41$ ,  $SD=1.75$ ;  $x=5.50$ ,  $SD=1.73$ , respectively). There was not found statistically significant difference between the first and the second measurement in sleep problems and physical health assessment in the groups of participants.

The limitation of this study is too small amount of men when compared to women in the studied groups. There is a high relevance to the subject of Congress theme because working remotely may create new work stressors, which may increase a risk for health and wellbeing of the workers, especially when they work remotely for long periods.

Practical implications of the research findings is drawing attention to hazards of working remotely and a need for monitoring wellbeing of remote workers and when necessary undertaking actions

aimed at improvement of well-being of remote workers. By indicating these this presentation contributes to SDGs (Good health and wellbeing).

*Keywords: wellbeing, sleep, remote work*

**Poster P180**

**A week-level study examining the mediating role of mood regulation in the relationship between work-related perseverative thinking and work performance**

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science

In this study, we investigated how two types of work-related perseverative thinking (i.e. affective rumination and problem-solving pondering) during the weekend are related to job performance-related outcomes (i.e. compensatory effort and task performance) through their relationships with mood regulation in the workplace during the subsequent working week. Participants responded to weekly web-based surveys at the beginning (i.e. on Mondays) and at the end (i.e. on Fridays) on six consecutive working weeks. The data (N = 107; 490-568 week-level data points) were then analyzed using Multilevel Structural Equation Modeling (MSEM). The results revealed that affective rumination during the weekend was indirectly related to a higher level of compensatory effort and a lower level of task performance during the subsequent working week via its negative relationship with mood regulation. Problem-solving pondering was not significantly related to mood regulation, nor to compensatory effort and task performance at the within-person level. Testing a dynamic model of weekly fluctuations, the findings of this study provide empirical evidence to support that affective rumination has a stronger emotional straining effect than problem-solving pondering.

*Keywords: weekend, recovery, rumination, problem-solving, mood regulation, job performance*

## Poster P184

### **Development of emotional exhaustion and secondary traumatic stress in healthcare workers during the second wave of COVID-19 in Spain.**

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science

**Goals:** Exploring job and personal demands and resources of healthcare workers that have influenced the development of emotional exhaustion (EE) and secondary traumatic stress (STS) during 2nd wave of pandemic in Spain.

**Background:** The Job Demands-Resources Model considers EE and STS in healthcare workers as the result of managing difficulties in a demanding stage (high workload, fear of contagion), and establishes that job and personal resources (hardiness and posttraumatic growth (PG)) could lessen negative psychological consequences. EE is experienced when emotional resources and the ability to cope with difficulties decrease, while STS combines symptoms derived from indirect exposure to others' trauma. Regarding resources, Hardiness involves a perception of control, commitment and challenge in stressful situations, while PG promotes succesful coping and includes 5 dimensions (relations, possibilities, strength, spirituality, appreciation of life). These variables are closely linked to COVID-19 evolution. The growth of patients increased workload and fear of contagion at overcrowded hospitals. This experience became traumatic for many professionals, and resulted in EE and STS.

**Methodology:** This is a cross-sectional study that evaluated 172 Spanish healthcare workers on job demands, lack of job resources, Hardiness, PG, EE and STS. Snowball sampling method was used and professionals were evaluated throughout December 2020 (2nd wave in Spain).

**Results:** Firstly, descriptive analyses reveal high level of job demands and Hardiness, and moderate levels of EE, STS, lack of job resources, and PG. Secondly, we calculated mean differences depending on job position, and observed that assistants have less access to job resources, but, at the same time, show higher PG. Finally, regression analyses suggest that EE is positively related to fear of contagion and negatively related to "relations" (PG), while STS is positively related to job demands, lack of resources and "apreciation of life" (PG).

**Limitations:** This is a cross-sectional study, so it is not possible to build a global picture of pandemic and its impact on healthcare workers. Moreover, the sample is not representative of men and certain job positions. Additionally, social desirability could be present, due to self-report measures.

**Implications:** This research sheds light over PG and Hardiness as personal resources that could prevent from negative psychological consequences. "Relations" (PG) protects against EE. This highlights the importance of perceived social support on wellbeing. "Appreciation of life" is possitively associated with STS, and this involves that some dimensions of PG could be more useful than others when confronting hazardous situations. Hardiness does not work as a protective resource in this analysis, as psychological distance from the trauma could be necessary to provide the experience a new meaning. These findings are meaningful for designing preventive programs based on the improvement of social networks at organizations, the provision of enough human and material resources, and the strengthening of psychological strategies to deal with challenging work demands.

Relevance to the Congress Theme: This study discusses issues associated to new competences that could be trained by professionals ( contribution ), provides solutions for the mental health crisis that has been derived from COVID-19 (urgency), and stresses changes for the improvement of working conditions (delivery).

*Keywords: COVID-19, emotional exhaustion, secondary traumatic stress*

## Poster P185

### **Is remote working suitable for managers? The Study on Managers' attitudes toward working from home.**

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science&practice

Currently, job duties are massively transferred from in-person to remote working. Existing knowledge on remote working is mainly based on employees' assessment. However, the manager's perspective is crucial in organizations that turned into remote work for the first time facing sudden circumstances, i.e., SARS-CoV-2 pandemic. The main aim of the first measurement of this study was to analyze remote work effectiveness perceived by managers (N = 141) referring to three crucial aspects, i.e., manager, team, and external cooperation. We assumed the perceived benefits, limitations, and online working frequency as predictors of remote work effectiveness. Further, we analyzed the possible differences in remote work perception referring to different management levels (i.e., middle-level and lower-level). Our findings revealed a significant relationship between the benefits and effectiveness of managers and external cooperation, specifically among lower-level managers. Limitations, particularly technical and communication issues, predicted team and external cooperation effectiveness. The results showed remote work assessment as being socially diverse at the management level. In order to rule out the impact of pandemic stress and its effect on effectiveness, it is necessary to repeat the study after the epidemiological threat has ceased. If home-office information on a management level is available, and if a comparison during and after the coronavirus crisis is possible, we can learn whether COVID-19 has contributed to a substantial structural change. Without a doubt, remote work has become an inherent work system, and the challenge today is to maintain or indicate maximum efficiency.

*Keywords: effective leader; leader perspective; remote working*

## Poster P186

### Supporting the Next Generation of WO Psychologists: Evaluation of the 'Emerging Occ Psychs' Initiative

Simon Toms, Simon Gander, Eloise Mason, David Biggs, Hardeep Viridi, Nikita Mikhailov | PsychologyAtWork.Blog

practice

Occupational Psychology represents a popular field of study, with over two-dozen MSc courses in the UK alone. However, graduates frequently report difficulties in transitioning from their degree programmes into professional roles that are relevant to their qualifications.

The 'Emerging Occ Psychs' (EOP) initiative was launched in 2020 to provide mentoring and support to graduates of MSc programmes in Occupational Psychology (and related fields). The goal of the initiative was to increase graduates' engagement with their desired profession by pairing them with a mentor who possessed experience in relevant areas of the industry.

The current research project sought to evaluate the EOP's ability to increase the professional engagement of mentees taking part in the second cohort of the EOP, which ran from Autumn 2021 through to Summer 2022.

Research methodology

Prospective mentees were given a questionnaire that formed the basis of their application to the EOP initiative. In addition to asking questions relevant to their mentor pairing preferences, mentees were administered several variables relevant to their engagement with, and transition into, the occupational psychology industry. These variables included perceived employability (Berntson & Marklund, 2007), career planning confidence (McAuliffe, Jurgens, Pickering, Calliotte, Macera, & Zerwas, 2006), and self-esteem (Robins, Hendin, & Trzesniewski, 2001).

At the evaluation stage of the research nine months later, these variables were re-administered alongside additional questions relevant to the EOP's evaluation. This would enable the research to determine whether improvements between the application and evaluation questionnaire could be measured. Mentees were also offered the opportunity to complete an interview with the researcher about their experience of the EOP. This resulted in a longitudinal mixed-methods study.

Findings

The research concluded with 34 of the 104 applicants completing the evaluation questionnaire, six of which also completed a further interview to supplement their survey data. Analysis of the resulting data identified significant improvement across the majority of variables administered in the surveys. Mentees' perceived employability increased by 34.3%, Self Esteem increased by 24.0%, and Career Planning Confidence increased by 11.0%.

Thematic analysis of the interviews highlighted various themes of note. Greater professional engagement was reported by mentees, as the EOP enabled them to engage with a wider community of experienced professionals, peers, and potential employers. Improvements in perceived employability and networking were also cited. Benefits of mentoring included greater awareness of the industry and improvement to key skills relevant to career progression. Analyses highlighted various recommendations for the EOP organisers and future mentors.

Implications

The provision of mentoring had a clear and positive impact on various aspects relevant to mentees' engagement with the profession. This demonstrates the important role the EOP, or similar initiative, could play in facilitating the transition of fresh talent into the profession. This will also have clear relevance to the universities that offer MSc programmes, as transition into suitable employment is an important goal. Finally, the research provided some useful guidance for mentors interested in enhancing their effectiveness in supporting graduates.

*Keywords: Mentoring, Community, Professional Development*

## Poster P187

### **Lost in translation: Expectations and employment among refugees and immigrants in the U.S. versus Spain. A replication study.**

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science

Employment is a central resettlement factor for refugees in the United States (U.S.), in addition to needing to learn a new language. As noted by Baran, Valcea, Porter and Gallagher (2018), resettlement involves "a complex trajectory of expectations, adversity, turning points, and status changes". Underemployment, job dissatisfaction, and the like are work and life stressors. Based on Psychological Contract Theory, the results showed that refugees came to the U.S. with high expectations that didn't match the reality and they experienced underemployment, which resulted in lower life and job satisfaction (Baran et al., 2018). Low job satisfaction was a significant reason for many refugees to abandon the American dream and to wish to return home. Study variables included are: sociodemographic data, core self-evaluations, perseverance, underemployment, psychological contract, past U.S. perceptions, current U.S. perceptions, job and life satisfaction, and thoughts of returning home.

Since Baran et al., (2018) data was collected in 2016, there have been numerous changes: a different U.S. president, a decline in refugee resettlement after 2016, an increase in U.S. resettlement since 2021, and a world-wide pandemic. As such, our study will replicate the findings in the U.S. (with the same variables), to compare the earlier findings with those of the refugee experience during these last few years. In addition, our study will be extended to Spain, in order to compare the differences in attitudes and feelings in both countries. Spain in particular is uniquely relevant to understanding the migration and refugee population due to Spain's southern location and proximity to North Africa, as well as their historical relationship with Latin America. Other potential differences that may be observed between the U.S. and Spain may be due to variations in tolerance and cultural values, their health care systems, among other differences, that would subsequently alter perceptions of Psychological Contract breaches. For example, health care availability in Spain may contribute to higher perceptions of life satisfaction while job opportunities may be more prevalent in the U.S. leading to higher job satisfaction.

In addition to our conceptual considerations noted above, our goal is to obtain a larger sample of more than 100 refugees, with about half living in the U.S. and half living in Spain. We seek to collect the data during February and March of 2023. We currently have about 10 respondents and are seeking IRB approval to offer a gift card drawing incentive to increase the response rate. The previous study had a number of other limitations, such as an entirely male sample. We aim to acquire a more diverse sample in the U.S. and Spain, with a variety of countries of origin, a mix of males and females, etc.

Future research should supplement our survey with qualitative interviews, explore other countries of resettlement, and continue to explore diversity of sample in order to obtain deeper insights into our hypotheses and findings.

*Keywords: Refugees, Psychological contract violation, Resilience*

## Poster P188

### **Plan for equality between women and men, adaptation of state law to the reality of a public hospital**

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science&practice

Objectives of the research :

The objectives are several:

to comply with a legal obligation at both European and national level on the implementation of equality plans in all companies.

To find out the real situation regarding equality in a specific environment.

To analyse how the situation affects the working environment and individual comfort.

To take measures to correct the inequalities detected in order to increase job satisfaction and, therefore, confidence in the company.

To achieve the natural integration of equality in the culture of the organisation as something positive for the mental health of the company and its employees.

To promote the feeling of belonging to the organisation as the employee feels identified with the institutional policy.

Theoretical background .

Inequality between men and women is an issue as old as mankind.

In the last century, the situation has become legally equal, but much more slowly at the organisational level, since socially and culturally women continue to take care of the family and the home, especially in the Mediterranean family environment, and the role of men in these tasks has not been sufficiently corrected to achieve a balance between the genders.

This is why it has become necessary to make laws that promote this cultural and business change to improve the mental and physical well-being of women workers by implementing measures that allow them to combine their tasks without stress and in an equitable way.

The data of the global gender gap report 2022 of the world economic forum shows that Spain is in 17th place in the world ranking in terms of gender GAP.

The 2030 agenda of the united nations includes in its No. 5 the importance of promoting gender policies from the institutions.

At the European level, the question has been promoted by legislating with the 2006 directive on the involvement of the principle of equal opportunities and equal treatment between men and women in matters of employment and occupation.

Subsequently, the European gender equality strategy 2020-2025 and Community action plans are being developed.

Design / Method / Intervention.

Based on the general guidelines set out in the state law, LO 3/2007, for the development of an equality plan in all companies in Spain, the Hospital has followed the following steps:

-Creation of a commission made up of social agents and members of the company and training them in the matter to work on the development of the plan:

Situation diagnosis was carried out with data broken down by gender:

-Professional classification

-Training

-Professional promotion

-Working conditions.

-Salary Audit

-Family reconciliation and work.

-Prevention of sexual and occupational harassment.

-Analysis of the results of the diagnosis and elaboration of an improvement action plan in areas where it is needed.

Follow-up and evaluation.

Results.

Corrective actions put in place:

- Training courses on equality with a positive impact on a personal level and also on a work level as they are taken into account for promotion in the company.

- Facilities for work-life balance and professional promotion with very good results in terms of workers' well-being.

-Surveys on the perception of the situation and expectations regarding equality in the company.

-Creation of an internal forum for employee contributions to the equality plan.

-Implementation of a harassment protocol, the application of which has proved to be ideal for the cases to be dealt with.

Conclusions: Value

An equality plan can be an instrument that allows: balance and improve the work conditions, build sustainability and impact on community as a part of the Institutional Social Responsibility.

Include gender perspective in every hospital area.

Create a data system that allows having an accurate image of gender situation.

Improve the well-being of the worker who sees increased confidence in the institution, thus improving their productivity and motivating their sense of belonging.

*Keywords: Gender equality, balance and working conditions, Institutional Social Responsibility*

## Poster P192

### Is job crafting able to build up our mental health? Validation of the job crafting scale

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science

Research goals and why the work was worth doing

My conference contribution presents a validation of the job crafting scale on the Czech population. The ultimate aim of this project is to explore job crafting behaviour in the Czech working population together with mental health factors and to validate the existing job crafting scale. This validation has never been conducted on such national population before which places the project into a key role of raising the awareness of the job crafting concept in the field of Czech research and further.

Theoretical background

There are many facets out there aiming to strengthen our mental health. However, few of them can be directly placed in our working environment and especially the working behaviour. Wrzesniewski and Dutton (2001) introduced a concept called job crafting. Job crafting can be defined as “ the physical and cognitive changes individuals make in the task or relational boundaries of their work.” (Wrzesniewski & Dutton, 2001). In other words, a job crafter is an employee who proactively shapes his work activities or relationships into the form where he feels good and satisfactory. This concept shows thus positive correlation with work engagement (Frederick & VanderWeele, 2020) and also has extended the original Job Demands-Resources Model (Demerouti, Bakker & Xanthopoulou, 2017). It is undoubtedly a complex phenomenon, nevertheless, job crafting has ultimately the potential to strengthen our mental health at work, as well as anywhere else (Boehnlein & Baum, 2018). In order to examine job crafting behaviour, Tims, Bakker and Derks (2011) developed and validated job crafting scale. This measuring instrument laid the basis for our project where we focus on the Czech population. The Czech Republic belongs among post-communist countries and the population have tendency to maintain rigid and punctual (work) behaviour (Hofstede Insights, 2022) which puts this project into an interesting perspective.

Methodology

Quantitative research design was implemented to explore the job crafting behaviour and mental health factors on the Czech population. The project starts with a scale translation and back-translation from English into the Czech language. Online survey has been chosen as a research method administrated via research agency in order to ensure representativeness of the study sample. The survey consists of job crafting scale, mental health continuum and Utrecht work engagement scale (UWES).

Expected results

The results are not available yet and will be compiled in early spring 2023. We hypothesize that mental health and work engagement is positively correlated with all four dimensions of job crafting scale (increasing social job resources, increasing structural job resources, increasing challenging job demands, and decreasing hindering job demands). The hypothesis will be tested using linear regression.

Limitations

Limitations of this study are mostly connected with limitations that surveys bring in general. Since we apply only quantitative design, we miss the contextual level of gathered data and can rely solely on respondent's answers at the time of administration.

#### Conclusions

The results would clarify job crafting tendencies and possible determination of employee's mental health. Furthermore, and more importantly, the project is another potential step to raise awareness of this phenomenon within the Czech environment. Since mental health at workplace is coming to the fore more and more, it is crucial to look for ways and instruments that would help to grasp this topic better.

#### Relevance to the congress theme

The project is in line with the congress theme since working behaviour of ours is very much in a transforming stage due to all (post-)pandemic consequences. The working behaviour together with mental health belongs among the most crucial topics that organizations currently deal with and will possibly deal in the future.

*Keywords: Job crafting, mental health, Czech Republic*

## Poster P193

### **ASSOCIATIONS AMONG PATIENT EXPERIENCES, ORGANISATIONAL CLIMATE FACTORS AND PATIENT OUTCOMES: A SYSTEMATIC REVIEW**

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**Research goals:** Patient experience is an essential indicator for assessing hospital performance. The increasing attention on patient experience has also yielded research on its relationships with patient outcomes as well as organisational factors. In previous reviews, it was concluded that evidence of associations between organisational climate and patient variables is inconclusive, indicating a need for more research. Considering the years that have elapsed, and the increasing attention on patient experience from researchers, there is the need for a systematic review to draw adequate conclusions on whether there has been some changes in the associations between these variables in the general body of literature. The overarching goal is to make a qualitative synthesis of studies among the variables to draw informed conclusions on the general directions and theoretical underpinnings.

**Theoretical background:** The review focuses on and defines three main concepts; organisational climate factors, patient experiences, and patient outcomes.

**Methodology/Approach:** The study involved a search for literature in PubMed, PsychINFO, Medline, CINAHL, Academic Search Premier, Scopus and Web of Science between 2007 and 2022. The search was limited to English language and to human adult inpatients. The search was also done with the guidance of a librarian. Articles were screened first on title and abstract, and then on fulltexts. Quality assessments such as risk of bias assessments were done on remaining articles. Data was extracted from articles that met the inclusion criteria and passed the checks. Any discrepancy during the study was addressed through discussions or engaging a neutral expert in systematic review. The review also focused on both foundational climates such as the broad workplace environment, and specific climates, such as safety climate and service climate. Patient outcomes that were sought included both subjective (eg. patient satisfaction) and objective (eg. accidents) outcomes.

**Results:** The search identified 11570 records that were checked for duplications. After removing duplicates, 7361 records were eligible for the two phases of screening. The eligibility criteria were used in selecting articles for inclusion. A final list of 224 articles were included for the qualitative synthesis. Similarities and differences were drawn on the variables and findings in the included studies and presented under five broad themes: variables and factors, overview of associations, group comparisons, forms of interventions, and theoretical overview. Results showed that the relationships among patient experiences, organisational climate factors and patient outcomes were more conclusive and generally positive rather than negative. The review however showed areas that required more attention such as an encompassing quality-oriented care climate theory, validation of patient-reported instruments, and longitudinal studies linking subjective patient outcomes to objective patient outcomes.

**Limitations:** The review limited its search to quantitative studies or studies that employed mainly quantitative tools to assess associations or changes. Secondly, only peer-reviewed articles were included in the review. Also, a clear distinction was made between some related concepts, for example, between organisational climate and organisational culture, where the latter was excluded.

**Conclusions/Implications:** First, there is the need for an encompassing theory or framework that captures the care climate in hospitals, taking cognizance the different perspectives of employees and

patients as well as the complexities and interrelationships among organisational factors and patient-related factors. Secondly, although most of the longitudinal studies also show positive influences of favourable organisational factors on patient variables, there is still the need for more studies on concrete changes and trends in the associations of these variables. More studies are also needed towards linking subjective patient outcomes or experiences to objective outcomes especially for longitudinal studies. Furthermore, there should be more best practice examples in improving the experiences and outcomes of patients by way of interventions based on reports from patients. This also means increased collaboration between researchers and hospitals to know actual issues that need intervention for improved patient experience. Lastly, there is the need for more studies to validate instruments that are used to gather periodic data on patient-reported variables to ensure that adequate and accurate data is always gathered from patients.

**Originality:** This review provides thorough evidence of conclusive relationships among the concepts across a 15-year span in research.

**Relevance to the congress theme:** This study sets the tone for future research that focuses on increased collaboration between hospital workers and researchers thereby influence how work is organised in hospitals.

*Keywords: patient centeredness, hospital factors, systematic review*

## Poster P194

### **Sex Differences in the Hierarchy : An Experimental Study on Nonverbal Communication Behavior Adaptability.**

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Our goal was to address gaps in the existing research on Behavioral Adaptability (BA), the ability to change one's verbal and nonverbal interpersonal behavior in a non-random way according to the needs and preferences of different interaction partners (Schmid Mast & Hall, 2018). Preliminary evidence suggests that individuals who adapt their interaction style have better interaction outcomes and most of the results emerged for nonverbal BA. Existing studies have only investigated BA display in people of high-power and it is not clear whether previous results are specific to people of high-power or if BA display is related to power at all . We would expect that low-power individuals would be more likely to display BA when interacting with high-power individuals than vice versa based on the Social Distance Theory of Power (Magee & Smith, 2013) and Communication Accommodation Theory (Giles et al., 1988). We also explored if self-reported sex or sex of the interaction partner affects the link between an individual's power position and BA.

To assess BA, 4 interaction targets were chosen based on their previous pretested (fast or slow) articulation rates. In this online study, participants were asked to imagine taking part in a hypothetical values workshop to help establish the core values of their organization and were given a description of their role and an organizational chart that showed their position as well as the interaction targets position in the company. Participants made a baseline audio recording where they talked about their 3 most important values and then listened and responded to the interaction targets sharing their top 3 values resulting in 12 recordings per participant. The 306 participants (49% women) were recruited via Prolific and were randomly assigned to one of the 3 experimental conditions following a 3 (power level: low, equal, high) by 2 (target gender: women vs. men) between-subject design. BA was operationalized as the extent to which participants adapted their articulation rate to each of the targets' articulation rates.

Mixed-effects modeling showed that power, as such, did not affect BA display. However, self-reported sex did, as women showed more BA than men. Women were equally likely to display BA towards both female and male targets. Men showed similar amounts of BA when interacting with male targets and with high-power female targets but showed significantly less BA towards low-power or equal-power female targets.

Social Role Theory (Eagly, 1987) can explain the gender differences we found, which suggests that women would be more socialized to display BA compared to men. We suspect that men's BA display might be more status driven and are thus less motivated to display BA towards female targets except if they are explicitly described as high status. While the power manipulation was effective, future studies could manipulate "real" power and use an experimental design that allows for real-time exchanges. BA operationalization could be expanded to include more than one nonverbal channel.

This study focuses on interpersonal communicative behavior within hierarchical interactions and advances our understanding of how people interact in organizational settings. Moreover, this is additionally relevant to the "the future is now" theme and the "Partnerships for the goals" UN SDG as it investigates BA, an interpersonal skill that affects various interaction outcomes such as collaboration.

*Keywords: Behavioral Adaptability, Interpersonal Communication, Hierarchical Relations*

## Poster P195

### Intention to Leave and Commitment to the Legal Profession: What Future for Canadian Lawyers?

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science

**Research goals.** This study assesses whether professional commitment mediates the relationship between job demands/job resources and intention to leave the profession.

**Theoretical background.** Canada's aging population has created a labour shortage, and as a result, retention has become an issue. A key lever for retention is workplace health and wellbeing. Unfortunately, some professionals are particularly affected by mental health issues, including lawyers (Krill et al., 2016; Skead et al., 2018). One study found that 59.4% of Canadian jurists experience psychological distress (Cadieux et al., 2022). Yet, the literature has shown that mental health influences work attitudes such as professional commitment and intention to leave the profession (e.g., Chênevert et al., 2021). Again, according to Cadieux et al. (2022), 54.2% of jurists stated that they would be inclined to accept another occupation at the same remuneration level if an opportunity were offered to them. Many factors can influence intention to leave, including working conditions. Since the human being is a multifactorial whole whose reality cannot be explained by a simple stimulus-response model, it also seems relevant to consider the mediating role of professional commitment, which is an important predictor of the intention to leave the profession (Lee et al., 2000). Professional turnover has important consequences for society and for the profession itself, particularly in terms of the loss of skills (Parry, 2008). When voluntary professional turnover and intention to leave are high, they may be a symptom of a profession in poor shape. Studying intent to leave is essential to 1) understanding how to ensure a happy and fulfilled professional succession and 2) retaining experienced professionals who can be a lever for knowledge transfer.

**Methodology.** Data were collected via a self-reported questionnaire. A pre-test with 29 English and 35 French speakers was conducted to validate the measurement scales. The final sample was composed of 2,352 lawyers, 29.63% of whom were men. The average age was 40.44 years. To test the mediation, hierarchical multiple regressions (Baron & Kenny, 1986) were conducted along with bootstrap analyses (Hayes & Little, 2018; Preacher & Hayes, 2008) to increase the reliability of the results.

**Results.** Data analysis is not yet finalized. Preliminary results suggest that professional commitment mediates the relationship between several job demands and resources (i.e., workplace incivility, decision authority, skill utilization, and support from colleagues) and intention to leave the profession.

**Limitations.** Results should be interpreted with caution since the data are from a cross-sectional research design.

**Conclusion.** Few studies have examined the indirect effect of working conditions on intention to leave the profession. This study provides food for thought for professional associations that wish to ensure the outreach and sustainability of their profession.

**Relevance to the Congress Theme.** The study highlights the need to think collectively about how to change workplaces so that they become healthy and adapted to the next generation of professionals. Without this enthusiastic and motivated succession, the future is at risk.

Relevant UN SDGs. The research encourages organizations to change their practices and implement working conditions that are more beneficial to mental health and wellness.

*Keywords: Intention to leave the profession, professional commitment, lawyers*

## Poster P196

### Individual resistance to organisational change and practical implications

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Research goals and why the work was worth doing: Constant change in the world of work makes transformation a fundamental part of organisational life and long-term success. In this sense, individual resistance to change is an inherent part of transformations and an important source of information that can be used to improve these processes. Thus, this study seeks for the most important sources of resistance in different types of transformations in order to suggest evidence-based practices that can improve organisational change.

Theoretical background: In order to understand the phenomenon of organisational change more precisely, this case study distinguishes between changes that focus on processes, those that are structural and those that pursue cultural change. In terms of the sources of resistance to organisational change, individual variables such as the degree of understanding of organisational change are analysed. At the same time, the world of work is facing the oldest workforce in history and little research has been done on the influence of age and seniority on resistance to change. While some of the literature says that older generations are more resilient, others claim that organisations are acting biased against older age groups. This is why age and seniority are analysed as individual variables. Group variables are also included in relation to social life and peer pressure in work teams, and organisational variables linked to leadership style and previous organisational changes.

Design/Methodology: The study has a cross-sectional design that evaluates the relation between indecision and inconclusiveness, threat to social life at work, group pressure, organisational inconsistency and previous experience with unsuccessful change with individual resistance to organisational change. Age and seniority were studied as independent and moderating variables. All 96 participants experienced changes in the organisation where they worked in the last 5 years.

Results obtained: The sample analysed perceived high levels of cooperation in general terms. However, individual indecision and inconclusiveness and organisational inconsistency emerged as the strongest correlations with individual resistance. As for age and seniority, it is important to highlight that there is neither a statistically significant direct correlation nor a significant moderation.

Limitations: This study uses a cross-sectional design and the sample size could be bigger.

Conclusions and practical implications: This investigation details how to take forward evidence-based practices to address the variables most correlated with individual resistance to organisational change. These include improving communication in organizations, increasing organisational consistency and implementing active employee participation plans.

Relevance to the Congress Theme: It is understood that there is a call to action that is now. In this sense, this research makes it possible to link the scientific literature with different interventions for action at the workplace level.

Relevant SDGs: In a world pursuing decent work and economic growth, organisations cannot forget the worker as a key player. Continuous changes are implemented to increase productivity, apply new technologies and innovate and this is why this research seeks to promote development-oriented policies that focus on the well-being and continuous growth not only of organisations, but also of the people who make them up.

*Keywords: resistance, change, practices*

## Poster P203

### **Ethnography of the activity: the case of a transport company in fear of loss of knowledge**

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science&practice

Following World War II, some European countries experienced a rapid increase in their birth rate. This is called a “baby boom”. The massive retirement of an entire generation represents a considerable challenge in terms of the transmission of knowledge. These departures are being more complex due to the changing world of work that organizations are experiencing, such as premature resignations, increased competition or the scarcity of labour, etc. Nevertheless, this transmission experiences a paradox: despite the risk of loss of knowledge which could jeopardize the performance, occupational health and sustainability of companies; current working conditions contribute to the reduction of discussion times and the destruction of the collectives on which this transmission is based (Thébault & al. 2014).

Moreover, the process by which new members must learn to see the organizational world as the more experienced ones do is called organizational socialization. Even if it represents an important theoretical resource for the transmission of experiential knowledge, we think that it does not sufficiently develop the concrete activity of workers. Thus, in activity analysis, we retain two relevant approaches. The first one is professional didactics, which made it possible to demonstrate the formative power of the activity (Pastré, 2002). And the second one is the clinic of activity, which aims to understand real work (Clot, 2008). These approaches complement each other, but we think that they don't develop enough one of the purposes of the transmission of knowledge, its appropriation.

Therefore, the present communication aims to study a phenomenon made more complex by changes in work, the transmission and appropriation of experiential knowledge. This work proposes an approach that focuses on the reality of the individuals' activity, but which also and above all tries to combine knowledge development and organizational development through the clinic of activity.

To study this, our methodology is divided threefold, and takes place within our thesis field, namely a temperature-controlled road freight transport company. First of all, the first axis concerns the ethnography of the activity that we carried out for five months. We deep dived into a work situation, conducted interviews and observed for long periods of time. The objective was to understand the activity of managers and employees, to understand their expectations and to analyze their demand. The second axis relates to the realization of nine focus groups carried out on the nine subsidiaries in our scope. By means of a simulation of the activity, the objective is to identify the work situations that are problematic and those that are self-evident in the daily lives of workers. We will also seek to identify each of the strategies implemented by workers during a working day. Our third axis originates from these analyses. Indeed, based on the situations identified in the previous step, we will go into a work situation to set up simple and cross self-confrontations on a pilot subsidiary. Thus, the ultimate goal is to optimize the current training processes before the retirement of workers.

We have not yet obtained results during our study, but our methodology is in progress and will be finished in April 2023. Therefore, we will have the results at the time of the congress. Ultimately, we believe that our subject is aligned to the theme of the congress. Indeed, our thesis work studies one of the consequences of changes in work, the transmission of knowledge from experience. Our work aims to try to limit the harmful consequences that companies could experience following the loss of their experienced staff. We seek to promote a healthy future to ensure the competitiveness of companies, but also the increase in the individual and collective skills of workers.

The main and original contributions of our research are the association of the ethnography of activity and the clinic of activity to support a process favorable to the transmission of knowledge in the professional environment; and the participatory approach by associating the actors in the field to guarantee the sustainability of the action.

*Keywords: Activity; transmission of knowledge; clinic of activity*

## Poster P204

### The impact of a brief gratitude intervention on the cardiovascular response to an acute laboratory-stressor.

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#### Research goals and value

Health is an important resource at the individual, organizational and societal level (Cartwright & Cooper, 2014). Research indicates that work-related stress can lead to poor health outcomes (Li et al., 2016; Rose et al., 2017). Gratitude interventions have been explored as low-cost well-being interventions which have been shown to reduce work-related stress (Cheng et al., 2015). A review has identified work-related stress as a significant predictor of cardiovascular disease (Kivimäki & Kawachi, 2015). Some studies have estimated that cardiovascular diseases costs \$127 billion dollars per year in lost productivity. Furthermore, a recent survey of employers in the UK identified work-related stress as the main health concern among staff (Tu, Maguire & Shanmugarasa, 2021).

Research suggests that gratitude interventions have the potential to improve cardiovascular health outcomes (Cousin et al., 2021). Building on this, recent research has examined gratitude may act as a possible buffer to the development of cardiovascular disease (Ginty et al., 2020). This research extends this and utilises a randomized-control trial design to explore how gratitude impacts the cardiovascular response to acute psychological stress.

#### Theoretical background

The magnitude of the cardiovascular response to stress is typically labelled cardiovascular reactivity. Increased reactivity been associated with negative health outcomes such as coronary heath disease mortality and myocardial infarction (Carroll et al., 2012; Phillips & Hughes, 2011; Yuenyongchaiwat, 2015). Recent research has shown how gratitude has an inverse relationship with reactivity, implying gratitude to play an important role in buffering the effects of stress on cardiovascular stress. (Gallagher et al., 2020; Ginty et al., 2020).

Gratitude's apparent cardio-protective effects are consistent with the broaden-and-build model of positive emotions (Fredrickson, 2001), which postulates that positive emotions like gratitude broaden the repertoire of thoughts, actions, and attention (Le Nguyen & Fredrickson, 2018). This is also coherent with the stress-appraisal theory of stress which posits that one's internal resources are important influences on how one copes with stress (Folkman, 2008). For example, gratitude expressions are correlated with coping actions such as reappraisal (Bryan et al., 2018), as well as planning and goal-directed strategies which reduce the frequency and intensity of stress (Wood et al., 2007).

As such, it is unsurprising that gratitude's effect on stress has been proposed as a potential mechanism by which gratitude impacts cardiovascular health (Gallagher et al., 2020).

#### Method

This research uses an experimental design to examine how a short gratitude intervention impacts the cardiovascular response to stress in a laboratory stress-task. 128 healthy young adults underwent a standardised stress-testing protocol. Blood pressure and heart rate were measured throughout. This incorporated a 20-minute acclimation period, 10-minute baseline, 8-minute intervention, and a

12-minute stress period. The experimental intervention included writing a gratitude letter where the participant thanked someone in their life they had not thanked before. The control intervention included describing the laboratory in which the study was carried out. The stress tasks included both a mental arithmetic task and a public speaking task. This was followed by a 10-minute recovery period.

## Results

Results will be analysed using a multi-level growth curve modelling approach. While data-collection will be fully completed in November 2022, it is expected that the gratitude intervention will decrease the cardiovascular response to stress for systolic blood pressure, diastolic blood pressure and heart rate.

## Research implications/Limitations

This study will help further elucidate the effects that gratitude have on the cardiovascular response to stress. This will further help inform practitioners, both in a workplace and clinical context, as the value of short gratitude interventions for physical health. While this study takes place in a laboratory setting, which has the advantage of being very well-controlled, it would be beneficial to explore this relationship using an employee sample in a workplace context.

## Novelty

To our knowledge, is the first study to examine the impact of gratitude on the cardiovascular response to stress in a randomised control trial context.

## Relevance to the congress theme

With the American Heart Association suggesting that the burden of cardiovascular disease is set to triple by 2030 (Heidenreich et al., 2011), exploring how low-cost workplace well-being interventions can improve cardiovascular health is will be important in the years to come.

This study has been funded by the BIAL foundation.

*Keywords: Gratitude, health, well-being*

## Poster P205

### **Distant learning for leadership training: A systematic review of theoretical foundations, design, and evaluations of web-based leadership training**

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science&practice

Research objective.

The development of digital and digitalized competencies has become a central issue in many organizations, and especially for leadership positions (Peiró & Martínez-Tur, in press). The rapid technological advances offer a wide variety of alternatives for leadership training in companies, that might replace or support the traditional methods of training delivery with more practical and cost-effective approaches (Kim et al. 2018; Bosman et al., 2019). The evidence provided by previous systematic reviews and meta-analyses on leadership training (Avolio et al., 2009; Lacerenza, et al., 2020), has shown that, in general terms, leadership training and development interventions have been successful in improving leadership in organizations. This research also points out differences in the results achieved depending on the theoretical basis of the interventions, the characteristics of design and delivery of the training, and the type of outcomes considered to evaluate the programs. However, these studies have not specifically addressed leadership development web-based training and its impact on organizational outcomes. Taking into account the exponential increase of web-based programs for leadership development, it is peremptory to address this issue. In the present work, we develop a systematic review aimed to identify the challenges in the design, implementation and/or evaluation of web-based training programs for leadership development.

Theoretical background.

We consider the Kirkpatrick (1994) four-level training evaluation model to analyze the extent to which each of the programs reported significant impacts on reactions to training, learning, transfer, and organizational outcomes. In accordance with Kraiger, et al. (1993), we also consider the multidimensional nature of learning, attending to cognitive, affective, and skills capacities.

Methodology.

This review focuses on the analysis of empirical articles and doctoral theses published in PsycInfo, Scopus, Proquest, Web of Science, ERIC and Google Scholar databases, during the years 2000 - 2022, following the PRISMA methodology. In our preliminary search we found eight articles that present online or web-based leadership training programs. We plan to keep on refining the search in the forthcoming months. The analysis of the information is done with the NVivo software. The systematic review focuses in analyzing topics such as: aims of the study, characteristics of the sample and work setting, the theoretical foundations of the program, research design and results, and evaluation methods used.

Results.

The preliminary results show that out of the eight articles analyzed, four ground the training programs on experiential learning theory, one on constructivism, and another on the principles of behavioral learning; Two do not explain the basis of the learning theory. In terms of training design, two of the studies have a practical part (with equipment) and a web-based training part, two use

simulation games, and the other four rely on training platforms. The evaluation is carried out through questionnaires, two studies apply measures before and after training, and two studies use interviews to learn about the participants' experience. Additional analysis will focus on the extent to which each of the training programs contributed to learning, transfer, and results in the organizational settings.

Limitations.

There is little published evidence on leadership training based on the web or app, proportional to the online programs that already exist; very few report their evaluations in research.

Conclusion.

Rapid technological advances offer a wide variety of alternatives for training leaders through online education. So far, the systematic review shows that research in this area needs to develop further efforts in the analysis of the effectiveness and efficiency of those programs.

Relevance to the theme of the congress.

This review allows for presenting conclusions so that organizations recognize what changes and adaptations are necessary for the training processes mediated by information and communication technologies.

Relevance for the SDGs.

The review is framed in the SDGs: Decent Work and Economic Growth, and Quality Education. It allows organizations to support decision-making for the design and development of leadership training processes, making use of technological innovation.

*Keywords: systematic review, leadership training, training evaluation*

## Poster P207

### “There once on a ship...”. The quality of life onboard among Italian seafarers

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science

#### Research goal and why the work was worth doing

This study analyses psychosocial risks in Italian seafarers during their time on board and ashore, using an online questionnaire based on the Job Demands-Resources Model (JD-R) (Bakker & Demerouti, 2007). The JD-R is an occupational stress model that suggests burnout is a response to an imbalance between job demands and job resources. The purpose of this study is to identify the predictors of burnout using a hierarchical regression model. Since there are few studies that focus on the quality of life of seafarers (Carter, 2005; De La Campa Portela & Pérez, 2016; Mellbye & Carter, 2017), this study is an interesting contribution that fills this gap.

#### Theoretical background

The literature describes seafaring as a high-risk occupation for physical and mental health (Brooks & Greenberg, 2022; Oldenburg et al., 2010). During their careers, seafarers often face serious events that can impact the quality of life on board (Jensen & Oldenburg, 2019). In addition, the workload on board is very high, intensified by forced cohabitation over a long period of time and distance from family.

#### Design/Methodology/Approach/Intervention

An online tailor-made questionnaire that investigated job demand, job and personal resources related to life on board was sent to a random sample. The questionnaire collected: sociodemographic and occupational characteristics, job demands (workload, cognitive demands, negative work environment, physical characteristics of the work environment), job resources (quality of work, social support), and personal resources (humour at work, resilience, recovery). The data refer to 213 participants (91.5% male, 39.9 years old, all Italian). The research design, data collection procedure, and confidentiality were approved by the Bioethics Committee of the University of Turin.

#### Results obtained or expected (if not available, it must be made clear when they will be)

The results (IBM SPSS V.28.0.1.1. ) of the hierarchical regression model ( $Adj-R^2 = .442$ ,  $F=13.91$ ,  $p=.001$ ) are interesting: among job demands, workload and negative work environment increase burnout; among job resources, social support and quality of work decrease burnout; among personal resources, resilience decreases burnout.

#### Limitations

Limitations of this study relate to participants' confidence in privacy and willingness to cooperate in the distribution of the questionnaire. In addition, this is a cross-sectional study that cannot show causality between variables.

#### Conclusions – research and or practical implications/Originality/Value

The results of this study are partial because the administration of the questionnaire is still in progress. However, the initial results of the study are interesting: regression was used to determine which demands and resources are likely to impact seafarer burnout. The results show the importance

of intervening in workload, quality of the work environment, relationships, and the individual's ability to adapt to job demands and the work environment.

#### Relevance to the Congress Theme

This study aims to break new ground in research on the maritime industry, focusing on the health of seafarers in the workplace. The goal is to spread the word about the importance of wellness in the maritime sector by networking with companies and unions.

*Keywords: Seafarers, psychosocial risks*

## Poster P208

### **Developing systems and services for the digital transformation of SMEs, public sector, and professionals: The DANTE Project**

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science&practice

Currently, social and demographic modifications in our society brought into evidence the need for an overall digital transformation for organizations in the industrial and public sectors and at the individual level for professionals. The Covid-19 pandemic exacerbated the situation requiring rapid countermeasures linked to the innovation of digital systems/infrastructures and services to make them more resilient, accessible, and inclusive. These actions aim at improving people's quality of private and working life in all living environments, especially for the elderly and people with disabilities.

DANTE project is a European Digital Innovation Hub (EDIH) with the primary objective of supporting and fostering the digital transition for Small and Medium Enterprises (SMEs), Public Organizations, and professionals in the domain of healthy and active aging, Ambient Assisted Living, and Intelligent environments. On the one hand, the project will adopt a user-centered approach to design and develop digital-based tools and services to support the elderly and people with disabilities in their daily activities. It will provide professional and non-professional caregivers with digital knowledge, skills, and instruments to speed up the care processes and improve the quality of the Health System services, e.g., increasing the de-hospitalization and ameliorating the patients' diagnosis and treatment. On the other hand, the project will work on supporting the connections between the health and social policies of the Public Administration at the regional, national, and European levels and the citizenship, professionals, and companies in the domain of healthy and active aging in smart and sustainable environments. DANTE will work to fill the digital knowledge gap and boost the ability of professionals and organizations to implement digital innovations also based on increased collaboration among relevant players across Europe. One of the main strengths of the project is providing the stakeholders with the opportunity of trying its advanced digital services (e.g., test-before-invest solutions, based and advanced "skills and training" programs, etc.) and living labs equipped with cutting-edge and emerging technologies.

*Keywords: Digital Transformation, Advanced tools and services, Innovation*

## Poster P213

### **Ongoing research: Does mobile phone behavior in social contexts at work have implications for the psychosocial work environment?**

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science

#### Research goals

Phubbing (from phone and snubbing) is the phenomenon of interacting with one's smartphone rather than with physically present persons. The research project explores the occurrence of phubbing in social contexts at workplaces, e.g., in the breakrooms, and how phubbing at work is perceived on different levels in the organization. Further, the project examines if phubbing at work is associated with psychosocial factors such as organizational commitment and social support, including stress, and whether phubbing at work is an issue that needs to be addressed.

#### Why the work is worth doing

In pilot interviews with safety representatives in the electrical trade, concerns were raised that preoccupation with smartphones in the breakrooms contributed to reduced social communication among co-workers, impaired communication about work tasks, less commitment to work, and reduced access to social support. These are factors that by extension may have significance for occupational safety and health, occupational learning, productivity, and turnover. Only few studies have examined phubbing at work and its potential implications.

The research project Phubbing at work: A study of mobile phone behavior in social contexts at work and associations with the psychosocial work environment is granted by the Swedish Research Council for Health, Working Life and Welfare.

#### Theoretical background

The smartphone promotes multitasking and makes it easy to be mentally elsewhere or in communication with others rather than where one physically is. This means changed behaviors also in traditionally social contexts at work. Breaks at work gives an opportunity to recover, but also to chat and socialize with co-workers – a social exchange that seems to be positive for developing collegial cohesion and trust and facilitates access to collegial social support. On the other hand, studies have shown that being exposed to phubbing, i.e., being ignored because the other is preoccupied with their smartphone, is associated with feelings of exclusion and an experience of lower quality communication and relationship. In work life context, employees who were “phubbed” by their managers reported lower work engagement and trust (Roberts & David 2017; 2020).

#### Methodology

The project is partly exploratory and combines qualitative and quantitative methods.

#### Ongoing studies:

1) Exploratory survey study in 4 workplaces in the electrical trade and 4 in health care and dentistry, including a pilot study in various occupations (n=320). Maps mobile phone behaviors during the workday, policies regarding phone use, and psychosocial factors at work.

2) Qualitative interview study with electricians and health care and dentistry workers (n=25). Maps phone behaviors in social contexts at work and explores perceptions about these behaviors, causes and consequences, and norms and policies.

3) Qualitative interview study with managers and HR in the above trades (n=approx. 25). Explores the organizational and managerial perspective on mobile phone behavior at the workplace.

4) Cross-sectional survey to members of the Swedish Electrical worker union (n=800). Maps phone behaviors in social contexts at work and examines associations with psychosocial factors.

5) Longitudinal survey study in a representative sample of the Swedish working population (n=approx. 750 at T2). Examines associations between phubbing in the breakrooms and psychosocial factors including stress and need for recovery, at baseline and after 6 months.

## Results

Preliminary results from ongoing studies:

Study 1) A scale for phubbing at work has been developed and tested.

Study 2) Phubbing occurs at work and can be seen to be age-related, a means of escape, and a potential obstacle for social exchange and productivity.

Study 3) Managers and HR seem to identify co-worker phubbing more as a matter of individual misconduct than an organizational climate issue.

Study 4) Preliminary analyses shows associations between levels of perceived phubbing and psychosocial factors at work.

Study 5) is currently being launched. Preliminary results from the baseline survey can be presented at the conference.

## Limitations

Studies 1-4 are in mainly two trades. Survey methodology can raise questions about validity and reliability of measures. Low response rates can lead to participation bias and decreased generalizability.

## Conclusions/Discussion/Implications

This is an ongoing research project. Preliminary results indicate that mobile phone behaviors such as "phubbing" in social contexts at work may have implications for the psychosocial work environment. Varying norms seem to be at play and could be a relevant topic for discussions at the workplace.

## Relevance to the Conference Theme

Smartphones are part of the changing world of work and imply changed behaviors in social contexts at the workplace. Mobile phone behaviors such as phubbing and its potential implications for the psychosocial work environment is a contemporary issue.

*Keywords: smartphones, psychosocial work environment, mixed methods*

## Poster P214

### The future of Work after COVID-19: qualitative and quantitative analysis

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science&practice

#### Research goals

This research intended to investigate the impacts of confinement on job satisfaction and work life balance and the future perspectives of work.

#### Theoretical background

The pandemic forced many companies to adopt new work methods and come up with more flexible work arrangements, such as working from home. Recent research about the impact of COVID-19 on Job satisfaction and Work Life Balance (WLB) evidenced the reduction of boundaries between life and work (Anwer, 2020; Schieman et al., 2021). Additionally, research have shown that women were more affected in their WLB during this pandemic and still bearing the burden of “childrearing and household labor in industrialized countries” (Hjálmsdóttir & Bjarnadóttir, 2020; p. 2)

In a different perspective, a crisis can be seen as a turning point and an opportunity for new development and reflection has proved to be a good tool to face pessimism with (Jacobsen, 2006). Based on the goal setting theory (Locke & Latham, 1990), goal establishment imply a motivational impulse, that stimulates the identification of cognitive strategies towards goal attainment (Fontes & Dello Russo, 2020; Seijts & Latham, 2005). Our study intended to investigate:

RQ1: What reflections are reported during the confinement period regarding the professional context?

RQ2: Where does the work life balance topic stand within the objectives defined as a result of reflections made during the confinement?

H1: Do Job Satisfaction and WLB present significant differences during the locked down, when compared to the period before the lockdown.

H2: The differences between job satisfaction and work-life balance before and during confinement are moderated by remote work and demographic variables (gender, number and age of children)

H3: The differences found in job satisfaction and work-life balance, before and during confinement are moderated by reflection about the future (those who reflect about their future goals will present a higher Job Satisfaction and WLB in comparison to those who don't reflect)

#### Method

Data was collected during May 2020) via Linked. A total of 260 participants started the questionnaire and 171 fully completed it.

Qualitative data: With an open question, participants were asked to reflect on the impact the pandemic was having on how they viewed their life (personal, family, social, and work).

Quantitative data: A second semi-open question was presented: “Thinking about a post-epidemic scenario, do you intend to change any of your behaviors? A list of areas was displayed.

Job satisfaction and WLB scales were asked to be evaluated in two moments:

1)how they recall it before the pandemic and 2) at the present moment?

## Results

RQ1: Looking into the reflections during confinement we found that the majority has a positive nature. Improved WLF and competences development were the most mentioned.

RQ2: Work Life balance goals are the main change participants intend to implement.

H1: Job satisfaction presented significant differences during vs before locked down and WLB presents nearly significant differences.

H2: Remote work attenuates the decrease of job satisfaction during the pandemic but does not have the same significant effect in WLB. Gender evidence a nearly significant effect in the evolution of WLB.

H3: Goal setting for future changes moderates the negative effects of the pandemic in both job satisfaction and work life balance. Gender also works as a moderator together with the goal setting in the case of work life balance.

Our findings evidenced that remote work positively contributes to job satisfaction and women seem to be taking more advantage of the current situation, increasing their work life balance.

The main outcome is related with the reflection and goal setting process, that eventhough not necessary work related contributes positively for job satisfaction and work life balance, working as a buffer for the pandemic effects.

## Limitations and Future Studies

Longitudinal analysis would be necessary to access the maintenance of the results over time. The use of a reflection scale should allow for more robust analysis.

## Practical Implications

For companies to build a more satisfied workforce they need to, first, listen to their employees and assess what best suits their needs in terms of work-life balance and second, they should invest in developing their employees' positive focus in the future.

## Originality/Value

This study does more than measuring the effects of the pandemic, it takes a step further to assess future intentions of employees after the confinement. And we consider this to be powerful information that companies need to be made aware of.

*Keywords: work-life balance, reflection, job satisfaction*

## Poster P218

### **The effect of leader's transgression for the procrastination and anxiety of employee's: the role of psychological safety**

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science

The research goals:

The two years of the Covid-19 pandemic resulted in deterioration of the mental health and increased anxiety. On the other hand we live in a VAST World that requires to be daring, fast-acting and responsive, which is the opposite of procrastinating and being anxious. In an attempt to reduce anxiety and procrastination we look at the its determinants. The purpose of the paper is to investigate the direct effect of leader's transgression on follower's procrastination and anxiety as well as indirect effect mediated by the psychological safety.

Theoretical background:

Current research indicates an increase in mental health issues such as anxiety disorder, depression, post-traumatic stress disorder and psychological distress, which are caused by increased fear, and a loss of a sense of psychological safety and control in a time of Covid-19 (GUS, 2020; Heitzman, 2020; Pierce et al., 2021). The other thing that is maladaptive work behavior is procrastination which involves delaying work-related activities and engaging in non-work-related actions at worktime (Metin, Taris, & Peeters, 2016). Procrastination lowers well-being and self-efficacy (Çelik & Odaci, 2020; Metin, Peeters, & Taris, 2018), and raises fatigue, psychological detachment, job stress, job boredom and unemployment (Metin et al., 2018). A counterbalance to the unpredictable outside world and the resulting sense of danger can be a predictable and safe workplace (Heitzman, 2020).

The work environment is modelling both: procrastination (Reijseger et al., 2012) and anxiety (Heitzman, 2020), and I assume that the organizational factor such as psychological safety is decreasing them but also that the leader behaviour may play a role. Psychological safety is a cognitive state that is the result of assessment of the surroundings as accepting and friendly, an environment in which it is safe to take risks, e.g. interpersonal risk, in which making a mistake does not result in social ostracism (Edmondson, 1999). Research shows the relation between the feeling of safety and positive organisational behaviours, such as thriving (Jiang et al., 2019), identification with the organisation (Liu et al., 2015), effectiveness (Obrenovic et al., 2020), innovativeness (Sun and Huang, 2019), creativity and knowledge sharing (Wang, Liu and Zhu, 2018). Safety gives employees the courage to undertake activities (Chen et al., 2019), engage in voice behaviours (Xu et al., 2019), come up with ideas (Wang, Liu and Zhu, 2018) and put them into practice (Agarwal and Ferndale, 2017). Therefore I assume that psychological safety decreases the feeling of anxiety and the attempt to avoid the action.

We also already know that the leader might be a key factor in shaping the follower behaviour, attitudes and emotions. Harmful behaviour may rise this both negative outcomes and lower psychological safety. Leader transgression is defined as a (dysfunctional) behaviour contrary to the accepted societal principles, norms and practices in a given organisation (Shapiro et al., 2011). The effects of transgression are, among others, the intention to leave, withdrawal (Shapiro et al., 2011), loss of trust towards the leader and damage to employee well-being (Byrne, Barling and Dupre, 2014).

**Design:**

I use the data from daily diary study of 60 dyads of leader-follower (120 respondents, 10 observations per respondent) and apply multilevel modelling to test the hypotheses.

**Results:**

The results confirmed that transgressive leader behaviour reduces psychological safety of the follower and rises the procrastination and anxiety of the followers. The effect of the transgression on procrastination and anxiety is mediated by psychological safety in a way that psychological safety lower the level of both consequences. Conclusions and implications:

This research contributes to the body of literature on psychological safety, procrastination and anxiety but it is also a voice in a dispute on the impact of leader's certain behavior on employee's perception, emotions and behavior. In a changing world of work the feeling of safety is more important than ever because it enables employee to meet the requirements and to work without procrastinating and anxiety. The role of the leader is crucial in here. Leader must remember that through transgressive behavior is depriving employee's psychological safety and at the same time pushing them into procrastinating and feel of anxiety.

**Relevance to the Congress Theme:**

The idea of that research was driven by the rapidly changing World. Anxiety and procrastination caused by these changes exist alongside the requirements to be reactive and fast acting. This contradiction is creating a tense and the research questions are dealing with that and try to find a factor within the organization that may be a resolution.

*Keywords: psychological safety, procrastination, leader's transgression*

## Poster P226

### **The Questionnaire 4EF: collective effectiveness as a broader perspective for measuring team effectiveness**

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science

The effectiveness of virtual collaboration remains a challenge, which is particularly important because companies need to stay competitive in the face of recent crises (pandemic, war). In addition to economic parameters, most previous research on virtual teams has focused on non-economic parameters and variables, such as trust, cultural differences, communication, social skills, clarity of mission and goals, rewards, and recognition. As a result, the context of virtual teamwork is broad and varied. However, the team members' interdependence and the role of their individual and collective experiences have not been addressed so far in the context of efficiency. Our study comprehensively analyzes existing methods of measuring virtual team effectiveness before proposing a new one. The first phase of our research involved analyzing interviews with virtual team members ( N = 87). Respondent's written statements addressed their understanding of team effectiveness, techniques for effective work, and methods for evaluating virtual team performance. We analyzed the interviews using machine learning methods to understand the respondents' opinions better, looking for trends and patterns.

The second phase of the work involves to set up a new method. We analyzed the methods presented in the literature and used in the research to evaluate the effectiveness of virtual teams. Based on the collected information and conclusions of the first part of study, we have prepared a set of statements. We are currently collecting data to validate our proposal. The questionnaire has four dimensions that assess the performance of a virtual team, such as characteristics of the tasks performed [task performance], voluntary activities that go beyond duties and contribute to a good team atmosphere [extra-role performance], commitment to a common goal and teamwork [collective performance], and creative behavior [creative performance]. The results of the study are expected in March 2023. The outcome of the study will be an updated method with validated psychometric values.

The volume of the method (currently 20 items), due to its many aspects and the long execution time, can be viewed as the research's limitations. This is in contrast to the search for methods that require less workload on respondents. In addition, self-reporting measurements can be subject to response errors due to social desirability and individual answering tendencies.

Globalization and the increasing digitization of the workplace, as well as other factors such as pandemics, climate change, and the need to conserve resources, are forcing virtual teams to work more efficiently. Organizations and companies are facing these modern challenges, causing the development of a new, customized tool that considers both quantitative and qualitative methods of evaluating the effectiveness of virtual teams. For the above reasons and its innovative analytical approach, this study fits well with the conference theme „The Future is Now: the Changing World of Work.“

*Keywords: virtual team, team effectiveness, collective effectiveness*

## Poster P227

### The Efficacy of Servant Leadership with Hospital Employees

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science&practice

In the United States, over 41,000 healthcare facilities utilize the Press-Ganey<sup>®</sup> (2022) Engagement and Safety Survey as a national benchmarking device for comparing healthcare worker attitudes across hospitals. Considering the national interest among healthcare administrators in assessing caregiver job engagement, it is critical to understand which specific leadership behaviors are associated with employee job engagement. One leadership method associated with fostering positive employee workplace attitudes is servant leadership--a practice whereby leaders serve their subordinates by providing information, resources, and career growth opportunities. Further, social exchange theory (Cropanzano & Mitchell, 2005) suggests that employees are inclined to exert positive attitudes and behaviors at work as a social "exchange response" when leaders provide material and socioemotional support. Indeed, research has provided some evidence that servant leadership behaviors are related to employee job engagement (i.e., sense of energy; e.g., Ozturk et al., 2021). Moreover, engaged employees experience less job overload and turnover intentions, as well as greater job satisfaction and organizational commitment (Coetzer et al., 2017).

Given hospital administrators' interest in employee engagement, we test a theoretical model (within the context of a hospital that trains servant leadership principles) whereby hospital caregiver job engagement serves as a mediator between specific servant leadership behaviors and job attitudes among hospital caregivers.

H1 : Servant leadership will be positively related to job engagement.

H2 : Job engagement will be positively related to job satisfaction and job commitment, and negatively related to job overload and turnover intentions.

H3 : Job engagement will mediate the relationship between servant leadership and employee job attitudes.

#### Method

Survey responses included 377 (72% women, 90% Caucasian) caregivers from a single hospital in the United States in 2021.

Servant leadership factors including emotional healing, helping subordinates succeed, putting subordinates first, empowerment, and stewardship (Liden et al., 2008; van Dierendonck & Nuijten, 2011) were the independent variables. Dependent variables were work engagement (Schaufeli et al., 2019), job satisfaction, work overload (Cammann et al., 1983), organizational commitment (Cook & Wall, 1980), and turnover intentions (Boroff, & Lewin, 1997).

#### Results

A structural equation mediation model was created to test the hypotheses, ( $\chi^2(17)=23.31, p >.01, CFI=0.99, RMSEA=0.03, SRMR=0.05$ ) using MPlus (Muthen & Muthen, 2007).

H1 (partially supported): Putting subordinates first ( $\beta=.19, t=2.90, p <.01$ ), and stewardship ( $\beta=.22, t=2.76, p <.01$ ) were significantly related to job engagement.

H2 (supported): job engagement had a significant relationship with job satisfaction ( $\beta=.68$ ,  $t=17.83$ ,  $p<.01$ ), organizational commitment ( $\beta=.62$ ,  $t=15.22$ ,  $p<.01$ ), and job overload ( $\beta=-.55$ ,  $t=-12.70$ ,  $p<.01$ ) and turnover intentions ( $\beta=-.21$ ,  $t=-4.05$ ,  $p<.01$ ).

H3 (partially supported): Job engagement significantly mediated the relationship between stewardship and organizational communication (indirect effect=.12, SE=.05,  $p=.02$ ), putting subordinates first and organizational commitment (indirect effect=.12, SE=.04,  $p=.01$ ), stewardship and turnover intentions (indirect effect=-.11, SE=.05,  $p=.02$ ), putting subordinates first and turnover intentions (indirect effect=-.10, SE=.04,  $p=.01$ ), stewardship and job satisfaction (indirect effect=.11, SE=.06,  $p=.02$ ), putting subordinates first and job satisfaction (indirect effect=.14, SE=.05,  $p=.01$ ).

## Discussion

Though using cross-sectional data from a single source that limits generalizability, the results provide evidence that servant leadership, when explicitly trained, is significantly related to employee job attitudes through employee job engagement. Based on the significant mediation paths in our theoretical model, we suggest several practical courses of action for human resource managers. Training managers on stewardship and putting subordinates first servant leader behaviors may help hospitals bolster employee perceptions and positively affect national benchmarking goals. While technical skills are critical for managers, interpersonal skills such as meeting employee work needs and referring employees to workplace resources are important.

## Congress Theme and UN SDGs

Future is Now. Contribution and Delivery . Servant leadership can engage hospital caregivers while also fostering positive employee attitudes while mitigating employee job overload and turnover intentions. Given the positive effects, managers should be trained on servant leadership.

Good Health/Wellbeing : The enactment of servant leadership behavior is related to positive attitudes among hospital caregivers.

Partnerships/Goals . This research was conducted via a partnership between a public university and a hospital to promote hospital employee well-being and academic advancement.

*Keywords: servant leadership, engagement,*

## Poster P230

### **The Functional Resonance Analysis Method (FRAM): An approach to complex socio-technical systems**

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science&practice

Work-systems are increasingly understood and described in research as complex socio-technical systems (Mühlbradt, Shajek & Hartmann, 2022). This is accompanied by the need for new methodological approaches to such systems. One such approach is the Functional Resonance Analysis Method (FRAM) (Hollnagel, 2012). The presentation of results of a FRAM is usually prominently displayed and communicated in the form of a network representation of the process under investigation. This might give the impression that FRAM is just another method from the business process modeling toolbox. However, FRAM is a qualitative research method that is essentially based on guided interviews. This fact makes it interesting for numerous applications in work- and organizational psychology.

In our joint research project, FRAM is therefore being used for the first time in the context of health services research in two hospitals. In this contribution the essential steps of a FRAM are presented and experiences from the practical application to clinical processes are reported. From a systems theory perspective, there are interesting cross-connections to the postulates on Qualitative Research formulated by Mayring (2015). These ties are discussed with a focus on the phenomenon of complexity in the world of work.

The proposed contribution has a high and direct relevance to the conference theme „Changing world of work“ because it addresses the change towards complexity. The contribution also relates to the UN Sustainable Development Goal „Decent work and economic growth“ because FRAM uses a participative approach to encourage competence development and reduce stress. It also refers to „Good health and wellbeing“ because it addresses matters of patient safety in complex health care environments in a new and promising way (McGill et al., 2022).

*Keywords: complex socio-technical systems, qualitative research, healthcare*

## **Poster P231**

### **Changing of organizational roles and functions during the war in the area of active hostilities**

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**Problem:** Many people left Ukraine because of the war. As a result, organizations are faced with a shortage of employees and a large number of responsibilities that there is no one to perform. There was a need for a global restructuring to continue the operation of the enterprise. First of all, this is due to a change in the structure of duties. These processes occur spontaneously and are highly dependent on the personalities of workers and their willingness to take on additional responsibility. It was important for us to trace the factors that influence the process of restructuring and the reasons for the distribution of organizational roles in conditions of active hostilities.

**Purpose:** to clarify and track changes in the structure of organizational roles and functions in the Ukrainian organization during the war on the example of a manufacturing enterprise in Kharkov which was in active hostilities from February 24, 2022 to August 24, 2022. Determine what causes the fact that people independently occupy certain roles.

**Methods:** To collect data, we use the method of participant observation, semi-structured interview, which was conducted with each employee once a week and consisted of 9 open-ended questions and analysis of job descriptions, which include 4 sections (basic duties, additional duties, regulations, description of general requirements for the performance of duties). The study was conducted by the owner of the company from February 24, 2022 to August 24, 2022. The organization has existed for 23 years and is engaged in the development and production of extracts, dietary supplements and skin care cosmetics.

**Results:** The results of observations and interviews of 13 employees of the organization were obtained, who continued to work after the start of the war. 112 interview recordings and 56 hours of observations were received. It was found that the structure of duties has changed for all employees. The roles were distributed: the production worker took the role of production manager, the administrator took the role of retail manager, the commercial director took the role of deputy owner. This was due to high loyalty to the organization, personal initiative and willingness to learn.

**Conclusions:** In conditions of active hostilities and threats to life, we observed a natural and spontaneous restructuring of organizational roles, which helped to stabilize the organization and facilitated adaptation to new conditions.

## Poster P232

### **Getting Workers to Engage in Organizational Citizenship Behaviors and Decrease Their Intention to Quit: A sequential mediation process model**

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science&practice

Some researchers have investigated the relationship between justice at work and congruence (e.g., Çelik & Damar, 2017). Others have also highlighted a positive relationship between values congruence and organizational identification (e.g., Cable & Derue, 2002; Kristof-Brown, Zimmerman, & Johnson, 2005). Other studies have shown a relationship between organizational identification and affective commitment (e.g., Marzucco, Marique, Stinglhamber, De Roeck, & Hansez, 2014). Previously, relationships were found between organizational commitment, OCB, and intention to quit (e.g., Gurbuz, 2009; Haque, Fernando & Caputi, 2017). Relationships between these concepts seem established. However, most of the time, they were investigated separately. In fact, to the best of our knowledge, no previous study focuses on these concepts within an integrated model, despite the theoretical framework that supports its relevance (e.g., self-categorization and social identity theory, Tajfel & Turner, 1986; social exchange theory, Blau, 1964; norm of reciprocity, Gouldner, 1960). Therefore, the objective of this research is to shed light on the mechanisms leading workers to adopt/engage in extra-role behaviors, such as organizational citizenship behavior (OCB), and to intent to quit the organization employing them. More specifically, the aim is to investigate a mediation in sequence linking global justice, values congruence, organizational identification, affective commitment, OCB, and intention to quit. A self-reported questionnaire was diffused through an online survey. This study was carried out on an all-round sample. 193 people responded to the questionnaire. Analyses were performed using Mplus 6 (Muthén & Muthén, 1998-2010). We found that the perception of overall justice generates a feeling of congruence between the values of workers and those of their organization. This feeling in turn generates the development of a feeling of oneness with the organization, which, coupled with a feeling of obligation of reciprocity, allow the development of an emotional and affective attachment to the organization. This attachment subsequently results in a desire to implement positive and beneficial behaviors towards the organization such as organizational citizenship behaviors directed towards the organization, as well as a decrease in the intention to quit. Our study has several limitations, leading us to interpret the findings with caution. The first major limitation is the cross-sectional design, which precludes any inference of causality among the variables. A second limitation concerns our sample. Although a heterogeneous sample can have many advantages, it is undoubtedly a potential source of bias. In fact, the individuals composing our sample come from many different organizations. Although we have included some covariates (i.e., diploma, seniority in the company, seniority in the function, managerial responsibilities, and company size), other factors specific to organizations, such as organizational climate or human resources practices, could have influenced the investigated associations, making it impossible to guarantee that the relationships were isolated from spurious influences (Bollen, 1989). Thirdly, as we used self-reported data, common method variance may have biased our results (Podsakoff, MacKenzie, & Podsakoff, 2012). Nevertheless, considering that the single-factor model showed a poor fit to the data, this common method bias was partially treated (i.e. Harman's single-factor test; Podsakoff et al., 2012). Despite these limitations, our research also has several strengths. The first is that we tested a triple mediation model never investigated in the literature before. Our study extends previous research focusing on OCB and intention to quit by proposing a more comprehensive model. The second is that our study is in line with theories/models largely acknowledged in the literature (e.g., the self-categorization and social identity theory, Tajfel &

Turner, 1986; social exchange theory, Blau, 1964; norm of reciprocity, Gouldner, 1960). The third, is the fact that our study responds to the call for more research based on holistic and systemic visions of justice and examination of the effect of overall justice on workplace outcomes (e.g., Mohammad, Quoquab, Idris, Al Jabari, Wishah, 2019; Rodell, Colquitt & Baer, 2017).

*Keywords: Organizational citizenship behavior; Intention to quit; sequential mediation process*

## Poster P236

### **A Computational Approach to Understand Social Flow and Its Role in Interpersonal Relationships in Virtual Teams**

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science

With the increasing possibilities to work remotely in virtual compared to in-person collaborations, employees are confronted with new challenges to build and maintain positive social connections with their team members. A concept that could possibly serve as a protective factor is social flow, the joyful experience of being absorbed in an optimally challenging social activity. As previous research demonstrates, the shared experience of social flow might promote indicators of positive relationships among team members, such as team cohesion. However, there is little consensus about what the term social flow actually describes and several other names such as group flow or team flow are used interchangeably or with slightly different meanings. Consequently, one goal of the current study is to narrow down the construct of social flow and disentangle its preconditions or behavioural correlates from the experience itself. Furthermore, as to our knowledge there is no study that investigated social flow in the context of online collaboration, we aim to explore how social flow can occur in virtual teams depending on the number of interaction partners (dyads vs. groups) and different synchronous and asynchronous communication media. Finally, we determine the relevance of experiences of social flow for team relationships by examining interpersonal perceptions such as liking and interpersonal closeness. To address this research gap, we plan to conduct a cross-sectional field study in the form of an online survey, in which we will assess qualitative and quantitative data of N = 400 German and Polish employees working in virtual teams. Three open questions will be asked to identify typical situations, in which social flow in virtual teams is experienced, as well as fostering and hindering conditions. Furthermore, the participants will complete a series of questionnaires including a personality scale, several flow scales and ratings on their relationship with other team members. The qualitative data will be pre-processed with the help of text-mining tools and analysed by using latent semantic analyses to identify relevant components of social flow experience and its antecedents in virtual teams. As a second step, the resulting components will be combined with other questionnaire data and related to social flow with the help of machine learning models. Further analyses will be conducted by using a mixed-design ANCOVA and regression models. Results are expected for March 2023. We discuss how our findings contribute to a better understanding of social flow and its role within the cooperation of virtual teams, and critically evaluate possible limitations of our study.

Relevance to congress theme: The present study addresses recent developments of the increasing virtual collaboration, which will enable organizations to cope with modern challenges brought on by globalization as well as crisis such as pandemics and climate change. Moreover, we follow an innovative analytic approach by relying on text mining and machine learning algorithms. By tackling these future-oriented topics, our study fits in well with the congress theme *The Future is Now*.

*Keywords: flow experience, interpersonal processes, virtual teams*

## Poster P237

### **Transferring production plant practices in times of war and increased danger to a safe location using the competence center method**

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Problem - in warfare and high-risk situations, there is a need to relocate business, and quickly transfer and recreate competencies for productive operation of the plant at the new location. The particularity of the production is a complex product; high requirements for product quality, which meets international standards; critical consequences in case of errors in equipment operation. Currently, there is no proven and described method for such a transfer of competencies, provided no specialists and no supply chain for components; there is no prepared production area; new financial rules and labour laws.

Objective is to develop, adapt and practically verify, in a short time, a method making it possible to reproduction competences, for further productive performance of industrial plant in relocating circumstances

Method. We have developed a special method, the competence center method, which consists of several steps:

1. Selection of productive employees, carriers of core competencies for the full production cycle.
2. Relocating employees.
3. Establishing competence centers out (which supplies dynamic competence transferring, adaptation, and solves practical problems at the intersection of areas of responsibility; adapts competencies to current conditions).
4. Recruiting of newcomers from local candidates. Mentoring by competence bearers - do-it-like-me mentoring.
5. Practical activities (error correction and approbation).

The result - using the competence center method, it was possible to transfer all competences which are required for the production of the complete plant product cycle: technical product development; production competences of employees; planning; purchasing; recruitment; economic; commercial.

1. The peculiarity of the employee selection stage was the need to include managers in the assessment of necessary and sufficient competencies for the full actual production cycle.
2. The employee relocation phase worked partly because of the high risk conditions and the impossibility to leave the country.
3. The main difficulty of the competence center formation stage was the awareness and acceptance by employees that only necessary tasks should be done now, it express in stress and unpreparedness of workers to start work on such terms.
4. The recruitment and practical activity phases were completed. The negative features of the practical activity stage were the cultural differences, which became apparent in getting feedback, understanding the evaluation in real work.

The method has been verified in practice, allowed to solve the problem, can be used in the transfer of the production plant of the complete cycle of production.

Conclusion - the key resource that enabled the transfer of practices was the people who had a set of competencies; the physical presence of these people in a safe location and contact with the tasks.

## Poster P238

### **Stress at work on oil rigs in Poland in the perspective of 20 years of research. Time as a determinant of the dynamics of stress at work**

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science&practice

Introduction: Adaptation to stress at work in difficult conditions is a complex process, involving various cognitive, emotional evaluations, also depends on the objective situation related to working conditions. It is a kind of variable interaction, the result of the employee's perception of objective conditions, the relationship between this perception and the experience of stress, and between this experience and changes in behavior, physiological functions and health (Cox, 2006, Dudek, 1999, Karasek, 1990). Many studies of stress at work have been accused of a static understanding of the process, poorly chosen research procedures, and single-level research (Segestrom, O'Connor, 2012).

Method. Each of 167 oil rig workers in Poland, (average age 42), working in the same jobs and in a company with a more or less constant organizational structure, was surveyed several times over a 20-year period (1993-2014). According to the principle of triangulation, stress was studied from three sources: a. opinions on objective stress obtained from experts, b. study of subjective stress through questionnaires and surveys, c. data on physical health and mental well-being. Psychosocial burden and a wide range of demographic and individual variables were also examined.

Results. The 20-year study made it possible to distinguish 3 groups of employees differing in the level of declared subjective stress : 1-“Stress Resisting”, “SR”, 2 – “Stress Sensitizing”, “SS” and 3 – “Flexible Group”, “FG” . Intra-group variability was also shown: employees in the „RS” group are characterized by high stress at the outset, and declare a systematic decrease over 20 years. The „SS” group is characterized by an initial low level of stress, and declares a systematic increase over 20 years. Employees in the third group „FG” adapt to stress flexibly, depending on the real situation. Employees in the „RS” group, after 20 years, are characterized by worse health (number and type of ailments) than the „FG” group, in whom stress is variable and who activate, in addition to task-based, emotional coping strategies. If the results were to be developed in a cross-sectional model, one could conclude that declared subjective stress is not related to health indicators, to individual variables and perceived psychosocial burdens. The result obtained related to a single measure and in no way reflects the dynamics of stress. The results obtained in the prospective procedure also show that subjective stress is significantly lower than objective stress, which, on the one hand, may indicate a well-chosen professional group in terms of coping skills, the positive impact of occupational stress on its subjective perception, or a specific defensive attitude, characteristic of this professional group (the stereotype of the strong man).

Conclusions. Only longitudinal studies with diverse research methods reaching three measures of stress (objective, subjective and health consequences) can show the mechanisms of stress-related processes in cause-effect terms. The prospective nature of the study and the principle of triangulation showed a picture of a dynamic rather than static picture of stress, coping and individual health from the perspective of work conditions.

*Keywords: dynamics of stress at work, longitudinal study, wellbeing in work*

## Poster P239

### **Employee retention in the manufacturing industry: a key factor in Mexican organisations**

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science

The objective of this research is to identify and analyse the variables that affect employee retention in the manufacturing industry in Sonora, Mexico. Manufacturing is key to the economic development of the northern region of the country due to its strategic geographic location that facilitates trade with several countries. Mexico has one of the largest economies in the world, but this has not been enough to maintain strong growth. Evidence suggests as a key problem the decline in productivity and as one of its main causes, the high rate of employee turnover that increases the costs of recruitment, selection, hiring, and training, decreasing productivity and profitability, also impacting the quality of life of employees. In Mexico, employees in the manufacturing industry tend to leave their jobs within a few months of joining. This turnover is partly influenced by migration, violence, and low involvement of women, as well as low investment in public infrastructure that hampers living conditions, however, it is essential to analyse the underlying labour factors. Some variables were identified as predictors of intention to quit such as job satisfaction and immersion, organisational commitment, work-life balance, information, and working conditions. A non-experimental, causal, quantitative approach research is being conducted by applying questionnaires to employees from the manufacturing industry in the region of Sonora, Mexico. To date, 49 questionnaires have been applied to operative employees. The research is expected to be completed within three months, considering the necessary availability and permissions. Lack of cooperation from organisations in research is a major limitation, as well as the fear of workers expressing their opinions. The present study is a significant contribution to the scarce research on this subject. Some of the preliminary results were low satisfaction with promotions and financial rewards, low levels of challenge and perception of ergonomic problems, poor cleaning conditions, and inadequate temperature in the facilities. The induction process is lengthy and the time is not properly used for training. Workers express insecurity when returning home. Lack of information related to the company's mission and objectives inhibits organisational commitment. Higher work-family conflict and difficulties with work flexibility have been detected in employees with children; young workers expressed dissatisfaction with the information provided by their employers. Variables with low satisfaction indices were found to have a significant impact on intention to quit. Based on the preliminary results obtained, it is proposed to implement a programme of interventions that include incentives, promotions, hiring more female personnel, implementation of a life and career plan, improvement of facilities and working conditions, greater flexibility, and job information. The dynamics and working conditions in Latin American organisations require strategies to adapt to demographic, social, and competitive changes and to adjust the needs of employees to promote their retention. This research aims to contribute to the UN SDGs: Decent Work and Economic Growth and Good Health and Well-Being, providing knowledge on industrial manufacturing organisations to implement interventions for a better quality of life and well-being of their employees and economic growth of organisations and nations.

*Keywords: employee retention, manufacturing industries, wellbeing*

## Poster P240

### Systemic leadership - how does it differ from other leadership constructs?

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science

#### Research goals

This paper examines how systemic leadership, as a new construct in leadership research, differs from other leadership styles. A measurement instrument has only recently been developed (Systemic Leadership Inventory Revised, SLI-R, Göllner, et al., 2019). To date, there is little empirical research potentially due to the lack of a measurement tool.

#### Theoretical background

Leadership is one of the most important determinants of a company's success or failure (Al Khajeh, 2018; Felfe & van Dick, 2016). How leaders behave toward their employees is of particular importance. Distinct hierarchies and rigid leadership constructs, as they (still) prevail in most companies, lack the adaptability to quickly respond to changes. Leadership theories therefore need to shift to new perspectives that meet the complex adaptive needs of organizations. The systemic leadership approach provides a framework for leadership behaviors that are more likely to address these complex needs.

#### Design

In two cross-sectional online survey studies (currently running) employees from various professional backgrounds assess their leaders in systemic, transformational, transactional, ethical, authentic, servant as well as laissez-faire leadership and abusive supervision. Study 1 includes a criterion validity survey, study 2 measures incremental validity.

#### Results expected

Based on the evidence found in the literature, parallels are suspected between systemic, ethical, authentic, and servant leadership. The unique selling point of systemic leadership could be the holistic approach, which goes beyond the boundaries of the own company and recognizes and uses interdependencies. (Studies will run until end of November, with initial results expected in December)

#### Limitations

There may be measurement errors due to external assessments. It is essential to include the leaders' perspective in future research. Drawing firm causal conclusions about predictive validity is impossible because our data were collected in two cross-sectional surveys. Future research should use longitudinal designs to verify this.

#### Conclusions

Research using an entirely new measurement instrument, as well as validity testing, represents a completely new approach to leadership research. The results present similarities and differences of the leadership styles shown. They can be used to present suitable leadership styles to companies and to point out special characteristics and differences. Trainings can be designed.

### Relevance to the Congress Theme

Due to the increasing complexity, fast pace and dynamism in everyday business life, traditional leadership approaches no longer seem to be up to date. Analogous to this environment, the field of leadership research has also evolved in a diverse and dynamic way (Felfe, 2015). Therefore, it is no longer time to highlight the purely property-theoretical, behavior-theoretical, and situational approaches to leadership, but the systemic approach, which aims to understand and grasp the growing complexity in organizations and their environments.

### Relevant UN SDGs

A positive leadership and work climate contributes to health. Research to date show that systemic leadership has a positive impact on employee health. Furthermore, the lived diversity in a team of systemic leaders contributes to gender equality. Systemic leadership and thus our research should contribute to decent work, economic growth and innovation as a new approach in (positive) leadership research is explored.

*Keywords: systemic leadership, system theory, incremental validity*

## Poster P233

### Digital Disconnection: a grey zone between right and wrong? A qualitative study amongst mid-career employees

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science\_practice

#### Introduction

This study aims to gain in-depth insights into the why, how, and when of employee digital disconnection. To date, research on digital disconnection has theoretically developed along the lines of work-related technostress. From identifying notable negative consequences of staying always 'on' through digital media (e.g., e-mails, instant messaging...) – such as for example anxiety, irritability, difficulties with concentration, headaches as well as absenteeism (Sanderlin, 2004) – recent voices have called for a more balanced usage of digital media as workers. Digital disconnection encompasses this by setting – both short and long term – limits on digital connectivity with the goal of improving health, productivity, and wellbeing (Vanden Abeele, 2021). While practical interventions to digitally disconnect as employees are booming rapidly, scientific knowledge about the drivers behind disconnecting (why), the strategies employees deploy to disconnect (how), and the moments in which they experience a need for disconnection (when) is grandly lacking. As a consequence, current practical initiatives lack an evidence-based ground, and may risk failure.

#### Methodology

In an in-depth, qualitative study consisting of semi-structured interviews with nine employees – knowledge workers highly depending on digital media in their job – belonging to different organisations, we gathered insights on why, how, and when employees digitally disconnect. Our participants were recruited as subject matter experts: they were those scoring highest on an assessment of digital disconnection behaviours – part from another, quantitative study – and who had agreed to participate in further research by providing the principal investigator with their email address. For our current study, we specifically selected mid-career employees as a particularly valuable group in providing us information on digital disconnection. First, given their job and career tenure they may have installed more conscious habits on digital disconnection. Second, this group of employees is typically more challenged in their work-life balance by taking care of children or family members. The interviews were recorded, transcribed, and analysed using Nvivo.

#### Results

The rich information we collected, was integrated into a disconnection model, which incorporates the relation between disconnection at work and various influencing individual and organisational characteristics. Central to the model is the balance between connection and disconnection. This balance as well as how, why, and when employees disconnect, are influenced by both variable situational aspects (e.g., the urge of a certain interaction or the person with whom one collaborates), as well as (relatively) stable aspects (e.g. personal preferences and organisational expectations). Furthermore, why and how employees digitally disconnect is linked to when they do this. At work, the participants disconnected to improve focus. When not at work, they disconnected to psychologically detach from work. Our interviews reveal that the participants either disconnected in a direct way by eliminating digital devices (disconnection-by-device), or by limiting functions such as notifications (disconnection-by-function). Alternatively, disconnection can also be supported in an indirect way, through communication about one's (un)availability, management of communication

streams at work, or leisure time. In all, the proposed model portrays the various influences on the connection-disconnection balance, while it simultaneously shows that multiple factors are at play, which complicates or even limit the possibility to disconnect or improve (digital) wellbeing.

#### Limitations

While valuable in building in-depth insights on digital disconnection by investigating subject matter experts, we have only looked at a specific age group in our current study. Future research could thus benefit from comparing our findings to those of digital natives (i.e., younger generation) and digital immigrants (i.e. older generation) at work.

#### Conclusions

Our study can inspire follow-up scientific research on digital disconnection by employees, for example by quantitatively testing our model's pathways. From a practical angle, this research portrays how digital disconnection is of importance for employees' health and wellbeing, however, related to a balance with being connected. As such, organisations may see to facilitate digital disconnection (e.g. informal agreement), rather than imposing organisation wide regulations (e.g. shutting down server).

*Keywords: Digital disconnection, digital wellbeing, information and communication technology (ICT)*

## Poster P190

### **Relationships Between Immediate Manager's Leadership Style, Work Motivation and Psychological Resilience**

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science\_practice

**Research Goals** . The purpose of our study is to investigate relationships between leadership style, work motivation and psychological resilience.

**Theoretical Background**. The approach where transformational and transactional leadership styles are distinguished (Bass, 1985) was used in this study. Transformational leadership theories predict followers' emotional attachment to the leader and emotional and motivational arousal of followers as a consequence of the leader's behavior while transactional leadership theories assume exchange processes take place between the leader and subordinates.

One the other hand self-determination theory about the work motivation (Deci & Ryan, 2000) was used to explain motivation type. There are three basic needs for workers: need for competence, autonomy and relatedness. The self-determination continuum includes six types of motivation.

Resilience refers to positive adaptation, or the ability to maintain or regain mental health, despite experiencing adversity (Wald & Asmundson et al., 2006). The level of resilience is influenced by personal and environmental factors, including organizational level factors. Psychological resilience an important construct in understanding how individuals respond to workplace stressors and appears to be a major determinant of whether or not certain unfavourable outcomes such as burnout, compassion fatigue, anxiety, or depression ensue. Some studies have found that resilience can be fostered through the provision of workplace support (e.g., Grant, Curtayne, & Burton, 2009).

We have evidence that these constructs may be related in organizational behaviour.

**Design/Methodology** . A cross-sectional survey design was used with a convenience sample (N=263) of Estonian employees. The Multidimensional Work Motivation Scale (MWMS with 24 items), The Work-Related Basic Need Satisfaction Scale (W-BNS with 18 items), Resilience Scale (CD-RISK) (Connor & Davidson, 2003 with 10 items) and Multifactor Leadership Questionnaire (MLQ short form with 36 items, Bass & Avolio, 1995) were used in the study. Six-point assessment scale was used in all questionnaires.

**Results**. The results show significant relationships between different leadership styles and subordinates' work motivation. Transformational leadership (TR) has positive medium size correlations with identified and intrinsic motivation and negative correlation with amotivation. TR has also weak positive correlations with extrinsic social and material motivation. All five subscales of TR show the similar correlations with work motivation types. Transactional leadership (TA) has positive correlations with amotivation and extrinsic material motivation. Passive leadership (PL) and TA have both weak positive correlations with amotivation. PL has no positive correlations with extrinsic and intrinsic motivation types. IL has weak positive correlations with satisfied need for relatedness and medium size positive correlations with satisfied autonomy need, but no correlations with satisfied competency need. PL has negative correlations with satisfied autonomy and relatedness needs. TA has negative correlation with autonomy need satisfaction. Satisfied need for autonomy (SA) has positive correlations with identified and intrinsic motivation. Resilience (RES) is positively correlated

with autonomy, relatedness and competency need satisfaction and with identified and intrinsic motivation. From the other side resilience is highly positively correlated with TR. Multiple regression analysis with intrinsic motivation as dependent variable and IL, SA and RES as independent variables shows a good fit:  $F(3,191) = 23.106$ ,  $p < .001$ ,  $R^2 = .266$ .

Limitations. The small sample size and use of cross-sectional design are limitations of these study.

Practical Implications. Our study shows that transformational leadership style is preferred as a generator of intrinsic motivation and satisfier of relatedness and autonomy needs. It also has a strong positive relationship with psychological resilience. At the same time use of transactional style has, depending on the situation, an impact on extrinsic material motivation.

Relevance to the Congress Theme. Our study is connected mainly with decent work and economic growth theme of congress.

*Keywords: Leadership Style, Self-Determination Theory, Basic Psychological Needs*

## Poster P235

### Teleworking components and scientific productivity in Spanish ERC-granted teams: The mediating role of climate and well-being

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science\_practice

**Background** - The COVID-19 pandemic has forced a massive and unprecedented use of teleworking in several work fields. Despite such new way of working was forced due to force majeure, it has resulted in increased productivity and most importantly highly appreciated by employees. This to the point that, today, offering flexible or remote work solutions and practices represent a competitive advantage when retaining and hiring talents. Due to the recency of this global phenomenon, the reasons that empirically explain why teleworking, and which of its specific components, play such a relevant role on workers' well-being and productivity remain partially unclear. In regard, Lunde and colleagues (2022) highlight that the literature explaining this relationship is scarce and makes it difficult for practitioners and HR managers to make adequate decisions about how to best implement this relevant practice. Furthermore, Beckel and Fisher (2022) point out also the scarcity of research that explores how the different components that characterize the practice of teleworking, such as its duration, frequency, voluntariness, need for justification, and flexibility, are related to other outcome variables, as for example well-being or productivity. Under the theoretical framework proposed by Ostroff and Bowen, justifying the origin of climates through HR practices, the present study further explores, with a more granular approach, the relationship between the practice of teleworking, and its components, and scientific productivity, and considers the climate for well-being and well-being as relevant mediating variables.

**Method** - A sample of 358 participants working in the research sector distributed across 48 ERC-granted research teams belonging to different Spanish universities and research centers were involved in the study. The sample responded to an online survey measuring teleworking time, frequency, flexibility, voluntariness, need for justification, climate for well-being, perceived well-being, and objective performance indicators for the academic sector both at the individual and team level. The research design is cross-sectional.

**Results** – At the individual level, a direct link was found between telework quantity and scientific productivity ( $\beta = 0.25$ ,  $p < 0.001$ ), while among the considered teleworking components, only flexibility was found to have a positive relationship with climate for well-being ( $\beta = 0.24$ ,  $p < 0.001$ ). Climate for well-being was found to have a direct relationship with all four well-being outcomes: 1. Job satisfaction,  $\beta = 0.57$ ,  $p < 0.001$ ; 2. Positive emotions,  $\beta = 0.59$ ,  $p < 0.001$ ; 3. Negative emotions,  $\beta = -0.53$ ,  $p < 0.001$ ; 4. Eudaemonic well-being,  $\beta = 0.59$ ,  $p < 0.001$ . Finally, negative emotions and eudaemonic well-being were directly linked to scientific productivity, respectively  $\beta = 0.12$ , ( $p < 0.01$ ) and  $\beta = 0.24$  ( $p < 0.001$ ).

At the team level, a direct link was found between the components of quantity and frequency and team scientific productivity; respectively  $\beta = 0.17$  ( $p < 0.001$ ) and ( $\beta = -0.98$ ,  $p < 0.001$ ). Among the considered teleworking components, only telework voluntariness and flexibility were found to have a positive relationship with the climate for well-being, respectively  $\beta = -0.44$  ( $p < 0.001$ ) and  $\beta = 0.68$  ( $p < 0.001$ ). In addition, climate for well-being was found to have a direct relationship with all four well-being outcomes: 1. Job satisfaction,  $\beta = 0.77$ ,  $p < 0.001$ ; 2. Positive emotions,  $\beta = 0.72$ ,  $p < 0.001$ ; 3. Negative emotions,  $\beta = -0.58$ ,  $p < 0.001$ ; 4. Eudaemonic well-being,  $\beta = 0.55$ ,  $p < 0.001$ . Finally, and

contrary to what was found at the individual level, none of the well-being outcomes were found to have a relationship with the team's scientific productivity.

Discussion – Relevant insights are provided about how to best handle and manage the practice of teleworking in the context of ERC-granted research teams. Specific teleworking components are pointed out to play a relevant role while others not. The climate for well-being and some well-being outcomes are identified as relevant mediators between the variables of teleworking components and scientific productivity. Differences are highlighted between the individual and team levels of analysis. Relevant insights are thus provided on how to redesign workplaces and work spaces to facilitate the achievement of “Good health and well-being” in scientific research centers.

Limitations – The present study was carried out according to a cross-sectional research design, hence not allowing to draw causal conclusions. Also, the number of teams (n. = 48) should be greater for guaranteeing more power to the study.

*Keywords: Teleworking components; team climate; scientific productivity*

## Poster 241

### Zooming in on the Experience of Administrative Tasks in the Public Sector: A Day Reconstruction Study among Dutch Detectives

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science&practice

#### Research Aim

Engaging in administrative tasks experienced as red tape (i.e., pointless yet burdensome; DeHart-Davis & Pandey, 2005) negatively affects employee outcomes (e.g., decreased autonomy, increased powerlessness; Quratulain & Khan, 2015), ultimately decreasing organizational performance (Bloom & Labovich, 2020). The red tape problem is pervasive and so far it has been difficult to remedy it (George et al., 2020), especially because subjective differences between individuals' perception of red tape have not been addressed sufficiently (Brewer & Walker, 2009). Therefore, in this study we investigate whether the experience of red tape depends on individuals' personal and job characteristics.

#### Theoretical Background

Based on the "stress-as-offense-to-self"-perspective, being engaged in red tape tasks is expected to lower employees' self-esteem, leading to a poor work evaluation (Semmer et al., 2007). In line with that, the JD-R theory implicates that experiencing red tape (i.e., job demand) can evoke negative emotions (e.g., sadness, dissatisfaction, and annoyance). We examine whether the interactive role of job and personal resources (i.e., autonomy, meaningfulness) and job demands (i.e., time pressure) will weaken or intensify this effect respectively.

#### Methodology

Using the Day-Reconstruction-Method, 1615 Dutch detectives filled in questionnaires to reconstruct their workdays (e.g., time spent on work activities such as administrative tasks, perceived red tape doing those tasks, and several emotions for every half hour, job characteristics daily) for five consecutive workdays. The DRM allowed us to capture detectives' experiences, record those in a precise way, and investigate differences between participants (Kahneman et al., 2004).

#### Results

Preliminary results indicate detectives spent on average 30,1% of their workdays on red tape tasks (e.g., transferring information between registration systems or handling a seizure). Further, when an activity was experienced as red tape, detectives indicated the feeling 'annoyance' more often ( $r=0.43$ ,  $p=0.00$ ); whilst they indicated the feeling 'enthusiasm' more often when a work activity was not experienced as red tape ( $r=0.26$ ,  $p=0.00$ ). We are currently running a multilevel analysis, testing several interaction effects. Thorough results will be available at the end of November 2022.

#### Limitations and Future Research

Because we collected data within one organization (i.e., the Dutch police) it may limit generalizability of the results. Hence, future research should investigate employees' experiences from different governmental organizations.

#### Research & Practical Implications

When our expectations come true, this study adds to the literature on job design, that both job and personal resources are part of the solution to diminish the experience of red tape. An important practical implication is that organizational managers and employees' themselves can create more (job and personal) resources to balance the experience of red tape (e.g., offering job crafting training, empowering leadership).

#### Relevance for Congress

Since rules and guidelines are permanently increasing in current democratic societies (Kaufmann & van Witteloostuijn, 2018), red tape is a pressing issue in the modern working world. We aim to provide insights how to reduce employees' experience of red tape at work, contributing to design better jobs, and hence to EAWOPS' congress theme: 'The Future is Now: The Changing World of Work'.

*Keywords: DRM, Red Tape, Job and Personal Characteristics*

## 7 minutes science

### 7-minute science 7M85

#### **A social support and resource drain exploration of the bright and dark sides of teachers' organizational citizenship behaviors**

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science&practice

Organizational citizenship behaviors (OCBs) are important antecedents of work related outcomes in a wider variety of domains, including education. Next to the benefits of engaging in OCB, teachers also incur costs as OCBs are helping behaviors performed on top of the prescribed work roles. Our study tests in a sample of 1229 teachers two mechanisms that explain the cost-benefit interplay of OCB in relation to work performance (WP) and maladaptive work outcomes (MWO, stress and burnout).

Organizational Citizenship Behavior (OCB) reflect one's engagement in supportive extra role behaviors that are beneficial for teacher and overall school performance (Belogolovsky & Somech, 2010; Oplatka, 2006). More recent OCB conceptualizations, based on role theories argue that an excessive engagement in extra-role behaviors can be resource draining for employees (Jolly, Kong, & Kim, 2020). Therefore, an important question arises whether teachers' engagement in OCBs, a construct depicted as having important benefits for work outcomes (one of the most prototypical positive organizational behavior components see Bolino et al., 2013; Organ, 2018), also have detrimental effects in schools? We set out to answer this question by using a framework in which we investigate the mediating role of relational benefits of OCB (reciprocated social support received from peers and supervisors) and its costs (workload) in the relation between OCB and teachers' work-related outcomes (performance, exhaustion and stress).

Although OCB behaviors were clustered in multiple ways, meta-analytic Confirmatory Factor Analysis of the OCB dimensions has supported the bi-dimensional structure of the OCB as targeted towards the organization OCB-O (including conscientiousness, sportsmanship and civic virtue) and towards individuals OCB-I (including courtesy and altruism) (Hoffman, Blair, Meriac & Woehr, 2007). Moreover, in an integrative perspective on OCB research, Spitzmuller and colleagues argue "that a simple conceptual framework that contrasts types of OCB based on intended beneficiary (OCB-I and OCB-O) would provide focus and help researchers integrate and consolidate research findings." (Spitzmuller, Van Dyne & Ilies, 2008, p.115).

First, we argue that different types of OCBs influence differently the benefits and costs, such that workload is rather tied to OCB-O, while social support to OCB-I. Second, we claim that the balance between costs and benefits is influenced by the intensity of engaging in OCB such that the relational benefits emerge swiftly upon engaging in OCB, while the costs are tied especially to high levels of OCBs.

On the one hand we show that workload explains the association between OCB, WP and MWO for high rather than low levels of OCB, while social support explains the association irrespective of the OCB level. On the other hand, our results show that the association between organizational OCB, WP and MWO is mediated by workload, while the association between individual OCB, WP and MWO is mediated by social support.

These results show that both the type and level of OCB should be jointly considered when trying to understand the costs and benefits of OCB for work related outcomes.

Next to its contributions, our study has also important limitations. Data was collected from a single source, CMB is likely to have influenced our results. Second, because our study was cross-sectional, we cannot draw definite causal claims.

*Keywords: : organizational citizenship behavior, teachers, work performance*

## 7-minute science 7M113

### **Flexible work arrangements – do they differ? A comparison of employees with flexible working times and flexible location**

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**Research goals.** When the literature talks about flexibility at work, quite often everything is taken into account, including choice of working time and different locations (Wessels et al., 2019). However, there is a lack of information about how those different aspects of flexibility are associated with crucial employee outcomes such as job satisfaction, team belonging and extra-role behaviour. In this study, we will investigate how different flexibilities are associated with these different employee outcomes.

**Theoretical background.** Flexible work arrangements, including choice of working place or non-standardized working time are associated with the possibility to better align work needs to personal needs (Thompson et al., 2021). This flexibility is often treated as a job resource and a type of autonomy that a person can use to one's benefit. However, the literature also shows that flexibility is not a one-size-fits-all construct, and that different aspects of flexibility may have differential effects (Wessels et al., 2019). Job autonomy (that is inherent in flexible work arrangements) is often positively associated with job satisfaction and extra-role behaviour. On the other hand, flexible work arrangements (both, in terms of working time and location) receive criticism that they may create a feeling of loneliness and challenge team-cooperation (Wang et al, 2021).

**Methodology.** The study is based on the 10 th wave of the European social survey. Data from a representative sample of employed individuals in a European country were used for the analysis. ANCOVA test was applied for a set of variables covering remote work arrangements and flexible working time.

**Results.** Results showed that different flexible arrangements were associated with different outcomes. Work start/finish flexibility is bringing significantly different positive associations with job satisfaction, extra-work responsibilities and belonging depending on the level of flexibility. Workers who had full autonomy towards their work start/finish time were the most satisfied, willing to take extra-responsibilities, and feeling part of the team. A different pattern of results was observed for location-related flexibility. Most satisfied with work and willing to take extra responsibilities were those workers who were somewhere in the middle – neither fully, nor never working from home or other preferred location. There were no significant differences between feelings of belonging to the team and work location.

**Limitations.** The results should be generalised with caution due to the use of data from only one country. As single-item construct evaluations were used, the study is suggesting a direction for further research.

**Conclusions.** When discussing flexible work arrangements, we should notice that there is no one-size-fits-all solution. It is important to take into account nuances, that can make the difference about employees' satisfaction and extra-role behaviour.

**Relevance to the Congress Theme.** This study showed that future of work will require a deeper look into areas (i.e., flexible work) that are often treated as well-known.

Relevant UN SDGs . Results of this study show that various flexible work arrangements could be related to job satisfaction, hence showing an opportunity to contribute to work-personal life alignment, which is relevant to the 3 rd UN SDG (Good health and well-being).

*Keywords: Flexible work; job design; job satisfaction*

## 7-minute science 7M88

### **Intentions to stay: Examining expatriate adjustment in a host country according to time-dependent factors and cultural distance.**

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science

Expatriates or highly skilled migrants represent an increasing number of employees around the world, and follow a time-based cross-border movement driven by the underlying intention of gaining better professional opportunities in the face of unstable economic opportunities. Expatriates are essential for the Swiss economy with approximately 70,000 highly skilled adults entering Switzerland yearly. The research study aimed to assess if repatriation intentions were predicted by expatriate adjustment (EA) among three groups of expatriates according to time spent in Switzerland (Group 1 = 1-5 years, Group 2 = 6-10 years, Group 3 = 11-15 years). Additionally, cultural distance was included as a moderator in the EA process. Various inconsistencies exist in EA research, with cross-cultural adaptation, and acculturation being used interchangeably to refer to the EA process and outcomes. Expatriate studies have focused on indicators of work outcomes such as work productivity and job satisfaction, which were positively predicted by EA, but non-work variables have been overlooked. A recently developed EA theory and assessment was utilised in this study to assess changes experienced in ten diverse EA facets. Specific domains were selected namely: “work environment”, “job characteristics”, “work-life balance”, “family life”, “local friendships”, and “contact to those left behind” in this cross-sectional quantitative research design. Expatriates in German-speaking Switzerland (N= 266) completed an online survey. The following measures were used: demographic questions; Expatriate adjustment scale (Hippler et al., 2014); Cultural distance (Chen et al., 2010); and Repatriation intentions (Cao et al., 2013). The multi-group model showed good fit indices. In group one, there were significant findings on all domains, except local friendships ( $p > .05$ ). In group two, there was a significant result in the work environment domain and interaction effect between family life and cultural distance ( $p > 0.01$ ). In the third group there were significant results in work life balance and local friendship domains, and the interaction effect persisted ( $p > .01$ ). This means that EA issues change according to time spent in a host country, but that EA issues remained. Also, the effect of cultural distance is reduced by existing social support structures, but more research is needed to see how career trajectories and well-being is affected. Limitations include the cross-sectional approach and that the data was only collected in the German-speaking Swiss regions. Future research should consider a longitudinal approach to assess how time lags affect EA processes and other Swiss regions included. The originality of this study is the inter alii examination of EA trajectories according to time-dependent groups in the absence of longitudinal data. These results are informative to develop the EA literature base and create effective human resource management approaches and interventions for improving EA. The current research relates to the conference themes of Careers and the Labour market and Diversity and inclusion, because of an ever-increasing globalised and diverse workforce, resulting in the need for work environments that manage and incorporate diversity well. The 2030 Agenda for Sustainable Development is supported by including the relevant goals of decent work and economic growth and reduced inequalities, by creating inclusive work environments supporting EA processes.

*Keywords: expatriate adjustment, cultural distance, repatriation intentions*

## “LIVING AND WORKING TOGETHER” IN FAMILY BUSINESS DURING GENERATIONAL TRANSITIONS

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science

Within the current scenario, statistics report that in Europe approximately 8 out of 10 businesses are family-run, and only 2 go beyond the third generation (Family Business Yearbook, 2017). Moreover, literature on family businesses seems to be more focused on economic aspects, rather than the psychological ones (Corbetta & Quarato, 2021). Regarding this, Living and working together in organizations perspective (LWTO) could provide an insightful framework. LWTO assumes that – within a specific organizational culture, which informs about implicit assumptions related to diversity – the relational quality between generations impact in terms of well-being and performance during the handover (Gozzoli, 2016). Consequently, LWTO could help to better understanding how relational dynamics impact on managing the balance between individuality/conformity (group dynamics) and on the generational changeover (careers and labour market).

Using a qualitative approach, the present study aims to intercept the LWTO styles and their implications on the generational transition in 5 Italian family-businesses, where this process is taking place. For each business, senior and junior family members with managerial roles were involved.

Data were collected using semi-structured interviews. Analyses were conducted via paper and pencil, using both theory-driven categories and categories emerging from the data. Specifically, during the top-down phase, a direct content analysis was applied in accordance with the LWTO categories; during the bottom-up phase, a conventional content analysis was applied to identify specific micro-categories related to handover process factors. Results show that in all organisations, regardless of the LWTO style, there are common processes related to (re)defining functions and roles: division of tasks, how the junior joined the company, the representation of the senior figure, the giving back of positive feedback. However, it is the specific LWTO style that impacts on how this happens in terms of quality. Thus, where the generational diversity can find a symbolic space to be faced, a better relational quality between generations can be developed and, consequently, the turnover process is generative. Vice versa, when the generational diversity cannot find a symbolic space, the turnover process is infertile.

Since this is an initial exploratory survey, some limits should be highlighted. Future research should consider two other categories of participants: other family members working in the same company, for a better understanding of relationship dynamics; employees to define a more complex picture of LWTO representations.

In conclusion, results support the assumption that the generational transition in family business does not only concern technical and factual aspects (such as the entrepreneurial status, the family history and corporate assets), but also symbolic ones. In fact, the turnover needs an “Otherness” space in which generational differences could and should take form to support a whole organizational development. Analysing psychological aspects based on the LWTO seems to be an added value both to support practitioners and develop literature. In fact, LWTO allows to pursue a dialogue between generations – which is the actual heart of the 'familiar' in family businesses (Cigoli, 2006) – by holding together psychological, technical and procedural dimensions.

*Keywords: Family business, Generational transition, Relational dynamics*

**“Taking longer and better lunch breaks?” Effects of nudging and break activity interventions on recovery during the lunch break**

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science

Research goals

Recovery during the lunch break is important to maintain energy and performance during the workday. However, many employees cut their lunch breaks short or engage in activities that are not optimal for recovery during breaks, especially when time pressure at work is high. Thus, the present study aims to investigate whether it is possible to support employees in (1) taking sufficient time for their lunch breaks despite high time pressure and (2) using their lunch break for recovery enhancing activities. To address these questions, we implement a daily diary design with (1) two nudging interventions (i.e., social comparison and default option) to prolong lunch break length and (2) two break activity interventions (active and mindful breaks) to improve employees’ recovery strategies during lunch breaks.

Theoretical background

Building on the notion of the Recovery Paradox (Sonnentag, 2018), we hypothesized that on days of high time pressure, employees tend to take less time for their lunch breaks although recovery would be particularly needed. To counter this harmful tendency, we leverage the principle of nudging interventions which aim at positively changing behaviour without any restrictions or rules by changing the choice architecture (Sunstein & Thaler, 2008). Specifically, we assume that the nudging interventions (descriptive social comparison and default option) prolong lunch breaks and prevent cutting lunch breaks short by making the decision to take longer lunch breaks more likely. Drawing from the Effort-Recovery Model (Meijman & Mulder, 1998) and the Conservation of Resources Theory (Hobfoll, 1989), we argue that longer lunch breaks should result in better recovery outcomes (i.e., increased positive affect and work engagement and decreased negative affect) as longer breaks offer more time to unwind from job demands. Further, given that mindfulness and engaging in physical activities allow employees to get a break from their work demands and generate new resources, we propose that on days when employees participate in either an active break intervention (with light physical activities) or a mindful break intervention (with mindfulness exercises), recovery at the end of the workday should be better and employees should benefit more from longer lunch breaks.

Method

We conducted a diary study over three workweeks with an experimental intervention design. Forty-six employees from one company filled in one daily survey at the end of the workday. The first week was used as baseline week without any interventions. During the second and third week, participants were randomly allocated to receive a nudging intervention (descriptive social comparison, default option or control group) and to participate in a lunch break intervention (active break, mindful break or control group).

Results

Results of multilevel analyses showed that on days with a higher time pressure participants took shorter lunch breaks. However, lunch break length was not associated with recovery indicators at the

end of the workday. The nudging interventions did not prolong the lunch breaks, nor did they reduce the negative effect of the workload on lunch break length. On days the employees participated in the active or the mindful break interventions, they reported increased positive and decreased negative affect, but no increases in their work engagement. Participation in break interventions did not strengthen the association between break length and recovery indicators.

### Conclusions

Our study shows that it is possible to enhance lunch break recovery by participating in active and mindful break activities. In the current study, nudging interventions were not effective in preventing employees from cutting their lunch break short on stressful days. However, since lunch break length was not associated with recovery indicators at the end of the day, focusing on increasing break quality, rather than break quantity might be more important to optimize lunch break recovery.

### Limitations

As the sample size of our study was small and all employees came from only one organization, the generalizability of our results may be limited. Further, the average length of lunch breaks over all three weeks was rather high (  $M = 38.6$  minutes); hence, there was little room for improvement regarding break length.

### Relevance to the Congress Theme & Relevant UN SDGs

Our study contributes further insights into the topic “ The changing world of work ” by investigating new possibilities to improve lunch break recovery. In a changing world of work with increasing and intensifying demands, knowledge about effective recovery is essential for sustaining employees’ good health and well-being.

*Keywords: Recovery, Nudging, Breaks*

## 7-minute science 7M33

### “What Do I Want to Do Next?” The Phenomenon of Task Rotation at the Workplace

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science

Organizations have touted and implemented task and job rotations at the workplace because they anticipate various benefits from rotations such as greater job satisfaction and an increase in performance due to lower monotony and higher flexibility. However, because of organizations' strong belief in their advantages, their adoption of task and job rotations have left with no autonomy to the employees. As a result, it is hard to distinguish if employees truly appreciate the opportunity and benefit from rotating and switching tasks at the workplace. We focus on task rotation in this study which refers to the switching between tasks within a job that requires different skills and responsibilities. We draw on both inertia and effort-recovery literature to explain why individuals refuse or prefer task switching at work. Across three studies (an online cross-sectional study (N=115), an experience sampling study (N=1047, number of participants=163, number of waves=7), and a lab experiment (N=195), we found that individuals in general showed no intention to switch to a different task from their current task (Study 1-3). The preference was especially strong when individuals who have been working on creativity tasks were asked if they want to switch; they expressed no interest in rotating to a routine (non-creativity) task. Furthermore, their performance on the routine task after switching showed no difference compared with the baseline condition (Study 3). However, when individuals who have been working on routine tasks were asked, they showed mixed preferences between continuing working on routine tasks or switching to a creativity task, mediated by boredom and information learning (Study 2). Our study contributes to the task rotation literature highlighting the employee's agentic role in task rotation interventions and encourages organizations to reconsider their intended influence and outcomes of the concrete design of rotation practice. Our findings also have implication for the utilization of AI at work. Organizations can consider introducing AI tools to handle repetitive and routine tasks so that employees can focus on generating creative ideas and solutions.

*Keywords: Task rotation, Creativity, Boredom*

## 7-minute science 7M53

### **„Everything is important“ – Testing rating scales for a differentiated value measurement in organisational research**

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science

**Research goals:** Although organisational values are extremely important in organisations, their reliable and valid measurement remains challenging. When measuring values, typical distributional difficulties such as left-skewness occur. This study aims to test alternative response scales for measuring organisational values. In previous research by the authors, a substantive impact of response scale labelling on distributional properties was found. Building on these results, we expect a moderate and moderate-extreme response scale to result in more appropriate distributional parameters than a standard or an extreme response scale.

**Theoretical background:** Organisational values play a key role in organisational research and practice (e.g., Bourne & Jenkins, 2013). Hence, the reliable and valid measurement of values is important (Jung et al., 2009). However, as respondents consider values to be ideals, differentiation in the ranking of value importance is usually low (McCarthy & Shrum, 2007). Consequently, value measurement in organisational settings faces typical distributional difficulties (e.g., pronounced skewness, non-normality) limiting its informational value. Thus, rating scales with approx. equidistant verbal labels are needed as an alternative to alleviate the difficulties in organisational value measurement.

**Design:** Organisational values were measured with the German version of the Organisational Culture Profile (OCP). 406 participants took part in an experiment with four conditions, which differed in the presented response scale varying the extremeness of the verbal labels. A categorisation of these verbal labels has been developed in previous work. Affective commitment, turnover intention, and job satisfaction were measured as external criteria. Differences in variance, value means, normal distribution, intraindividual variance and the prediction of organisational value-related variables were analysed.

**Results:** Results showed lower value means for all three alternative rating scales compared to the standard scale. While no significant differences between the conditions emerged for value variance, the response distribution of two of the alternative response scales conformed to a normal distribution. The value distribution for one of the alternative response scales was significantly less skewed than the standard scale. Predictive validity of the values did not differ between the conditions.

**Limitations:** The present study uses panel data. Thus, incentivized participation potentially affects responses. However, data quality was monitored via control items and analysis of reckless responding.

**Implications:** Research on organisational values relies on reliable and valid measurement. This study offers response scales solving distributional issues of value measurement. The results advise future research on organisational values on how to create reliable, valid, and useful response scales. The developed rating scales enable the measurement of normally distributed and highly differentiated value ratings, thus improving the quality of future research in this context. Further, results of this study underline the importance of considering the specific subject area in which rating scales are

employed. Sophisticated development of response scale labelling is crucial for the remedy of distributional issues.

Relevance to Congress Theme – To assess changes and their consequences in the working world, organisational research requires reliable scales.

*Keywords: organisational values, value measurement, response scale*

## 7-minute science 7M06

### **A cross-sectional study about nurses' profiles in workplace incivility: the effect of sexism on employment**

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science

**Research goals:** Drawing upon role congruity theory, this study aims to analyse how uncivil nurse leaders are perceived in the feminine nursing context by their counterparts (nursing workers) and which are the consequences they predict.

**Theoretical background:** Nursing is still perceived in a feminine context. Despite current advances in gender equality, gender stereotypes remain evident nowadays. Furthermore, leadership characteristics have been traditionally associated with agentic characteristics (Vial & Napier, 2018). Thus, in this context we could wonder whether to being a nurse and acting in an agentic way, could be perceived as (in)congruent and (un)civil. In fact, recent research reports a high prevalence of incivility among nurses. Research about incivility in the nursing context has mainly focused on victims and less on bystanders. Moreover, less is known about how sexist perceptions can affect the perceived consequences of an uncivil situation. In sum, addressing incivility in the workplace is essential not only for the benefit of the nursing profession but also for quality healthcare outcomes including safety.

**Design/Methodology:** In a Quasi-experimental cross-sectional survey 557 nurses (63% women) were asked to read a scene in a hospital describing an episode of incivility from a nurse leader toward a nurse employee.

**Results:** Nurses are low in sexism in this working context, but two clusters emerged showing two distinct profiles: high sensitized nurses, who were higher in awareness and lower in tolerance for incivility; and medium sensitized nurses, who were lower in awareness and higher intolerance for incivility. Moreover, medium-sensitized nurses were significantly higher in sexism on employment affecting their evaluation of the incivility situation.

**Limitations:** All the participants pertained to the same culture and to different positions in the nursing context. Moreover, the levels of sexism in nursing participants were low, and generalization is limited. It would be also of interest to further explore whether in other cultures (i.e. masculine or feminine) the levels of sexism differ. Furthermore, comparing specific contexts of nursing (i.e. specialities or healthcare centres) could help to acknowledge the context influence.

**Conclusions – research and or practical implications/Originality/Value:** Despite most nurses being sensitized to incivility, slight higher sexism makes a difference in the perception and tolerance of an uncivil episode by bystanders. Therefore, it is yet necessary to train nurses, especially men, in the awareness of incivility. Enhancing the awareness of these behaviours could reduce this source of stress and negative consequences among nurses.

**Relevance to the Congress Theme:** The relevance of this study derives from the need of making work environments less uncivil and stereotypes context. The "future is now" implies solving gender problems in working contexts.

**Keywords:** *nursing, sexism, workplace incivility*

## 7-minute science 7M189

### A gender-role perspective of employee wellbeing and resilience

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Research goals and why the work was worth doing

The existing literature suggests that wellbeing plays an essential role in establishing a ground for resilience (Steel et al., 2008; Athota, 2019) and potential relation between resilience, wellbeing and gender (Purvanova and Muros, 2010). Women in particular have been found to score lower on measures of resilience (Stratta et al., 2013). Employee wellbeing and resilience appear to be associated with specific organisational and cultural contexts. For example, Huang et al. (2019) found that gender plays an important role on employee wellbeing in the Chinese retail sector. However, research on wellbeing and resilience from a gender perspective in the UK is scarce.

The aim of this research is to examine the relationship between resilience and employee wellbeing from a gender perspective. The research seeks to address the following research questions:

Are UK retail employees' reaction to exceptional job demands different in respect to their gender?

Could any relation be established between resilience and wellbeing and the reaction to these demands?

What is the implication for HRM practices in the UK retail sector?

Theoretical background

This research draws on the Job Demands-Resources model as it provides a useful theoretical framework that organizations can use to understand the well-being of employees and improve their health at work, whilst at same time improving performance of the organization. The model argues that there is a tendency for every occupation to have specific risk factors linked with job stress, which can be grouped into two overarching categories of job demands and job resources (Bakker & Demerouti, 2007). Job demands are potential initiators of a health impairment process and may include workload and emotional demand while job resources are factors that can initiate a motivational process and include interpersonal relations, job security, and participation in decision-making (Bakker et al., 2004; Crawford et al., 2010). Accordingly, Crawford et al. (2010) argue that these two general categories can have significant effect on the well-being of employees. The current research focuses on these two overarching categories especially as hard work and the need for emotional management in delivering satisfactory customer service are associated with retail sector jobs (Bakker & Demerouti, 2007; Huang et al., 2019) and interpersonal relations, job security, and participation in decision-making influence employees in the retail industry (Huang & Gamble (2011).

Design/Methodology/Approach

The methodological paradigm chosen for this project is empirical-quantitative research which requires the development of hypotheses based on extant literature. Survey data will be produced through an online questionnaire via Qualtrics from 1000 frontline employees of 10 large retail stores (supermarkets) in Bristol, United Kingdom. The survey questionnaire will be based on a deductive theoretical framework aimed at examining the extent to which respondents regard the influence of job demands and resources on their own wellbeing.

### Results expected

it is expected that the effect of workload, emotional demands, job security, employee participation in decision making on employee wellbeing will differ by gender

### Limitations

This research has some limitations that provide opportunities for future research. for example, a cross-sectional design is used. Future research can address this by adopting a longitudinal design to understand the relationships employee wellbeing and resilience and the role played by gender

### Conclusions

This research has important implications. First, the findings will provide organisations and in particular, those in the retail sector with a better understanding of frontline employees and hence, help inform HR policies designed to increase wellbeing and resilience. In this regard, I will offer consultancy services to organisations in the retail sector and organize webinars and online workshops. Second, this study extends prior research which focuses on emerging economy context, by showing the role of gender in the relationship between employee wellbeing and resilience.

### Relevance to the Congress Theme

This research is relevant to the congress theme - the Future is now: the changing world of work shares critical links with employee resilience and wellbeing. Also, employee resilience have been identified through empirical research to substantially improve employee wellbeing (Cooper et al., 2014; Tonkin et al., 2018)

### Relevant UN SDGs

This research is relevant to good health and wellbeing, decent work and economic growth and gender equality.

*Keywords: employee wellbeing, resilience, gender*

## 7-minute science 7M10

### Training transfer: a nexus between formal and informal learning

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Training transfer: a nexus between formal and informal learning

The present study aims to investigate the relationships between formal and informal learning processes at work and their interaction effect on transfer of training. The challenges posed by the current working contexts have highlighted the crucial role played by workplace learning to continuously adapt job skills, however, most companies still focus only on formal training programmes losing valuable opportunities from the integration between formal and informal learning processes (Manuti et al., 2015).

Workplace learning is the process engaging individuals in training programmes as well as experiential learning for the purpose of implementing competences (Jacobs & Parks, 2009). Therefore, it consists of both formal and informal learning dynamics. Formal learning is traditionally referred to training courses, characterised by a prescribed learning framework and specific objectives (Eraut, 2000). Informal learning occurs in the actual work setting because of evolving activities, it is mainly experiential and characterised by individual reflection and relational exchanges (Marsick & Watkins, 1997). The effectiveness of the formal learning processes is often evaluated in terms of transfer of training - the extent to which the learning acquirements resulting from a training experience might transfer to the job – but transfer needs experiential informal learning for generalization and retention (Baldwin et al., 2017). Despite a large theoretical consensus on the importance of a variety of learning opportunities, few studies focused on linking formal and informal learning processes (Ford et al., 2018).

An online survey was administrated to 119 employees investigating perceptions of HRM practices referred to formal training, individual evaluation of the formal training, organization's learning culture, informal learning behaviours, and transfer of training. A path analysis was conducted to investigate direct and indirect relationships and explore the interaction effect between formal training evaluation and informal learning behaviours on transfer.

Results showed that HRM practices were related to training evaluation. Organizational learning culture was related to informal learning behaviours. Training evaluation and informal learning behaviours were both related to training transfer and showed a significant interaction effect suggesting that the relationship between training evaluation and transfer intention was stronger for those employees who adopt more informal learning behaviours.

The cross-sectional nature of the study and the self-report measures do not allow strict causal conclusions.

Research and practical implications of the study suggest that formal and informal dimensions of learning need to be seen as interdependent rather than separate processes. Specifically, high-quality training courses may result in higher levels of transfer if they are complemented by informal learning behaviours, which are promoted by organizational learning culture. Therefore, a learning culture should be widespread at all organizational levels since it has a crucial role in promoting informal behaviours that contribute to the effectiveness of formal training. Organizations that consider closely the virtuous circle between formal and informal learning dimensions may benefit in terms of return on investment in training and employees development.

Congress Theme of training and development.

UN SDGs: goal 8

*Keywords: Transfer of training, Informal Learning, Learning Organization*

## 7-minute science 7M28

### Openness or closedness to experience – what protects better bullied employee’s mental health?

Anna Skuzińska, Academy of Applied Medical and Social Sciences in Elblag; Wojciech Plopa, University of Economics and Human Sciences in Warsaw

The aim of the current study was to better understand the role that openness to experience plays in the relationship between mobbing and employee mental health. Psychosocial stressors, and mobbing in particular, are important risk factors in the workplace. Mobbing is a specific stressor which comprises hostile social interactions and ambiguous workplace communication (Einarsen & Nielsen, 2015). High openness to experience involves tolerance of uncertainty, more liberal social attitudes, adaptation to change, and divergent thinking (McCrae, 1996). Employees with high openness to experience more frequently appraise stressors as challenges rather than threats (Penley & Tomaka, 2002). Thus, they may be able to better cope with negative workplace acts (mobbing).

We carried out an anonymous, cross-sectional study of  $n = 695$  employees (nurses, public servants, and police officers). We used Goldberg and Williams’ GHQ-28, Diener et al.’s Satisfaction With Life Scale, Costa and McCrae’s NEO-FFI, and Einarsen and Raknes’ Negative Acts Questionnaire. Contrary to expectations, lower rather than higher openness to experience protected employee mental health against negative workplace acts, particularly anxiety and insomnia, social dysfunction, and physical symptoms. This paradoxical effect may be explained by the impenetrable cognitive set and the need for closure characteristic of individuals with low openness to experience. It may motivate them to make surface-level interpretations of others’ behaviors and not seek alternative, “deeper” explanations. On the other hand, these results may also be explained by an interaction between closedness and workplace environment. In highly structured workplace environments, individuals who are closed to experience are better able to cope with conventional tasks than individuals who are open to experience. Through its relation to a low amplitude of experienced emotions, low openness to experience may have a protective role for the mental health of employees experiencing intensive negative workplace acts.

These conclusions are suggested tentatively due to the study’s cross-sectional and self-descriptive character. In sum, it seems that those characteristics of closedness to experience which seemingly make individuals more vulnerable to stressors actually have a protective role in the context of mobbing. The role of openness to experience appears more complex and interesting than previously thought. Future studies on mobbing should explore these surprising effects caused by well-known factors and their interactions. Studying protective factors for mental health in the workplace is in line with one of the United Nations’ Sustainable Development Goals - good health and well-being.

*Keywords: workplace bullying, openness to experience, mental health*

## 7-minute science 7M175

### **A Meta-Analytical Review on Negative and Positive Crossover at the Work-Family Interface in Couples**

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science

Research goals and why the work was worth doing

Crossover refers to a dyadic or interpersonal transmission, whereby stressors and resources are transmitted between closely related persons, such as life partners, across the work and family domains (e.g., Westman, 2001).

Two recent meta-analyses on crossover among life partners contributed in important ways to our understanding about crossover from work to family. At the same time, these meta-analyses mainly focused on crossover of stressors from work to family. Yet, besides stressors, also resources are powerful determinants of work- and family outcomes, not only for the focal employee but also for the life partner at home. Hence, also positive crossover (i.e., crossover of resources) between life partners can occur. Further, existing meta-analyses only focused on the crossover from work to family; however, crossover among life partners is considered a bi-directional phenomenon that also includes crossover from family to work. In addition, more knowledge is needed with respect to the underlying mechanisms through which crossover at the work-family interface unfolds. Finally, as work and family tend to remain highly gender-segmented, at least in heterosexual couples, further knowledge is needed of whether gender differences exist in crossover effects at the work-family interface.

We aim to address the identified gaps, by providing a quantitative summary of negative and positive crossover from work to family and from family to work among life partners, as well as the underlying processes and boundary conditions of these crossover effects. Thereby, we contribute in several ways to work-family crossover research. First, by investigating—besides crossover of demands—crossover effects of resources, and crossover from family to work, we contribute to a more complete picture on crossover effects at the work-family interface among life partners. Second, by investigating theoretical assumptions about the underlying mechanisms of crossover, we contribute new knowledge about how crossover among life partners unfolds. Third, by investigating gender differences in crossover effects, we provide new insights into potential boundary conditions of crossover effects.

Theoretical background

According to the work-home resource model (e.g., Brummelhuis & Bakker, 2012), stressors/resources in one domain deplete/increase resources and impede/facilitate accomplishments in the other domain. As in couples, the work and family domains tend to be highly intertwined, according to crossover theory, stressors and resources in different life domains have not only implications for the job incumbent but also for their life partner.

Design/Methodology/Approach/Intervention

We conducted a computer search, using the PsycINFO, Web of Science, and Scopus databases. We combined the following search terms work-family , work-home , work-life , each paired with each of the following search terms crossover , dyadic , couple , spouse .

We applied the following inclusion criteria: First, studies had to investigate cross-domain crossover. That is, stressors or resources that the job incumbent faces in one domain cross over to affect an outcome of the life partner in the other life domain. Second, to be included, measures of both spouses had to be reported. Finally, we included empirical quantitative studies that were published in English. Based on these inclusion criteria, we identified 113 articles as relevant for our meta-analysis.

#### Results obtained or expected

Preliminary analyses indicate that besides stressors, also resources have crossover effects on the life partner. In addition, preliminary results indicate crossover effects occur in both direction, that is, from work to family and from family to home. The final results, as well as the results for the underlying processes and gender differences in crossover effects, will be ready to be presented at the conference in May 2023.

#### Limitations

We limited our meta-analytical investigations to crossover across life domains (i.e., cross-domain crossover) in heterosexual couples.

#### Conclusions: Research/Practical Implications /Originality/Value

We add to previous meta-analytical findings by showing that besides work stressors, also work resources have important effects for the life partner. Further, we provide evidence that crossover occurs not only from work to family, but that also factors at home impact on the partner at work.

#### Relevance to the Congress Theme

Increasing rates of telework will increase the interconnection of work and family for many people, making crossover in couples more likely to occur. Hence, understanding how stressors and resources in the two life domains affect not only focal employees but also their partner seems increasingly crucial.

*Keywords: Crossover, work-family, couples*

## 7-minute science 7M157

### **Adaptation of Self-Perceived Employability Scale and Psychological Predictors of Young Adult's Employability**

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science

#### Research goals:

The main aim is to explore Polish University students' employability and its psychological predictors. Many studies suggest that employability is positively correlated with job-seeking, self - efficacy and is the crucial factor in graduates' transition to the labor market (Paulos, Valadas, Almeida, 2021; João, Gamboa, Paixão, 2019). The research goals are focused on:

To examine the relationship between self-perceived employability and procrastination, personality, and hope for success;

To establish the psychometric properties of the adapted, polish version of Self Perceived Employability Scale;

To make recommendations for curriculum and policy initiatives relevant to Universities, career counselors, and managers in organizations.

#### Theoretical background:

Employability in a traditional view has been understood as a set of skills that is likely to give a graduate secure employment (Rothwell & Rothwell, 2016). This type of thinking focused on short-term employment outcomes – on initial graduate destinations. However, a more appropriate approach might be to facilitate skill development to help individuals sustain their careers in labor markets where continuous life-long employment has not been the norm for some time. In more recent times, employability understood more as the ability to attain sustainable employment appropriate to one's qualification level, has been perceived on four different levels (Vargas et al., 2018).

#### Design

Ethics committee approval was obtained for the research conducted following APA requirements. Our study is based on a survey of 1200 first-year students at a Polish University. Survey instruments include the Self Perceived Employability Scale, Academic Procrastination Scale Hope For Success Questionnaire, and personality traits were measured using the Ten Item Personality Inventory. Socio-demographic data were also obtained.

#### Results

A two factors structure was chosen, which explained 47.6%. The internal consistency obtained in our research was lower (for the 8-item scale it was .779, for internal employability .754, and for external employability .741) than the reliability of the original version. Our findings are similar to the Spanish researchers who tested a two-factor model. Their model explained less variance (44.28%), and more items had higher factorial loadings. Finally, they received a higher reliability index in external

employability (Factor 1 – .81) but a lower reliability level in internal employability (Factor 2 – .64). The stability of the scale assessed at an interval of 4 weeks was  $r_s = .759$ ,  $p < .001$  for external factor,  $r_s = .650$ ,  $p < .001$  for internal and  $r_s = .769$ ,  $p < .001$  for the general score which is at the satisfactory level. The CFA showed that  $\chi^2$  value is not significant ( $p > 0.05$ ) and the chi-square/df ratio is  $< 3$  indicating a great value ( $\chi^2 = 39.53$ ;  $df = 17$ ). The other model fit indices are good: CFI = 0.984; NFI=0.973; RMSEA = 0.047; PCLOSE=0.570. The results also showed that employability was predicted by personality, procrastination, and hope for success. Hence, the research reveals an understanding of the relative importance of antecedents that determine employability.

#### Limitations

Some limitations set a basis for future research directions. Firstly, reliance on self-report measurement raises concerns over construct validity due to response distortions, among others. Secondly, the sample was derived from a single university and focused on a simple measure of self-perceived employability in this specific context. Additionally, the follow-up study could take into account possible socio-economic changes resulting from the specific global situation.

#### Conclusions

Perceived employability may be considered an important variable – from the economic, educational, and individual perspectives. However, following the career development of graduates in Poland – and graduates of our university in particular – it can be noted that for a number of them, their employability skills are not solid enough to enable them to find a good job and feel competent players in the job market. This observation underlines a gap in the employability perception of students and reality after graduation. More importantly, it calls for implications for university study programs: they should incorporate not only subject knowledge but also courses on developing student's managerial, communication, and career development skills.

#### Relevance to the Congress Theme

Our concern is regarding the work-readiness of the graduate workforce, their sustainable livelihoods, as well as their ability to engage proactively with the world of work from a basis of sound psychological health.

*Keywords: Employability, job-seeking, personality*

## **Adapting Mindfulness-Based Programmes to the Workplace: An exploratory Case Study**

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science&practice

According to the World Health Organisation, 8% of the global disease from depression is currently attributed to workplace risks (Prüss-Ustün & Corvalan, 2006). In recent years, the pace of demand for making the wellbeing benefits of mindfulness-based programmes in clinical settings available in more mainstream settings such as the workplace, has outstripped the pace of research. There is both a need for more knowledge on the process of adapting mindfulness-based programmes (MBPs) without compromising their integrity and effectiveness (Crane et al., 2016), as well as a need to explore the outcomes and process of adapted programmes, (i.e., what works and why, e.g., Lomas et al., 2017).

Underpinned by a pragmatic research philosophy and using a case study design, this series of studies aimed to address these needs. A phased approach to adapting an MBP to a retail workplace setting is outlined, with two studies exploring the scoping phase and one single-case design intervention study investigating the implementation and evaluation phase.

The overall findings contribute to the fledgling body of knowledge on adapting MBPs in two ways, both of which offer advances to professional mindfulness teaching practice. Firstly, the adaptation process used provides a platform for developing a “compass” for mindfulness teachers to use whilst adapting programmes and protecting their integrity. Secondly, the intervention study findings strengthen the case for workplace MBPs being a facilitator of mental wellbeing and other useful employee behaviour benefits (e.g., interpersonal skills, ability to focus). The programme theory of change and associated theory of action elicited offer a clear support to mindfulness teachers in their articulation of how and why MBPs can benefit a prospective organisation.

Whilst the case study approach limits the generalisability of the findings, it paves the way for future research to refine both the adaptation process and the use of a specific theory of change and theory of action for workplace programmes.

*Keywords: mindfulness-based approaches, wellbeing, programme theory*

## 7-minute science 7M39

### **AI, will you hire me? Perception of AI-assisted recruiting systems in the context of assessment centers**

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science&practice

Research goals and why the work was worth doing

Artificial intelligence (AI) will become increasingly important in the organizational context in the near future. However, psychological research on this topic is still scarce. Thus, our scenario-based study examined the perception of AI-assisted feedback in the context of assessment centers (AC).

Theoretical background

Previous studies have shown that people have concerns about using AI in recruiting. Concerns are expressed about usefulness (Araujo et al., 2020), fairness (Acikgoz et al., 2019), or emotional creepiness (Köchling et al., 2022). Based on construal level theory (Lerner et al., 2015), we examine the extent to which the degree of individual involvement influences the perception of AI-assisted recruiting as there is evidence from the medical context that people prefer the advice of human doctors rather than AI when it comes to their own situation (Hudecek et al., 2022).

Design/Methodology/Approach/Intervention

We conducted a preregistered (osf: <https://tinyurl.com/42v2xeyp>) study with a 2x2x2 between-subjects design. Participants (N=379) were asked to imagine that they vs. an average German citizen (condition perspective) have recently applied for a senior lead position in a medium-sized company. They (vs. the person) have successfully completed the first phase of the selection process. After a personal interview, they (vs. the person) are now invited to a one-day AC. Here, participants were then randomly assigned to either human recruiters or the AI HireBot (condition source of feedback). Next, all participants received randomly either a positive or a negative feedback and evaluation of their performance (condition decision). The feedback and decision were communicated to them by human recruiters or HireBot, respectively.

Results

Results show that people prefer the feedback from human recruiters rather than from HireBot. Feedback resulting in a positive hiring decision was perceived as more accurate and trustworthy. Negative hiring decisions communicated by HireBot were perceived as the worst. Accordingly, there were statistically significant main effects for source of feedback ( $\eta^2=0.12$ ) and decision ( $\eta^2=0.23$ ). No main effect was found for perspective (i.e., self vs. average German citizen). Thus, participants perceived feedback and evaluation in the same way regardless of whether it was about themselves or an average person.

Limitations

We used a scenario-based design which might affect the validity of results. Future studies should therefore replicate the design in a more realistic setting.

Conclusions

Contrary to research in other settings (e.g., medical advice), participants' perception was independent of whether the scenario involved themselves or an average person. In general, AI-assisted recruiting processes were perceived as critical by applicants. Especially when it comes to a negative hiring decision, it is highly recommended that feedback is provided by human recruiters.

#### Relevance to the Congress Theme

As AI will be of increasing importance for the organizational context, it is crucial to learn more about psychological effects to design work environments in a human way.

#### Relevant UN SDGs

Decent work for all requires that we use technological development in a way that meets human needs and ensures fair cooperation between humans and machines based on humanistic values. In this context, our research provides insights for the responsible use of AI in recruiting.

*Keywords: artificial intelligence, recruiting, assessment center*

## 7-minute science 7M30

### **All that glitters is not gold: Self-efficacy enhances the negative consequences of illegitimate tasks for health and job engagement**

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science&practice

**Research goals:** Believing in one's own capacity to accomplish tasks is a powerful resource. As such, this self-efficacy is known to enhance performance and personal well-being, and can buffer negative consequences of stressors. But what if the task is not worth it? Illegitimate tasks are tasks that are not consistent with the individual's occupational role because they are perceived as unnecessary or unreasonable. This study addresses the question if especially individuals with a high level of self-efficacy are impaired in health and job engagement by illegitimate tasks.

**Theoretical background:** Based on the Stress-as-Offense-to-Self theory, employees seek affirmation of their occupational identity. Illegitimate tasks are known for disregarding this need and thus threaten self-esteem. Previous research has shown that such tasks can impair both health and job engagement. In general, dealing with work tasks requires effort. Personal resources, such as self-efficacy, help individuals to regulate decision-making and effort accordingly. Yet, apart from the effort to complete illegitimate tasks, they distract from pursuing more meaningful tasks. Especially when individuals believe in their abilities, a mismatch arises between needs and supplies of the work situation. Thus, we propose that higher levels of self-efficacy enhance the negative association of illegitimate tasks on general health and job engagement.

**Design/Methodology:** We tested our hypotheses in two Swiss longitudinal samples. In Study 1, we examined the association of illegitimate tasks and general health using data from the last two measurement points (2010, 2014) of the first cohort of the Swiss Transition from Education to Employment (TREE) study. The final sample consisted of 1'031 employees (61% female), aged 25 to 29 years. Study 2 serves to replicate these findings in a large-scale Swiss employee survey, the Job Stress Index (JSI) Study. In addition, we examined the relationship between illegitimate tasks and job engagement. A total of 368 employees (40% female) participated in both surveys (2018, 2020), aged 18 to 63 years. Data were analyzed using a cross-lagged structural equation model with a latent interaction term between illegitimate tasks and self-efficacy (Mplus 8.8), controlling for sex, age and job change.

**Results:** Study 1 showed a negative association between illegitimate tasks and general health. This relationship was strengthened at higher levels of self-efficacy. In study 2 no main effect of illegitimate tasks occurred, but we also found a significant interaction with respect to general health and job engagement.

**Limitations:** Our results are based on self-reports. Future research should include, for example, sick leave and bio-physiological indicators of health.

**Conclusions:** Organizations benefit from high self-efficacious employees, when opportunities to confirm one's occupational identity are available. Therefore, organizations should take care to promote meaningful tasks in the workplace.

**Relevance to the Congress Theme:** A high degree of personal responsibility in shaping and redefining one's own work is attributed to the individual, but should an individual be left with the responsibility

for such tasks? Social sustainability of work also requires sustainable task design, which focuses on the social message of tasks assigned.

UN SDGs: Our study aims to promote decent work and economic growth, as well as health and well-being, as part of social sustainability.

*Keywords: self-efficacy, illegitimate tasks, well-being*

## 7-minute science 7M127

### Applying psychometric rigour in the development of a game-based assessment

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science&practice

There is an increasing interest in assessments with game elements as a way of improving the applicant experience and safeguarding against cheating. The initial work of this project was to redevelop an existing static assessment by adopting five key principles that a game-based assessment will address:

- 1) interactive and engaging, to improve applicant engagement with the recruitment process
- 2) dynamic to mitigate against test leakage
- 3) intuitive design to remove the need for written instructions
- 4) ensure device equivalence
- 5) job relevance

There is little literature on the practical development of an assessment with game-based elements in a way that is psychometrically robust. This work sets out the detailed steps in designing such an assessment and hopes to inform this area of psychometrics and invite further considerations.

We first undertook a literature review of the cognitive constructs of attention and vigilance and looked into the engineering field to explore key components of process monitoring. From this work we translated an existing static assessment, that was used as a selection tool for control room operators, into a 3-stage model. We presented this model to new and existing clients and from their feedback, scoped out the initial elements of the assessment. Key design considerations were:

How many elements?

How do we ensure measurement equivalence across devices?

How do we train the candidates in the rules of the “game”?

Should candidates be able to review the rules during the assessment?

We developed 5 moving elements each with its own distinct set of rules defining when each element is either “safe” (requiring no action), or in an “alarm state” (requiring some action). We focussed on ensuring that all elements can be measured in a psychometric sense. We devised a clearly defined sequence of events, at a second-by-second level, such that each element had specified windows of time that constituted where an applicant can be awarded credit for a response. Timing of events and responses would inform the scoring. This 2-minute sequence constituted one block and the aim was to build multiple, equivalent blocks to dynamically construct an assessment.

The first block will be trialled in November. The trialling will inform further block construction and scoring methodology, namely: Was the trial block complex enough/too complex? What is the response behaviour to the “alarm” states of the elements? Do we award partial credit to responses? How do we ensure device equivalence?

A separate criterion-related validity study will also be conducted in December to validate the assessment with existing job roles.

One of the limitations of our approach is the resource intensive nature of constructing a block. We are currently doing this manually in order to maintain full psychometric control given the novel nature of the assessment, but a future approach could be to automate the block generation subject to pre-defined constraints.

This research offers a practical blueprint for ensuring psychometric principles are kept at the forefront of the development of a game-based assessment.

Increasing globalization and the pandemic disruption has meant organisations have had to adapt to working in different ways, which inevitably means recruitment assessments need to be:

Convenient (remote, mobile-enabled)

Predictive

Engaging

Provide a realistic job preview which is what our new game-based assessment sets out to do.

*Keywords: psychometrics, game-based assessment*

## 7-minute science 7M125

### Association of Systems Intelligence and Job Performance: A Three-Wave Longitudinal Study

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science&practice

In today's dynamic world, employees need to adapt to changing demands to achieve goals in their personal & social life, especially at the workplace. Systems intelligence refers to behaving intelligently in complex systems based on the interaction and feedback mechanism of the environment (Hämäläinen & Saarinen, 2004). A person's level of systems intelligence reflects his/her ability to think, adapt and act effectively by understanding the basic features of relevant systems. Individuals within a system are interconnected, they act according to their mindset, and get feedback from the system. Both system and individual are affected by each other. This study investigates the association between systems intelligence and job performance, job crafting, job stress, and job autonomy. Drawing on the job demand-resource model, we argue that human skills such as systems intelligence will affect Job performance. Specifically, job resources (job autonomy), personal resources (job crafting), and job demands (job stress) will mediate the relationship between systems intelligence and job performance. We have conducted a three-wave study (time lag mediation design) with a one-month time lag (Robledo et al., 2019) and administered self-report measures the same for each lag (Miragila et al., 2017) for three months. By following the job demand-resource model (Bakker, Demerouti, 2007), we assumed that human skills such as SI (measured at T1) lead to outcomes like Job performance (measured at T3). Whereas job resources (job crafting and job autonomy) and job demands (job stress) mediate the relationship between systems intelligence T1 and job performance T3. Measures of control variables will be done at T1. Using a three-wave longitudinal study, we test these relationships. The first time lag of data collection was completed in April 2021 (n= 405), the second in May 2021 (n=312), and the third wave was done in June 2021. Data were analyzed by SPSS and Smart PLS 0.3. Bivariate correlation indicate positive correlation of systems intelligence with job autonomy ( $r = .196^{**}$ ), positive correlation with job crafting ( $r = .434^{**}$ ), job stress ( $r = -.038$ ) job performance ( $r = .683^{**}$ ). Job performance is positively correlated with job autonomy( $r = .262^{**}$ ), job crafting( $r = .230^{**}$ ) and job stress ( $.155^{**}$ ). Job stress is negatively correlated with job autonomy ( $r = -.307^{**}$ ) and job crafting( $r = -.139^{**}$ ). The statistics indicate that SI has a significant effect on Job performance ( $\beta = .639, p < 0.000^{***}$ ). We assumed emotional intelligence as a control variable which has also a significant effect on job performance ( $\beta = .119, p < .01^*$ ). Other significant predictor of job performance are; Job autonomy ( $\beta = .100, P < .013$ ), job crafting ( $\beta = .164, p < .001$ ), and job stress ( $\beta = .138, p < .001$ ). Findings of the study indicate that Job position ( $\beta = -.480, P = .05$ ) is a significant moderator, whereas gender ( $\beta = -.063, P > .790$ ) is not a significant moderator between the relationship of systems intelligence and job performance. We hypothesized that Job crafting, job stress, and job autonomy (at T2) will positively mediate the association between systems intelligence (at T1) and job performance (at T3) over time. The mediational model was analyzed by mediational path model bootstrap in smartPLS0.3. Statistics indicate significant partial mediation of job autonomy and stress between systems intelligence and job performance. Whereas job crafting is a significant positive mediator between systems intelligence and job performance. The findings of the study will help to understand the utility of systems intelligence in organizations and the antecedents of job performance at the workplace. Future research should explain the association of work-related factors such as motivation, leadership, commitment, and success.

*Keywords: Systems Intelligence, Adaptively, Job Performance & Longitudinal Design*

## 7-minute science 7M96

### **Authenticity at Work: Comparing Perceptions of People with and without a Mental Illness**

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science

One billion people worldwide were reported to have a mental disorder, according to the World Mental Health Report (WHO, 2022), and 15% of working-age adults had a mental illness. An observed 25% increase in anxiety and depression was reported to be triggered by the COVID-19 pandemic, and the global shortage of mental health resources was highlighted, with governments budgeting approximately 2% on mental health resources (WHO, 2022). In a work arena, wider societal issues are amplified that negatively affect mental health, which include discrimination, bullying, bossing or mobbing. The promotion of mental health and well-being at workplaces, together with reduction of stigma, discrimination and integration, is recognized as crucial by many national and international organizations for social and work inclusion of people who experience mental conditions (WHO Regional Office for Europe, 2010). Authenticity at work was recently explored as a set of perceptions and feelings that allows an individual to express him/herself in accordance with his/her True Self. Although, authenticity at work is related with positive job outcomes, it is dependent on organizational policies and practices. A qualitative survey was conducted with 30 workers, half of them with a mental illness, with the aim of exploring the nature and value of the construct of authenticity at work. In the first phase of our research, we used a qualitative methodology, and then in the second phase we opted for a quantitative approach by using categories, frequencies and a chi-square test to make comparisons between our participant groups (i.e., individuals with and without a mental illness) (Elliott & Wexler, 1994). Results highlight authenticity at work is characterized by intra- and inter-personal components of the Self and by a contextual component. People with mental illness recognize the role of the environment in facilitating self-disclosure and people without a mental condition highlight difficulties in social and emotional learning skills. Results confirm the importance of taking into account both individual and contextual factors to increase the perception of authenticity at work and navigate toward more inclusive organizations. The originality of this study is the finding that individuals without a mental disorder exhibited low social and emotional skills, which meant they were only able to present a partial self, so others formed images of them that did not correspond to reality. However, people with a mental illness gave more emphasis to situations when prejudice and misunderstandings, sometimes related to mental disease, affected others' perceptions and images of them. These situations resulted in work dynamics that caused social exclusion and had negative repercussions for the quality of employment relationships. The current research relates to the conference themes of Careers and the Labour Market and Diversity and Inclusion due to the focus on creating working environments that facilitate self-expression and disclosure as well as offer opportunities for growth and enrichment without the stigma associated with mental illness. Therefore, the 2030 Agenda for Sustainable Development is supported by including the relevant goals of decent work and economic growth and reduced inequalities, by creating inclusive work environments to facilitate the expression of authenticity in individual's working lives and promote mental health (Patton, 1990).

*Keywords: Mental illness, authenticity at work, inclusive work environments*

## 7-minute science 7M169

### Behavioral signatures in multiple speed assessment

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Meta-analytic research shows that the predictive validity of personality for work outcomes is low to moderate at best. We suggest that this might stem from an almost exclusive focus on personality traits, or the average level of actions, thoughts, and feelings.

Addressing this issue, we examine whether behavioral signatures (i.e., one's characteristic pattern of actions, thoughts, and feelings across a range of situations) have predictive validity for work outcomes above and beyond the average level of actions, thoughts, and feelings. To this end, we analyze data of a novel assessment method — Multiple Speed Assessment (MSA; Herde & Lievens, 2018) — in which assessors rated interpersonal behavior (Dominance, Submissiveness, Agreeableness, Quarrelsomeness) of 96 participants in 18 exercises. MSA is a new umbrella term (Herde & Lievens, 2020) for multiple, short, interpersonal simulations that allow obtaining samples of participants' actual, overt behavior in a range of situations. By using Criterion-Related Profile Analysis by Davison and Davenport (2002), a method that is specifically developed to test the predictive validity of a profile of scores, we demonstrate that the pattern of an individual's interpersonal behavioral dimensions (Dominance, Submissiveness, Agreeableness, or Quarrelsomeness) across situations does indeed account for a unique variance in teamwork and communication skills, as rated by the participant's supervisor. These findings are the first to show that an individual's behavioral signatures across situations is predictive above and beyond the average behavior. We therefore call for more attention to the dynamic interplay between person and situation as well as to assessment methods that allow revealing this interplay.

*Keywords: behavioral signatures; personality assessment; multiple speed assessment*

## 7-minute science 7M151

### Big Four LinkedIn Dimensions: Signals of Soft Skills?

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The use of LinkedIn as a tool in the recruitment and selection process has become routine in human resource management. However, a major drawback of such an approach is the lack of systematic and rigorous inferences on the psychological characteristics of the candidates. This study adopts signalling theory as a framework for exploring how LinkedIn profile information signals a candidate's soft skills.

The basic idea of signalling theory is that the interaction process between two people (e.g., applicant and recruiter) is composed of three basic elements: sender, receiver, and a set of signals that the sender issues to the receiver. These signals transmit the sender's unobservable characteristics (e.g., KSAO's), which the receiver can use in their interaction and communication with the sender when trying to reach an agreement. The selection process can therefore be understood as a process of negotiation between candidates and organizations.

The principal aim of this paper is to answer the following question: Is LinkedIn profile information a valid signal of soft skills? To this end, we used the LinkedIn Big Four model (Aguado et al., 2019) and an adaptation of the soft skills set used in the LinkedIn research conducted by Roulin and Levashina (2019). Using a sample of 169 ITC professionals, soft skills were measured through a self-report questionnaire, and LinkedIn profiles were assessed using rubrics for measuring the LinkedIn Big Four. The assessment of the LinkedIn profiles was carried out by a group of 12 human resources professionals. The soft skills measures were obtained through an unproctored online questionnaire completed by the participants. Every soft skill was considered as a dependent variable, while the LIBFD were considered as independent variables. We used discriminant analysis as a classification technique. Our findings demonstrate that LinkedIn Big Four Breadth of Professional Experience and Social Capital are valid signals of leadership, communication, problem solving, and entrepreneurial and commercial thinking. Moreover, discriminant analyses show significant results for: Leadership, Entrepreneurial and Commercial Thinking, Planning and Organization, and Problem Solving. As can be seen, overall ranking percentages (Hit Rate) between 55.7% (Planning and Organization) and 64.4% (Entrepreneurial and Commercial Thinking) are obtained for the four soft skills considered. This classification percentage is balanced, as the values obtained for Sensitivity and Specificity are similar.

Our research contributes to the study of LinkedIn as a method of personnel selection and the findings presented in this study offer evidence of the validity of LinkedIn to infer soft skills. In this way, professionals can avoid the unsystematic analysis of information to make decisions based on the information contained in LinkedIn profiles.

*Keywords: soft skills; signaling theory, recruitment and selection*

## 7-minute science 7M73

### **Biofeedback EEG in prevention and reduction of negative consequences of work addiction: preliminary results and barriers to providing support**

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science&practice

#### Research goals

The study aimed to examine the effectiveness of alpha wave relaxation training using EEG-Biofeedback for reducing work addiction and its negative consequences, and investigate the potential barriers to providing support. Work addiction is likely the most common behavioral addiction among working populations and is related to significant individual, social and economic harm. It requires systematic and systemic solutions.

#### Theoretical background

Work addiction is related to the inability to relax. Occupational and outside job stresses are risk factors and consequences of work addiction. EEG-Biofeedback technology was shown to be effective in developing the ability to relax and reduce stress. Similar studies were carried out among people addicted to substances, resulting in a reduction of anxiety and decreased consumption of substances.

#### Design

The study consists of a screening questionnaire designed to identify people with high work addiction risk and associated decreased well-being. Individuals that scored above the established cut-off score for work addiction received feedback about the possibility of participating in a free EEG-Biofeedback relaxation training focused on stress reduction. The invitations to the screening surveys were sent to employees via employers in Tricity in Poland.

#### Results

The preliminary results showed that 189 of 705 (27%) of the administration staff at one of the employers who all received invitation emails completed the survey. Of them, 53 (28%) had results above the cut-off score for work addiction, with 23 (43%) having the highest possible score on burnout and 47 (89%) having a very high score on burnout. However, only one person (less than 2%) applied for the free training sessions. Also, an overwhelming majority (almost all) of the employers are unwilling to collaborate and send the invitation to screening study to their employees. Results from the main part of the study, which is the EEG-Biofeedback session, will be available at the end of the 2022 year.

#### Limitations

The main limitation is the difficulty accessing those qualifying for psychological support.

#### Conclusions

The study shows considerable problems among work-addicted individuals of not seeking and/or refusing help even when it is easily available and free. It parallels findings from addiction studies showing that more than 95% of addicted people do not seek help or/and do not recognize a problem. It points to two crucial implications. First, work addiction and its negative consequences need wider recognition to enable support-seeking among those affected. Secondly, early prevention programs

directed at young populations are necessary because they constitute feasible cost/effective solutions, overcoming barriers typical for adult working populations.

#### Relevance to the Congress Theme

There is high urgency to address this problem with preventive programs and psychological support. Our project shows that substantial barriers exist in providing support in this area, likely due to widespread denial among work-addicted individuals typical for addictive disorders and low corporate recognition of this problem and willingness to collaborate.

#### Relevant UN SDGs

The results point to an unrecognized area related to sustainable economic growth (goal 8) based on work environment and working conditions assuring good health and well-being (goal 3), particularly by drawing attention to considerable barriers in introducing support for individuals addicted to work.

*Keywords: work addiction; workaholism; biofeedback EEG*

## 7-minute science 7M106

### **Burned out by the binary: Gender non-binary employees' experiences with emotional strain**

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science

Research goals and why the work was worth doing

Organizations and employees are increasingly appreciating the importance of managing gender diversity in work contexts. Research related to identities that exist outside of the male/female binary (i.e., non-binary) is seriously lacking, however. In this initial investigation, we examine how having a non-binary identity might be related to psychological health at work (e.g., burnout and exhaustion).

Theoretical background

We drew on theories related to gender, stigmatization, minority stress theory, and occupational health to inform our questions, coding, and conclusions.

Design/Methodology/Approach/Intervention

We have conducted 20 interviews with gender non-binary employees to date and expect to present data from approximately 40 total individuals at the conference. All of the participants identify with identities outside of the traditional male/female binary. Interview questions focused on their experiences at work in general. We are engaging in ongoing thematic coding to identify dominant themes, in line with grounded theory methodology, and will present our grounded theory model at the conference. For this presentation, we focus on the themes related to burnout and emotional exhaustion related to having a marginalized identity, in particular.

Results obtained

Burnout and exhaustion at work manifested in three three primary ways. First, participants noted how an unsupportive work environment, or a work environment that purported to be supportive but was not supportive in practice (i.e., “performative” support) contributed to burnout. Second, they identified discussed how navigating one’s non-binary identity by disclosing to, educating, and correcting coworkers was emotionally draining. Finally, they noted that their very existence at work seemed to cause disruptions among coworkers, which further contributed to burnout.

Limitations

We currently have a relatively small sample size, but are actively collecting and coding more data.

Conclusions

Our data are among the first to connect principles related to diversity and stigmatization with principles related to occupational health and burnout. Our findings suggest that managing a marginalized identity at work can contribute to work stress already inherent in basic job tasks. Organizations and employees with dominant (relatively privileged) identities can work to foster climates and cultures that are accepting of diverse identities (and non-binary identities in particular).

Relevance to the congress theme

As gender diversity increases and more employees feel comfortable expressing gender identities that have been considered nontraditional it is critically important to understand the psychological experiences that might undermine optimal performance. Our results are especially germane in the context of widespread labor shortages and increased mental health issues following the COVID-19 pandemic.

Relevant UN SDGs

Gender equality, reduced inequities, good health and wellbeing

*Keywords: Gender non-binary, Transgender, Occupational health*

## 7-minute science 7M51

### Can PDF make you happy? The effect of job resources and digital skills on happiness and life satisfaction in the changing world of work

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science

**Research goals.** Being happy and satisfied with life is among the most important aspirations for many. Positive aspects of work (job resources) are widely researched predictors of employee happiness (Xanthopoulou et al., 2012), but in the context of the fourth industrial revolution, digital skills are becoming increasingly important (Ghislieri et al., 2018). This study aimed to test the strength of the relationship between digital skills and employee happiness and life satisfaction and compare it with the effect of the main job resources.

**Theoretical background.** Job demands-resources theory proposes that individual-, job-, and organizational-level resources promote well-being by buffering against negative aspects of work and helping to satisfy employee needs. Moreover, it is well established that the extent of the impact of specific resources is not universal since their relative importance may depend on various internal and external circumstances. Rapid technological advances and the fourth industrial revolution have brought changes in how people do their work, thus possibly undermining the importance of the resources provided by the organization but highlighting the need for individual, especially digital, skills. As a result, acquiring basic digital skills for the new world of work may be a more relevant predictor of employee happiness and satisfaction than traditional job resources.

**Methodology.** For the analysis, we employed the representative data of one Central European country from the 10th wave of the European social survey. Data on employees' traditional work resources (i.e., autonomy, social support, feeling part of the team), basic digital skills (i.e., being familiar with preference settings, advanced search, and pdf), happiness, and life satisfaction were used.

**Results.** The results showed that digital skills are associated with happiness ( $r = .28$ ), and satisfaction with life ( $r = .23$ ), and this relationship changes only minimally after controlling for key demographic factors. Although the effects are not large, having basic digital skills is a better predictor of happiness and satisfaction than such job resources as autonomy, social support, and feeling part of a team. Regression analysis also revealed that digital skills predict happiness and satisfaction over and above the previously mentioned job resources.

**Limitations.** Due to the use of cross-sectional data from only one country and exclusively single-item job resources scales, the results should be interpreted cautiously and accepted as an invitation for discussion and further research. Further research should also examine the effect of a broader range of digital skills.

**Conclusions.** As the world of work changes, it makes sense to re-evaluate ideas about what makes people happy and satisfied. The results suggest that digital skills training can be just as necessary as conventional job design initiatives.

**Relevance to the Congress Theme.** The results revealed that digital skills might be as crucial as traditional job resources for happiness in the changing world of work.

Relevant UN SDGs . The study results reveal opportunities to promote the well-being of employees and are therefore relevant to the third UN SDG (Good health and well-being).

*Keywords: Digital skills, job resources, happiness*

## Career Turning Points in Extreme Contexts: A Tragedy or an Uplift

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science

Careers are described as “the evolving sequence of a person’s work experiences over time” (Arthur et al., 1989, p. 8). The term experiences imply a context in which they happen (Gunz et al., 2011). Failure to capture this significant aspect causes an incomplete picture of the career development process (Akkermans et al., 2018; Hirschi & Dauwalder, n.d.). Therefore, in recent years, many scholars have called for research on the contexts in which careers evolve (Akkermans et al., 2020; Gunz et al., 2011; Gunz & Mayrhofer, 2011; Rodrigues & Guest, 2010).

Moreover, careers rarely go exactly as planned or envisioned due to experiencing career shocks. A career shock is “a distinct and impactful event that triggers deliberation about potential career transitions such as acquiring new skills, searching for a new job, changing occupations, or retiring. The triggering event may be expected or unexpected, and may or may not induce strong emotions, but it is something that occurs at a specific time and place and impacts thoughts and feelings about your career status and future career direction” (Seibert et al., 2016, 245-246).

Different contexts might cause career shocks of various natures. The growing research on extreme contexts has recently highlighted the importance of studying such work contexts (Hällgren et al., 2018b). According to Hannah et al. (2009, p. 898), extreme contexts are environments “where one or more extreme events are occurring or are likely to occur that may exceed the organization’s capacity to prevent and result in an extensive and intolerable magnitude of physical, psychological, or material consequences to—or in close physical or psychosocial proximity to—organization members”. This definition refers to the term extreme events which is defined as having three conditions: They “must (1) have the potential to cause massive physical, psychological, or material consequences that occur in physical or psychosocial proximity to organization members, (2) the consequences of which are thought unbearable by those organization members, and (3) are such that they may exceed the organization’s capacity to prevent those extreme events from actually taking place” (Hannah et al., 2009, p. 898).

The more extreme the event, the more it may shatter one's understanding of the current situation (Stevens, 1998), resulting in critical career turning points (Hodkinson et al., 2013; Strauss, 1962). A career turning point refers to a set of experiences and interpretations that led people to either exit their current career trajectory or else move deeper into it (Arthur et al., 1989b). Whereas for some people, those turning points can be a tragedy, for others who can meet them calmly, they can lift up their career. Some turning points in the career histories of people are of little emotional importance. Hancock (2009, p. 132) referred to this type of turning point as a ‘breeze’. These turning points occur frequently but only have short-term effects. They do not trigger people to reflect upon their careers. Some turning points, however, were perceived as negative and stressful. Hancock (2009) calls such events ‘gale’ and ‘hurricane’. These turning points may occur less frequently than breezes but stimulate sudden insight into careers.

Applying the life histories methodology developed by the Chicago sociologists (Arthur et al., 1989b) and using the critical incident technique, this study aims to shed light on the extreme events which can trigger career shocks, and, in turn, career turning points for people performing in extreme contexts over time. In this study, we draw on semi-structured interviews with people working in extreme contexts (e.g., firefighters, police officers, war journalists,...).

The following research questions will guide this study: Do extreme events in extreme contexts trigger career shocks that can become career turning points for people performing in such contexts over time? If so, what is the nature of those turning points? How do turning points impact individuals' careers journey over time?

Highlighting the complexity of the role of extreme contexts, career shocks, and turning points, this study contributes to two streams of research: First, it will contribute to the research on career shocks by incorporating context into this field, which helps to understand how career shocks are contextualized. Second, it will contribute to the research on extreme contexts by analyzing how such contexts appear in people's work experiences and influence their careers.

*Keywords: Career shocks, Extreme contexts, Career turning points*

## 7-minute science 7M76

### Character strengths and well-being of earning female online influencers

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science

The study focuses on an arising new profession of being influencer, which has been not defined unambiguously in psychological literature yet and which has been weakly described empirically in terms of personal traits. Character strengths - in terms of Peterson and Seligman – are positive beliefs, emotions and intention of behaviors which lead person to a good life. Many studies revealed that high levels of character strengths leads to many positive outcomes including well-being and satisfaction, sense of calling, positive emotions, engagement, positive relationships, sense of meaning, accomplishments and many others. We aimed to examine which character strengths are distinctive for female online earning influencers. Based on assumptions driven from key characteristics of character strengths and from definition of influencers, we hypothesized that some of character strengths seems to be related with being influencer by definition, e.g. leadership, creativity, social intelligence and some character strengths seems to be important for well-being but not as much specific for the influencers.

In the study participated 125 woman aged 19-65 years old, with 66 female influencers who possessed the profile in social media, published content at least once a week, d earning money thanks to social media and self-described as a internet creator. They were compared to 59 woman who used profiles in social media but did not satisfied at least one of mentioned criteria. The t-tests revealed differences between influencers and non-influencers in leadership and in creativity, partially supporting hypotheses. Additionally, the positive correlations with well-being were found in case of leadership, creativity, social intelligence, zest, love and gratitude in both groups, and with perseverance among influencers. Strengths of correlations were higher for social intelligence and zest in case of PERMA measure and for perseverance in case of both PERMA and SWLS measures.

The study was limited to female influencers who earn by internet actions and calling themselves as creators in the Internet, so it can't be generalized for the other group of influencers. Nevertheless, it expands the knowledge about psychological characteristics and their role in well-being among female representatives in this new arising profession of social media influencers.

The study directly addresses the theme The Future is now. Contribution as it regards the competences of new arising profession.

The topic is relevant UN SDGs in the area of good health and well-being.

*Keywords: Character strengths, well-being, social media*

## Character Strengths, Resilience and their Relationship: The Study of Hungarian Leaders

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science&practice

Our research aimed to find out which character strengths are the most typical in the sample of Hungarian leaders and which strengths are related to their resilience. To explore this, we used both qualitative and quantitative methods.

The moral aspects of leadership character have been researched primarily to date, especially the leadership characteristics that best underpin ethical leadership and hence ethical leadership behaviour (Wright, 2010; Brown et al., 2005; Wright and Goodstein, 2007).

Literature to date has shown that character strengths are a much stronger determinant of resilience than personal self-efficacy, social support, positive affectivity or any sociodemographic characteristic (Martínez-Martí and Ruch, 2016). Further findings suggest that higher levels of resilience, which are more prominent in coping with stress, mental health and feelings of psychological well-being, are associated with certain character strengths (Schueller et al., 2014; Peterson, 2008).

Leaders were chosen to study the relationship between character strengths and resilience because strengths themselves play a key role in leadership performance and functioning, but the study of this has received minimal attention in previous research on this specific sample. In the VIA-IS strengths framework (Peterson and Seligman, 2004), which has become most popular within positive psychology, character strengths are included that can be assumed to be the most important signature strengths for leaders (e.g., leadership, teamwork, empathy, humanity, integrity).

A total of 250 leaders (112 men and 138 women) participated in the survey. The sampling method was random and convenience: the questionnaire was distributed electronically through different media platforms, and the only condition for completing it was that the individual had to be in a leader position.

In the study, the Resilience Factor Inventory (Reivich and Shatté (2002) and the IPIP-VIA Character Strength Questionnaire were used (<https://ipip.ori.org/HungarianVIAScales.htm>). The questionnaire battery also included an open-ended question, which was worded as follows: "As a leader, what do you consider to be your main strengths that underpin your personal leadership effectiveness? Please describe in keywords."

In our qualitative analysis, we categorised 580 content units, resulting in two main categories: the leader as a human being and the leader as a leader. 301 coded units described the leader as a person, and under this category we were able to distinguish three subcategories: interpersonal skills, personality traits, and people orientation. The other main dimension is called the leader as leader, and the four sub-categories here represent characteristics that are necessary to embody leadership. These are leadership competencies, leadership mindset, professional competence and leading by example.

Along the sample of 250 leaders we found that the virtues of wisdom and humanity came first, courage and transcendence came second, and justice and modesty came last. In terms of character strengths, gratitude, judgement, perseverance, vitality (zest) and curiosity came out on top - representing the virtue categories of wisdom, transcendence and courage respectively. These proved

to be the signature strengths of leaders, in the middle were strengths such as appreciation of beauty and excellence, hope and humour, and in the bottom were strengths such as modesty, humility and leadership.

In terms of the skills that support the leaders' resilience, self-efficacy ranked first and impulsivity control ranked last, although there is not a big difference between first and last place, indicating that leaders are applying all their resilience skills in a balanced way. Examining global resilience skills in relation to virtues and strengths, we found that leaders' resilience showed the strongest relationship with the virtues of wisdom, humanity and transcendence, and the strengths of social intelligence, hope and zest.

Our results confirm that leadership requires the co-presence of several strengths and that these can probably only be described along individual profiles; we cannot say that leaders must have this or that, but most importantly that they must have the strength of leadership. Our qualitative analysis also confirms this, as we have seen that one of the salient key dimensions describes the leader as a person. For the factors determining resilience, leaders scored lowest on empathy and highest on self-efficacy. Resilience is a skill that not only ensures that a leader can successfully cope with difficulties, but also thrive on them (Southwick et al., 2017). Our findings add to previous research on how resilience relates to the 24 character strengths and the six virtues that comprise them, along which useful interventions can be designed as part of leadership development programmes.

*Keywords: character strengths, resilience, leadership*

## 7-minute science 7M16

### **Civic happiness: a new instrument to map happiness and well-being of citizens and workers**

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science

Research goals and why the work was worth doing

In the last five years, the social climate in Italy has been characterised by resentment, vulnerability, and psychological discomfort, especially among the most disadvantaged social classes (the poor, the working poor, youth, women, immigrants, the disabled). Moreover, distrust in public institutions risks creating a gap between people's real needs and the capacity to provide concrete responses. It is therefore necessary to provide a tool that can capture the level of happiness and subjective well-being as part of a project that promotes collaboration with policy makers, organisations, and associations.

Theoretical background

The economic wealth of a nation does not necessarily correspond to the level of well-being of its citizens. Therefore, measures other than gross domestic product are needed to inform interventions for the promotion of individual and social well-being. According to the Nobel Prize Joseph Stiglitz, "What you measure affects what you do. If you don't measure the right thing, you don't do the right thing". Most instruments are based on objective indicators, whereas in Italy today there is a need for an instrument to measure happiness and subjective well-being that asks people directly about their perceptions.

Design/Methodology/Approach/Intervention

This study aims to propose a new instrument for measuring civic happiness, namely the level of psychological well-being and satisfaction with different domains of life in a given community: 1) environment and public spaces; 2) family and housing; 3) health and safety; 4) culture and access to culture; 5) youth, school and education; 6) social relations; 7) work and life-times; 8) identity, differences, and participation; 9) use of technology; and 10) seniors and aging. In relation to the work and life-times dimension, different aspects are assessed, including job satisfaction, quality of professional relationships, perceptions of gender equality, work-life conflict, and satisfaction with family-friendly local services. The questionnaire is currently under validation in the city of Turin in cooperation with the city administration and other local organisations and associations.

Results obtained or expected (if not available, it must be made clear when they will be)

To date, 2875 citizens have completed the questionnaire and we aim to reach a representative sample of 5000 participants by November 2022. The preliminary analysis shows good psychometric properties for all dimensions. Furthermore, an investigation of the relationship between happiness, subjective well-being and each dimension is possible, including those related to work and life-times.

Limitations

The data are self-reported and the research is designed as a cross-sectional study in this first phase; however, a longitudinal investigation is possible in the future.

Conclusions

This project has important practical implications as it was set up with the aim of providing public institutions, local organisations, and policy makers with evidence-based information on citizens' happiness and subjective well-being to guide their interventions. It is one of the few tools that is entirely based on people's perceptions and allows mapping the level of happiness in different neighbourhoods.

#### Relevance to the Congress Theme

The project contributes to addressing some pressing issues of our time, including social change, sustainability, and inclusion.

*Keywords: happiness, well-being, social change.*

## 7-minute science 7M149

### **Congruence in perceptions of mental health and organizational performance interdependency: A two-wave study of top, middle and line managers**

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science&practice

Research goals and why the work was worth doing/Motivation

There are indications that managers at different managerial levels differ in their perceptions of the links between mental health and performance and how they are enacted in their organisation. There is thus a risk that challenges and problems relating to integrating mental health and performance may remain unresolved. This work is central to a deeper understanding of why workplaces have difficulty preventing mental health and ensuring sustainable work.

Theoretical Background

The interdependence between mental health and performance is widely acknowledged. Accurate knowledge of that interdependence is of great importance for employers' practice and for achieving sustainable management. However, failing to support mental health and performance in tandem substantially affects human resources, financial, and productivity costs and is unsustainable. Despite the research[KMM1] on the interdependence between mental health and performance, less attention has been paid to how managers across different levels perceive the link. Hence, additional research on managers' perceptions of mental health-performance interdependency is warranted. The main objective of this two-wave study was to explore Danish managers' perceptions of the interdependency between mental health and performance and to compare these perceptions across managerial levels to identify potential differences.

Pertaining to our objective, we hypothesized that: There are group differences among managerial levels in their perceptions of the impact of well-being on the overall performance of the organization (self-perceptions) (three managerial levels: top, middle, line) (Hypothesis 1) . Following this, we hypothesized: There is an interaction between managerial level and Gender / Age / Educational background / Sector / Type of Industry/Business / Number of employees in the company in this relationship . Finally, conducting the study during the COVID-19 pandemic, we wanted to investigate whether the crisis influenced this understanding. Consequently, we hypothesized: The COVID-19 pandemic has/has not altered this relationship.

Design

Over two waves, survey data were collected from members of the Association of managers and Executives[CI2] in Denmark (N 1 =2211, N 2 =1520) as part of a more extensive annual survey. To assess managers' perception of interdependency, we presented this statement: I believe that employee well-being has an impact on the overall performance of the organization (Statement 1). We used a Likert-type scale (1 strongly disagree to 5 strongly agree) to record the responses. Demographic variables measured included gender, age, management level, educational degree, company size, sector (public-private), and industry. Data was collected in August 2020 and December 2021.

Results

The two surveys allowed us first to explore Danish managers' perception of the link between mental health and organizational performance and second to explore whether there are group differences among managerial levels in their perceptions of the impact of well-being on the organization's overall performance. First, the analysis reveals that managers agree that mental health and performance are interdependent. Second, the study also shows that the management level does not influence the perception of interdependence. Consequently, the perceptions are congruent across the managerial levels. Finally, the perception of interdependence remains unaltered during the pandemic.

#### Limitations

While the strength of this study is the unique focus on managers at different levels and their perception of mental health and performance, the study has some limitations. First, the study is a Danish study. However, it is also highly representative of the population of managers in Denmark and speaks to the hierarchy of managerial levels across organizations worldwide. Therefore, we are confident that the primary relationships and findings will apply to non-Danish managers. Second, both data rounds were collected during the COVID-19 pandemic. Although the pandemic may have changed managers' attitudes toward mental health and performance, the managerial hierarchy has not changed. Therefore, the congruence or disagreement in beliefs across managerial levels is likely to apply regardless of the pandemic. Finally, we propose a more nuanced survey to examine attitudes and seniority levels using validated attitudinal scales.

#### Conclusion

There is consensus on the interdependency of the mental health and organizational performance relationship across management levels in Danish enterprises, but also some points of disagreement. These are worth exploring. The next step will be to investigate managers' stress management intervention approach and whether they experience that they have the tools and programs available to solve the mental health challenges and prevention.

*Keywords: sustainable management, stress prevention, managers*

## 7-minute science 7M187

### **Contributing factors to sustainable employability and work engagement of physicians in a hospital setting**

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science&practice

#### Research goals

In the past decades the health care sector in Western countries has been facing multiple challenges like an increased workload, a growing complexity of care, growing costs and an aging and declining labor force. This negatively impacted the health and wellbeing of physicians, who reported higher levels of burn-out, sickness absenteeism and turnover intentions. In addition, a rising number of physicians decide to leave their jobs and upcoming physicians quit their traineeship. To maintain the quality of care and the accessibility of the healthcare in general it is important to gain a deeper understanding of what promotes sustainable employability of physicians. Previous literature shows that both individual factors such as psychological capital and work context factors such as team climate are potential antecedents of sustainable employability or work engagement. In addition, the achievement of personally meaningful work values and work is an important construct to look at.

This study aims to contribute to this understanding and focusses on the following research goals: (1) to explore which individual and work context factors are associated with work engagement and sustainable employability amongst physicians in a hospital setting, and (2) to examine the association between the capability set for work and more traditional operationalizations of sustainable employability.

#### Theoretical Background

Despite the emerging research on mental health and wellbeing of healthcare professionals, previous research mainly focuses on contributing factors to negative work outcomes, such as burnout and turnover intention. Less is known about the contributing factors to the positive opposite of this continuum: work engagement and sustainable employability. The capability approach suggests that people differ in the aspects of work that give them positive (or negative) energy. Importantly, if people are able (themselves) and enabled (by others) in realizing the aspects they find valuable and get positive energy from in their work, they are more likely to stay intrinsically motivated, engaged and able to cope with job demands and stress. Therefore, individual meaningful work values are important to explore since they can play a crucial role in helping physicians to stay sustainably employable.

#### Design and methods

A cross-sectional survey study was conducted among 250 physicians working in a general hospital in the Netherlands. Main outcomes variables were work engagement (UBES) and sustainable employability (various operationalizations). Independent variables were individual factors (psychological capital) and work context factors: team climate (Team Climate Inventory) and feeling appreciated at work. Valuable work was measured with the Capability Set for Work Questionnaire. Correlations and regression analyses will be conducted as well as multivariable regression analyses controlling for age, gender and job type.

#### Results

Results will be available by the end of 2022.

Conclusion – research and practical implications

The study will contribute to the understanding of which factors are associated with keeping physicians engaged, happy and healthy at work. Because of the cross-sectional nature of this study no causal relationships can be determined, this should be should be recognized as limitation.

Relevance to the Congress Theme [The Future is now: the changing world of work]

The study aims to explore contributing factors of sustainable employability and work engagement in physicians.

Relevant UN Sustainable Development Goals

Good health and wellbeing.

Keywords: *Sustainable employability, work engagement, work values*

**7-minute science 7M148**

**Control Versus Feedback provision: HR Attributions for monitoring, privacy violations and their relationship with Well-being, job meaning & motivation**

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science

## Research goals and why the work was worth doing

The study aims to explore how monitoring employees' digital activities shape employee HR attributions and feelings of privacy violation. In addition, we explore whether privacy violations mediate the impact of monitoring attributions on negative well-being, job meaning, and work motivation states.

## Theoretical background

We explore a range of attributions based on Nishii and Wright's (2008) HR attribution framework. Specifically, we examine the extent to which perceived privacy violation is determined by employee beliefs that the organisation monitors workers for: feedback provision, information gathering for planning, legal and compliance requirements, to control workers' performance, and/or industry norms as potential attributions on feelings of privacy violation. We also draw on self-determination theory (Gagne et al., 2014) to consider the impact that control versus feedback attributions are likely to have on well-being, job meaning, amotivation, and external (social) versus intrinsic work motivation states.

## Design/Methodology/Approach/Intervention.

We utilised 3 waves of survey data collection (1 month time gaps) with an online sample of workers sourced from Prolific, preselected on the basis that they work in jobs that digitally monitor and present metrics of performance. After filtering out workers who indicated that they believed that they were not being electronically monitored, we analysed a 3-wave sample of 169 workers using latent variable mediation analysis. We ensured that IVs, mediator, and outcomes were temporally separated (T1, T2 and T3 respectively).

## Results obtained

We find that the more "soft HR" attributions of feedback provision with monitoring help negate employee perceptions of privacy violations, whereas "hard HR" attributions of control contributes to feelings of privacy violations. Greater privacy violation perceptions were associated with less well-being and more amotivation, and showed a negative relationship with job meaning and intrinsic motivational states (known to be related to positive employee outcomes). Both feedback attributions and control attributions have indirect relationship with lower levels of well-being, work meaning and intrinsic motivational states via feelings of privacy violation. Control attributions and norms of monitoring both have direct relationships with external (social) motivational states, control being a positive relationship and monitoring norms being negative.

## Limitations

The main limitation is the sample size, which reduced through longitudinal dropout and many of the sample were unsure whether or not they were being monitored. Also, online panels may be more prone to a bias since respondents are paid for participation.

## Conclusions – research and or practical implications/Originality/Value

With the increased use of electronic monitoring, where organisations are seen to be monitoring as a way to control worker output or productivity, this will foster feelings of privacy violations that are likely to lead to a sense of external (social) rather than intrinsic motivational states. More control-based attributions will also be likely to reduce employees' perceived job meaningfulness and also foster negative well-being states. However, where monitoring is conducted to help provide feedback on employee activities, employees may respond positively rather than negatively.

#### Relevance to the Congress Theme

The paper fits the conference themes of engagement and motivation (5) as well as organisational design and development (8) specifically job characteristics and job design.

#### Relevant UN SDGs

Monitoring has the potential to have a damaging impact on employee well-being; over-monitoring to control employees can be considered irresponsible and unsustainable management of human resources, care must be taken if employees are to be monitored to avoid negative outcomes and ensuring that organisations provide decent work conditions.

*Keywords: Electronic Monitoring, Motivation, Well-being*

## 7-minute science 7M179

### **Corporate social responsibility (CSR), justice and organizational cynicism: A fairness perspective on the imbalance of internal and external CSR**

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science

Research goals and why the work was worth doing

In research and in practice, it is common sense that corporate social responsibility (CSR) has a positive impact on employees as numerous meta-analyses show. However, it is interesting to know under which circumstances CSR can have a negative impact on employees and if CSR can create feeling of unfairness and evoke organizational cynicism.

Theoretical background

In the research field of CSR, it is established that employees feel treated fairly when their organization engages in CSR, either when witnessing others being treated fairly (external CSR) or when they profit from CSR themselves (internal CSR). Building on this research, we hypothesize that this will only be the case when CSR initiatives are balanced. When external CSR is comparatively high to internal CSR, we assume that employees will feel treated unfairly and will show organizational cynicism. Contrary to the fact that procedural justice is more often studied than distributive justice, we regard distributive justice as more relevant to CSR than procedural justice and hypothesize that effect sizes will be stronger for distributive justice.

Design/Methodology/Approach/Intervention

A total of N = 116 employees participated in our correlational online study. We assessed internal and external CSR as the independent variables and distributive and procedural justice as well as organizational cynicism as dependent variables. Reliability ranged from  $\alpha = .76$  to  $\alpha = .95$ . We investigated the fit between internal and external CSR using polynomial regression analysis and response surface analysis.

Results obtained

Applying regression analysis, we found that internal CSR was positively associated with distributive and procedural justice and organizational cynicism. Polynomial regression analysis yielded the following results: Employees experienced less distributive and procedural justice when external and internal CSR were incongruent (imbalanced). A visual and statistical examination showed a curvature on the incongruence line of internal and external CSR for distributive justice, but not for procedural justice. Coefficients of the interaction effect were larger for distributive justice ( $b = -.449$ ,  $p = .011$ ) than for procedural justice ( $b = -.139$ ,  $p = .164$ ). The interaction effect was not significant for organizational cynicism.

Limitations

The investigation was correlational and does not allow for causal interpretation. However, the research design is adequate, as this is one of the first studies in the research area of incongruence between internal and external CSR.

Conclusions – research and or practical implications/Originality/Value

Concerning theory, we promote the previously neglected role of distributive justice. CSR can be regarded as an allocation of resources and may therefore be strongly linked to distributive justice. Concerning practice, we recommend organizations to aim for a balance of internal and external CSR to counteract potential negative effects of CSR. Using a fit approach and response surface analysis is a novel statistical approach in CSR research.

#### Relevance to the Congress Theme

This study is relevant to the congress theme “The Future is Now – The Changing World of Work”, because CSR is highly relevant not only for environmental sustainability, but also social justice. By means of CSR, organizations can contribute to sustainability in the future.

#### Relevant UN SDGs

By means of CSR, organizations can contribute to the UN SDGs. The extent depends on their area of operation, as CSR initiatives are organization-specific. Potentially, CSR can contribute to the following SDGs: no poverty, quality education, decent work and economic growth, reduced inequalities, responsible production (external CSR) and good health and well-being as well as gender equality and decent work (internal CSR).

*Keywords: corporate social responsibility; justice; cynicism*

## 7-minute science 7M55

### Corruption and System Justification - Literature review based on PRISMA Methodology

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science&practice

#### Research goals

Corruption has been the subject of research for decades in economic, political, sociological and psychological terms. In view of the negative consequences of this protean social object, much work has been done to assess attitudes towards the phenomenon of corruption, with a favourable attitude being a predictive marker for acting out.

The assessment of attitudes towards corruption is multifaceted. It covers its affective, cognitive and conative dimensions, and the targets of the assessment are themselves varied. Actors, the phenomenon, the perception of its prevalence, the intention to act, to vote for a corrupt politician or to report corruption are only a sample of the elements assessed and grouped under the generic term "attitude towards corruption". As corruption itself can be active or passive, of public or private origin, and take different forms, it is also difficult to define the phenomenon.

Over the last decade or so, only a few studies have sought to explore the links between system justification and corruption. This approach is interesting because it offers a new understanding of the status quo in societies where corruption is perceived to be widespread.

We aim to provide a state of the art of studies on system justification and attitudes towards corruption.

#### Theoretical background

System Justification (Jost et Banaji, 1994). According to this theory, people are motivated (to varying degrees, depending on situational and dispositional factors) to defend, support and justify aspects of existing social, economic and political systems. This theory proposes that this active support is often done by denying or rationalising injustices and other problems, even if this is at the expense of the personal and collective interests of the people concerned.

PRISMA Methodology Page, M.J., McKenzie, J.E., Bossuyt, P.M. et al. 2021. The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) statement, published in 2009, was designed to help systematic reviewers transparently report why the review was done, what the authors did, and what they found. It should be done to ensure a systematic review is valuable to users.

#### Design/Methodology/Approach/Intervention

In the framework of the PRISMA method, we consulted 3 databases (PsycArticles/PsycInfo, Web of Science and Google Scholar) in order to aim at the exhaustiveness of scientific resources dealing with corruption and the justification of the system. Our query was "Bribery" OR "Corruption" AND "System justification". We then carried out a systematic review of all peer-reviewed articles in English and French in order to produce a synthesis of the state of research.

#### Results obtained or expected

The objective of this study is to produce a synthesis of the state of research. The results of this synthesis will be available in January 2023.

## Limitations

Several factors limit the comprehensiveness of our research. We consulted 3 major databases, but these may not contain all of the world's research on the subject. Our inclusion criteria are limited to journal articles in languages we are fluent in, i.e. English and French, which may also limit our resources.

## Conclusions

Our work produces a state of the art of research on the links between system justification and attitudes towards corruption and contributes to a better understanding of the phenomenon. This comprehensive and unprecedented state of the art will facilitate future research, both practical and theoretical.

*Keywords: Corruption, System-justification, PRISMA*

## 7-minute science 7M91

### **Creating a compassionate work environment for grieving employees: The role and experiences of supervisors**

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science&practice

#### Research goals:

The goal of this study is to examine how supervisors can support an employee suffering from the death of a loved one in a compassionate way and how organizational initiatives can support supervisors in creating a compassionate work environment. Research on compassionate workplaces has already demonstrated the positive effects of experiencing or showing compassion for both the suffering employee as well as the compassion providers and organization (Dutton et al., 2014). However, we lack insights into how supervisors—often the designated formal contact for suffering employees—can foster such a compassionate work environment and how organizations can stimulate or hinder this through collective processes.

#### Theoretical background:

Within organizations, compassion refers to the interpersonal process of noticing another employee's suffering, feeling the pain, and responding to alleviate the suffering (Kanov et al., 2004). Experiencing compassion stimulates the grieving and recovery process, and strengthens the employee's feelings of being valued by and commitment to the organization (Dutton et al., 2014, Grant et al. 2008, Strauss et al., 2016). Supervisors play a focal role in the compassion experience, however, creating a compassionate work environment also requires processes of collectively noticing, feeling, and responding to suffering (Gilbert et al., 2021; Kanov et al., 2004). In this study, we examine how supervisors engaged in compassionate responding to suffering employees, and how organizational processes challenged or hindered them to respond (more) compassionate.

#### Methodology:

We will interview 25 supervisors who have been confronted with an employee who lost a loved one in the past 5 years. Using a narrative interview technique, we will first ask participants to share their personal experience with us, followed by questions elaborating on their personal actions and the collective processes and initiatives (or the lack thereof) supporting or hindering them in creating a compassionate work environment.

#### Results obtained or expected:

The first interviews are scheduled mid-November. Our data collection will be finished mid-February, the data analyses and reporting will be done from February to April. We are confident that we will be able to present our final findings at the EAWOP conference.

#### Limitations:

Although compassion at work is an interpersonal process occurring between members of the organization, we can only provide insights from the perspective of one actor in this process (supervisor), whereas it would be interesting to combine this with that of the suffering employee, colleagues and the organization.

#### Conclusions:

Almost all employees are confronted with the death of a loved one throughout their career. This situation inevitably influences the way they feel and function in general and at work. Many organizations and supervisors already acknowledge this. However so far, compassion often displays at the individual level as a result of personal initiatives. It remains unclear how organizations can stimulate a compassionate work environment with collective processes of compassion. Our study aims to contribute to this knowledge and provide policy advice.

Relevance to the Congress Theme:

Our study provides insights into how organizations and supervisors can support the mental well-being of employees who lost of a loved one, a situation that unfortunately affects almost all employees at some point in their career.

*Keywords: compassionate workplace, employee well-being, employee support*

## 7-minute science 7M147

### **Deleting and organizing irrelevant files can improve concentration and work performance – but only when people are able to mentally let them go.**

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science

Research goals and why the work was worth doing

In view of the steadily growing amount of digital information and data files, organized work environments are important to quickly access important information and easily find one's way. However, it is still unclear how the process of organizing the digital work environment can contribute to mental relief in the short term, and whether it is depending on individual abilities to mentally detach oneself from deleted objects. Therefore, the present study aims to shed light on immediate consequences of deleting and sorting files on mental effort, concentration, and work performance in daily working life. To consider individual differences in dealing with ruminative thoughts, the individual ability to control thoughts is also considered.

Theoretical background

Being surrounded by and having to work with large amounts data files is a challenge many employees are facing in the increasingly digitized and complex world of work. Systematic organization of the work environment and avoiding clutter – that is, regularly sorting and deleting data files – are therefore important strategies which prevent distractions and enable focused work. However, the process of sorting and deleting files alone might not be sufficient to achieve positive consequences: Following the concept of distributed cognition, which proposes that cognition is routed both inside and outside the individual and that these domains are connected (Hutchins, 1995), both external (i.e., organizing the environment) and internal (i.e., controlling related thoughts) factors need to be addressed. We assume that it is important to not only delete and file irrelevant documents, but also to stop related ruminative thoughts in order to improve concentration and focused work. People having difficulties in controlling their thoughts might tend to re-think their decisions and not be able to mentally detach – with a potentially negative impact on concentration, mental effort, and work performance.

Design/Methodology/Approach/Intervention

To assess the individual ability to control thoughts, participants ( N = 158) initially performed the think/no-think laboratory task (Anderson & Green, 2001). After that, participants participated in a five-day experience sampling study. During their working time, they were randomly prompted three times per day and asked questions about their sorting and deleting behavior in the past 30 minutes, about their current ability to concentrate, current mental effort, and current work performance.

Results obtained

Data from 1,476 questionnaires were analyzed using a multilevel modeling approach. Analyses showed that having deleted files did not relate to concentration, mental effort, and work performance, but sorting files was associated with higher work performance ratings. However, we identified several cross-level interactions between the individual ability to control thoughts and deleting and sorting behavior in the workplace: When people were less able to suppress unwanted, distracting thoughts, deleting files resulted in higher mental effort, and lower task performance compared to people with a higher ability. A similar pattern of results was found for sorting files:

People with lower thought control ability did not benefit from sorting files, whereas people with higher thought control ability reported better concentration and work performance.

#### Limitations

The main limitation of the study is that all dependent variables were based on one-item self-report ratings.

#### Conclusions – research and or practical implications/Originality/Value

Our study shows that organizing one's work environment can be beneficial for concentration, mental effort, and work performance – but only when people are able to stop subsequent post-decisional thoughts. These findings highlight the need to consider not only external (i.e., organizing the environment by deleting and sorting), but also internal (i.e., controlling related thoughts and stopping rumination) factors in the organization of work environments. Thus, multifactorial interventions (e.g., also providing cognitive trainings when establishing deleting routines) are needed when trying support people working in cluttered work environments.

#### Relevance to the Congress Theme

The world of work is changing and becoming increasingly complex. To prevent overload, it is important to understand how people deal with these changes, and how they can be appropriately supported in actively structuring and organizing their work environments.

#### Relevant UN SDGs

The study addresses two of the UN SDGs: By providing research results for further individual recommendations and interventions in dealing with complex, overloaded work environments, we 1) help to improve good health and wellbeing of employees, and 2) contribute to more decent work and economic growth by making organizational procedures more manageable and efficient.

*Keywords: work organization, work environment, thought control*

## **DEVELOPMENT AND VALIDATION OF THE “POSITIVE ORGANIZATIONAL CULTURE SCALE (POC-S)” AND ITS RELATIONSHIP WITH WORK WELLBEING**

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science

**Research goals and why the work was worth doing:** The main objective of this study is to validate a positive organizational culture scale (POC-S) based on prosocial behaviors and, subsequently, to analyze the relationship of its factors with the variables that make up the block of healthy employees (well-being) of the HERO model (mental competence, emotional competence, efficacy beliefs, work engagement, resilience, optimism, burnout, vertical trust and horizontal trust). The POC-S is made up of 48 items that reflect prosocial behaviors. In this way we could obtain information about how both the amount of prosocial behaviors characterized the organizational culture and what type of these influence the most the well-being of workers.

**Theoretical background:** There are some approaches that allow arguing and giving theoretical shape to the construct of Positive Organizational Culture (COPo) as the proposed by Luthans (2002): positive organizational behavior, being this “the study and application of positive psychological capacities and human resource strengths, which can be measured, developed and managed effectively to improve performance in the workplace”. On the other hand, the HERO Model (HEalthy & Resilient Organization) refers to Positive Organizations that are characterized by the conjunction of health and resilience (Salanova et al., 2012; Salanova, Llorens & Martínez., 2019). If we define the attributes of culture as observable behaviors, it could conceptually fit into this model as organizational practices. In any case, it is also necessary to classify behaviors with a positive culture. The model does make it possible to empirically contrast which indicators of well-being it is related to and what is the degree of this incidence.

**Design/Methodology:** This study is part of a larger project consisting of a quasi-experimental field study using a three-stage longitudinal design in an automotive company in Valencia (Spain). At the moment, we have the results of time 1, which allows us to carry out a cross-sectional analysis for the validation of the POC-S and its relationship with occupational well-being. The construction of the POC-S began with the qualitative analysis of the company's values through inter-judge evaluation, which consisted in the extraction of psychological variables (empathy, recognition, organizational justice, trust, proactivity, curiosity, optimism, among others). The 48 resulting items have been grouped, for the moment, into the eight categories that represent the company's values. Data will be analyzed by R software by Factorial Confirmatory and Structural Equation Modelling Analyses to test mediation and moderation effects with resources and demands variables of HERO.

**Expected Results:** We hope to obtain the validation of the scale and a final structure of the POC-S through the application of the pertinent psychometric analyzes (establish the number of categories and the final number of items). It is also expected to obtain a directly proportional relationship between Positive Organizational Culture (behaviors) and Organizational Well-being through linear regression models [SLG5] [AOV6]. Work demands and work resources will act as moderators in the interaction between the two variables mentioned above. These results will be made in March 2023.

**Limitations:** First, placing the POC-S at the end of a survey made up of other questionnaires may have generated a certain acquiescence bias. It would be analyzed. Second, the current items are not grouped into categories based on any scientific criteria. Although they are grouped into eight categories, the information will actually be treated as a single block of 48 items. Finally, the collected

data belongs to only one organization. However, this limitation can be overcome by considering the very heterogeneous composition of the sample (12 departments with very different functions) and its size (2455 employees).

**Conclusions:** The validation of the POC-S based on prosocial behaviors will be a resource that allows knowing the organizational culture and the state in which the organizations are from a more approachable and specific perspective. The study of the relationship between organizational culture and organizational well-being, as well as its mediators (demands/resources), will allow us to know how to address possible positive psychological interventions that can improve the organizational culture towards a more positive perspective.

**Relevance to the Congress Theme - "The Future is Now":** As researchers of organizational well-being, it is our duty to provide tools with which we can measure and generate a subsequent change for the better in organizations through positive psychological interventions in the real context. The world of work is evolving at breakneck speed, and we must be prepared to know the state of psychosocial health of employees and how to safeguard or improve it, always taking into account the context of each organization.

*Keywords: organizational culture, positive psychology, prosocial behavior*

**Do you remember? Exploring employees' nostalgia after mergers and acquisitions**

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science

Mergers and acquisitions (M&As) are frequent, but many fall short of their goals, mostly due to human factors. It is thus critical to understand M&A success from the perspective of employees. M&As imply discontinuities between past and present, requiring temporal approaches. Moreover, research on employee reactions lacks emotional perspectives. We propose that nostalgia plays a key role as a sense-making, continuity-maintaining emotion. It is defined as feeling sentimental about an appreciated, affectionate memory, and can have important benefits such as instilling a sense of continuity between past and present. However, when experienced at a collective (e.g., national) level, nostalgia can lead to the exclusion of other groups. The role of nostalgia in M&As is unknown, but we assume that it may help maintain continuity and sensemaking, but when experienced as a group member (collective), it may harm post-merger identification, a key variable for M&A success.

We took an ideographic approach, by interviewing employees and managers about their experiences. Twenty-seven interviews were conducted with people whose organizations underwent an M&A at least two years ago. The semi-structured interview guide included questions regarding nostalgic memories evoked in M&As, whether they are primarily individual or collective, to what extent interviewees identify with the post-M&A organization, and how they envision their current situation. The textual corpus was subjected to a six-stage thematic analysis, taking an abductive approach. The analysis showed six overarching themes: 1) gains and losses, 2) identification; 3) intergroup factors; 4) other risk or protection factors; 5) first reactions; and 6) nostalgia. Nostalgia was an important theme, appearing in all interviews. Participants evoked cherished moments pre-M&A, especially for those experiencing more changes and taking a negative view of the M&A. Nostalgia was often collective. An example of individual nostalgia was missing the autonomy in decision-making they had prior to the change, whereas collective nostalgia included missing past organizational traditions. Participants used nostalgia in difficult moments (when under stress at work) and saw it as bitter-sweet: comforting but tying them to the past.

Interestingly, managers saw nostalgia as unacceptable and unprofessional because it was perceived to diminish employees' availability for new organizational realities, whereas employees saw it as a positive refuge to deal with changes and guide future decisions. This mismatch can have important consequences for allowing employees' necessary sensemaking. However, only three interviews captured managerial/decision-maker participants and their perspectives, which is an important limitation of the study.

Nevertheless, this work is an important first step towards understanding nostalgia in M&As and guiding good practices such as new administrations maintaining social events, and managers allowing for planned celebrations of the past. In the scope of the EAWOP 2023 conference, the future of work in the face of change involves looking at the past, allowing it to be used as part of organizational management strategies in the quest to reduce resistance to change. This ultimately contributes to UN sustainable goal 8 (decent work and economic growth): By promoting the success of growth strategies such as M&As, innovation goals are more likely to reach their potential, and economic prosperity is fueled.

*Keywords: mergers & acquisitions; nostalgia; identification*

## 7-minute science 7M59

### Does a Planned Day Make a Creative Day?

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In this study, we examine whether a planned day is likely to be a creative day. We build on the daily diary study by Parke et al. (2018) that showed that planning enhanced performance, and refine it theoretically and methodologically. We add a different mediator and creativity as an additional outcome variable. We conduct the study among three randomly assigned groups: 1) one that is asked about planning in the morning, as in the original study, 2) one that is not asked about planning, to assess possible reactance, and 3) one that is asked about daily goals in the morning and their completion in the evening, to introduce more specific time management.

Parke et al. tested engagement as a mediator in the relation between daily planning and performance, and included interruptions as a moderating influence. We propose that instead of engagement, control of time is a theoretically more accurate mediator. Control of time implies feeling autonomous and confident about the use of time. Although both engagement and control of time imply a better focus, only control of time would follow from planning and dealing with interruptions. Engagement was measured as a combination of the willingness to exert effort, and cognitive and emotional energy. This is too unspecific in our view, and would not directly follow from using time management.

Additional to the self-rating of performance, we add creativity as a dependent variable. Building on the idea that control of one's own time in combination with feeling energetic enhances daily creativity, we include daily energy as a moderator in the relation between control of time and creativity.

240 participants (80 per group) will respond in a diary study over two weeks in the morning and afternoon (i.e., expected N = ca. 4800 data entries). Multilevel analyses will be conducted. The results are expected in December.

Limitations of the diary study apply, such as the self-ratings of performance, and possible effects of repeated answering over the days.

Our study will help to refine theory and, following from it, offer more specific practical advice. First of all, engagement is different from control of time. For example, engagement would imply being enthusiastic to cooperate, but control of time could mean shielding one's own time from others. Second, we answer the practical question whether daily goal setting might be a better strategy than asking people to plan. Third, we include creative performance as an outcome variable to examine whether a planned day is a creative day.

The future of work is likely to involve more flexibility in time and place, requiring more autonomy and new solutions from employees. Time management may help them to regulate their work, stay in control, completing more goals and staying energetic and creative.

Experienced shortage of time is an important factor in lower wellbeing at work, as many struggle to get things done. Provided that task design is enhanced and decent work is requested, time management may play a role in gaining more control. This study helps to provide advice about daily time management and the importance of staying energetic and mentally healthy.

Keywords: *time management, creativity, wellbeing*

## 7-minute science 7M24

### Does Background Type and Blurring Affect Performance Ratings in Video Interviews?

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science&practice

**Goals:** Asynchronous video interviews (AVIs) have become increasingly popular as alternatives (or complements) to more traditional face-to-face interviews. Yet, AVIs research has been largely focused on applicant reactions or behaviors, and we still know very little about how applicants are rated or the presence of biases. Importantly, because AVIs afford applicants the flexibility to record responses from their homes, elements visible in their background could influence raters' judgments and represent a new source of bias. This study examines whether raters' initial impressions and final ratings differ if applicants record their AVIs from a home-office, a bedroom, or use background blurring settings, as well as the role played by response quality.

**Theoretical Background:** Meta-analytical evidence suggests that applicant performance ratings are lower in technology-mediated vs. face-to-face interviews (Blacksmith et al., 2016). In AVI specifically, raters' initial impressions and final judgments can be influenced by applicants' appearance (Suen et al., 2019; Torres & Gregory, 2018). In addition, because most AVIs are recorded from applicants' homes, their surrounding environment (e.g., which room they are in, but also items like artwork, posters, etc.) becomes visible in the background of their video recordings, which may introduce unique forms of bias (Lukacik et al., 2022). This could be explained the dual-process framework for interview bias (Derous et al., 2016), which suggests that interviewers' initial impressions of applicants considered as "stigmatized" are influence by automatic processes (cognitive scripts, heuristics, and stereotypes).

**Methods:** We recruited 276 Prolific respondents with prior hiring experience. Participants were randomly assigned to one of six conditions in a 3 (office vs. bedroom vs. blurred background) x2 (high- vs. low-quality responses) between-subjects design. They watched a short introductory video of a male candidate and rated initial impressions. Next, they watched five video responses of the candidate (60-to-90 seconds each), and rated the candidate's overall interview performance.

**Results:** We tested a moderated-mediation model using Hayes' (2022) PROCESS macro (Model 15). Final interview scores were positively associated with both initial impressions and applicant response quality. Yet, background type or the use of blurring were not associated with initial impressions or final interview scores.

**Limitations:** This study involved a simulated selection with an actor playing the applicant role and online panel participants. The high/low-quality response scripts were very polarized, and made it easy for raters to judge the applicant as (un-)qualified. Perhaps video background plays a larger role when responses are of average quality, with more room for interpretation.

**Conclusions:** Recording an AVI in a bedroom was traditionally described as inadequate in popular media and research. Our findings might reflect changing normative behaviors and perceptions of AVI background due to the COVID-19 pandemic.

**Relevance:** This study is directly relevant to the congress theme "the future is now" because it examines AVIs, which an increasingly popular technology to select employees. It also contributes to the UN Sustainable Development Goal of "reduced inequalities" by showing that some of applicants

(e.g., from lower socio-economic status groups) can use blurring features to help “level the playing field”.

*Keywords: Asynchronous video interviews, bias, interview performance*

## 7-minute science 7M82

### **Does distributed leadership deliver on its promise? A moderated mediation model of innovative work performance and job satisfaction**

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science

#### Objectives and theoretical Background:

Distributed leadership is extensively used in schools in order to distribute managerial workload and to increase efficiency of work coordination. Current data shows that distributed leadership is positive related to teachers and principals work satisfaction and work commitment. But in the same time the present literature did not comprehensively investigate the mechanisms that could explain the beneficial or detrimental effects of distributed leadership. Research to date showed that different sociocultural context subscribe to different ways of understanding and applying distributed leadership. Also, using the same approaches in various context it not necessarily leads to same results, but may provide diverse results, including negative effects on leaders, teachers and principals in schools.

Our hypothesis is that distributed leadership may be a double edge sword because it may reduce the distinctiveness of the organization and as a consequence can reduce organizational identification . Reducing organizational identification can impact work performance or job satisfaction .

#### Design and hypothesis:

Our study design is cross-sectional, we surveyed a sample of 2158 school teachers in different regions of Romania, with an average age of 42,8 years old and 245 of them were males. An online survey was distributed among different schools and the teachers were asked to complete it. As control variables we have asked participants to report their gender, age and work experience expressed as the number of years of work experience.

In our paper we tested a moderated mediation model between teachers distributed leadership, job satisfaction and innovative work performance. To explain better the relationship between these variables we used organizational identification and empowerment as mediators, dependence and distrust as moderators.

#### Results:

Our results show an indirect association between distributed leadership and innovative work behavior, partially mediated by empowerment and organizational identification. The indirect association between distributed leadership and job satisfaction is fully mediated by organizational identification and empowerment.

#### Conclusions and limitations:

Considering our findings, we think that distributed leadership is not necessarily leading to better job satisfaction or work performance, like most of the literature shows. In other words, we propose that any leadership practice must consider the culture of the country and another sociological contexts. Some limitations of our study is the transversal design and one single item scale used in the survey.

#### Relevance:

We think that our article is relevant because it addresses the future of using distributed leadership as a practice in schools. Most of the literature shows a lot of benefits by using distributed leadership practice, but we want to show the other part of the coin. Sometimes distributed leadership can be harmful for job satisfaction or innovative work performance. Also we explain the relations and mechanism of our findings by using individual and also school variables.

*Keywords: Leadership; Distributed Leadership; Schools*

## 7-minute science 7M38

### Effects of Inclusive leadership on subordinates daily job crafting

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science

This study aims to investigate the impact of inclusive leadership on day-level job crafting. While the effects of job crafting have become clearer through many previous studies and meta-analyses, research on leadership that promotes job crafting remains insufficient. In addition, most job crafting research has been conducted to identify interpersonal differences, with few detailed studies examining intrapersonal day-level variations. Therefore, it is unclear whether managers can promote job crafting by changing their behavior toward subordinates. This study is the first to focus on inclusive leadership, which is attracting increasing attention in today's society, where collaboration among diverse human resources is required, and to examine its impact on job crafting, including at the day level. Based on the Conservation of Resources (COR) theory and its related theory, the broaden-and-build theory, this study aims to clarify the mechanism by which supervisors' inclusive leadership promotes job crafting through employees' positive affect. Supervisors' inclusive leadership and provision of situational resources in the workplace to their employees may lead to an increase in the positive affect of employees' own personal resources. In addition, according to the broaden-and-build theory, positive emotional states can expand an individual's repertoire of momentary thoughts and actions and build lasting personal resources, ranging from people's physical and intellectual resources to psychological and social resources. Therefore, positive emotions are expected to lead to expansive and positive employee behaviors. Thus, positive affect encourages job crafting. We conducted a survey of 102 employees working in Japanese consulting firms using a pre-survey questionnaire and a 5-day diary survey. We conducted a Multilevel Structural Equation Model analysis using data from everyone. In the person-level analysis, the results revealed that inclusive leadership was positively related to high positive affect, and high positive affect was positively related to three types of job crafting (increasing challenging job demands, increasing social job resources, and decreasing hindering job demands). Note that person-level inclusive leadership had no direct effect on the three types of job crafting. Second, the day-level analysis revealed that inclusive leadership had an effect on two types of job crafting via positive affect: increasing challenging job demands and increasing social job resources, however, had no effect on decreasing hindering job demands. Moreover, the results revealed that day-level inclusive leadership had a direct effect on two types of approach to job crafting: increasing challenging job demands and increasing social job resources. In sum, this study is the first evidence that supervisors' day-level inclusive leadership behaviors explain variations in subordinates' day-level approachable job-crafting behaviors. In addition, the study is significant as it reveals the influence of positive emotions as a factor mediating these two variables. However, this study also has limitations. The results of the day-level analysis revealed a direct effect between inclusive leadership and the two types of job crafting. In future, it will be necessary to clarify the mechanism of variation via factors other than positive affect. Future work is required to clarify the relationship between inclusive leadership and avoidant job crafting.

*Keywords: job crafting, Inclusive leadership, diary method*

## 7-minute science 7M58

### Employees' change crafting in digital change processes – An initial mixed-method study

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science

Research goals and why the work was worth doing – In the course of digital transformation, employees face changes due to the implementation of digital technologies in their work. We suggest that employees might show change crafting behaviours – in analogy to job crafting – to cope with the high demands imposed by these change processes. This study aims at exploring (1) if and which change crafting behaviours are shown in a digital change process, (2) which antecedents are related to the behaviours, and (3) if cross-cultural differences can be found.

Theoretical background – We build on the concept of job crafting (Demerouti, 2014) and define change crafting as changes employees initiate in the level of demands and resources to cope with the digital change process in order to make it more meaningful, engaging, and satisfying for themselves. We investigate antecedents based on Armenakis and Bedeian's (1999) taxonomy of change management factors.

Design/Methodology/Approach/Intervention – A mixed-methods approach was chosen to examine change crafting behaviours in a field study. The setting was the implementation of Microsoft Office 365 in an international company. In narrative interviews, N = 13 employees from three locations (Germany, Singapore, Brazil) reported their change crafting behaviours. In a content analysis, change crafting behaviours as well as antecedents were coded. A survey was used to assess cultural values based on Schwartz's values (2012).

Results obtained – The identified change crafting behaviours represented all categories of the crafting concept – increasing change resources, challenge seeking, and reducing demands. Individual characteristics represented important antecedents for change crafting, while change management factors (content, process, and context factors) were less systematically related to change crafting. Based on the reported patterns of antecedents and behaviours, four types of change crafters were revealed ( motivated , demotivated , simplifying , and restoring status quo ). For the cultural values, slight differences were found.

Limitations – Data were collected in a single company during a digital change project. While implementing Microsoft 365 is a common endeavour, generalizability of the findings needs to be tested in future research. To reduce subjectivity in the collection, analyses, and interpretation of the qualitative data, careful measures have been taken (e.g., standardized interview guidelines, establishing inter-rater reliability).

Research/Practical Implications – Findings point to a high relevance of individual attributes for engaging in change crafting – e.g., motivated crafters reported flaws in top-down change management but were themselves eager to bring the digital transformation to success. While more research is needed to understand change crafting and employees' needs, it will be also important to understand how change crafting can be fostered by change management interventions.

Relevance to the Congress Theme – The changing world of work forms the background of the present study. With change crafting, one employee-centred way to cope with the demands of recurring change and to increase the chances for successful introduction of new digital technologies is explored.

Relevant UN SDGs – The present study investigates conditions under which employees employ change crafting more likely in order to make transformation processes more meaningful, engaging, satisfying, and sustainable.

*Keywords: Digital transformation, change management, coping with change*

## 7-minute science 7M140

### eNPS: from experience to recommendation

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science&practice

In recent years the way we work has radically changed. We go through a pandemic, the great resignation, and today we are in face to the need for an intervention in workers' mental health. For organizations, surveys are a longstanding method of measuring employees, their experiences, attitudes, and opinions and gaining actionable feedback on HR development. One of these methods of measuring is eNPS. These scores are typically calculated based on responses to a single question, often whether you are likely to recommend a specific organization to friends and family, on an 11-point scale (0-10). People who select either 9 or 10 are labelled as "promoters" while people selecting options 0-6 are labelled as "detractors". A total net promoter score is calculated by subtracting the proportion of detractors from the proportion of promoters. This philosophy of promoters and detractors can also be applied to work experiences where highly disengaged or dissatisfied employees may be expected to negatively impact their surrounding co-workers. Despite its increasingly frequent use, it must be considered that the eNPS may have certain limitations. The aim was to explore the distribution and analyse whether tenure and sex of the employee have an impact on the eNPS. A total non-probabilistic sample of 56,694 workers (59% female) from 19 companies and 13 countries aged between 19 and 69 years ( $M=38.72$ ;  $SD=10.71$ ). The average job tenure of the participants was 9.57 ( $SD=9.17$ ) and ranged from 0 to 48 years. Participation was voluntary, and data were treated anonymously to preserve the confidentiality of the participants. The research design is descriptive, correlational, and group differences, cross-sectional and non-experimental. The results of this research confirmed that distribution shows negative highly skewed, and for 3 equal groups percentiles were  $33.33=7.7$  and  $66.66=9.4$ . Furthermore, there are significant differences according to tenure ( $F(4,56689)=70.479$ ;  $p<.001$ ;  $\eta^2=.04$ ). Participants with less than one year of tenure ( $M=8.41$ ;  $SD=1.976$ ) would recommend their organization more than those with 2-4 years of tenure ( $M=8.08$ ;  $SD=2.196$ ); 5-10 ( $M=8.15$ ;  $SD=2.090$ ), 11-18 ( $M=8.00$ ;  $SD=2.216$ ), and +19 ( $M=8.09$ ;  $SD=2.245$ ). In addition, participants with tenure between 5-10 years would recommend their organization more than those between 2-4 and more than 11 years of tenure. Likewise, there are significant differences according to gender ( $t=14.566$ ;  $p<.001$ ), men ( $M=8.29$ ;  $SD=2.084$ ) report better scores than women ( $M=8.03$ ;  $SD=2.189$ ). As a limitation, even if we found significant differences, the size of the effects is lower. Future research should consider differences between industries, and we encourage you to continue exploring the correlation with other variables (e.g., engagement, burnout, motivation). These results are consistent with the literature. It still shows the same distribution, but it should be continued exploration, especially the neutral employee group. According to the differences, it may be related to the decrease in the agreeableness trait of the BigFive model of personality, as we get older, we tend to be less complacent, and this may be leading workers to be more critical of their environment labour. As a practical contribution, the results show that the eNPS model could be helpful as an HR indicator, but we suggest that it couldn't be the only one, it always must be with other questions to explore deeper the experience of employees.

*Keywords: eNPS, Employee experience, engagement*

## 7-minute science 7M129

### Entrepreneurial Bricolage, Wellbeing, and Business Performance

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science

Research relevance and goals

Entrepreneurship is important for the economic development of societies and understanding entrepreneurial performance and well-being remains of utmost importance. Ample evidence has shown that entrepreneurs' proactive personality is important for achieving favorable business outcomes (e.g., economic growth) and individual well-being (e.g., satisfaction). However, few studies have shed light on the behavioral mechanisms through which proactive personality may foster these outcomes, and which conditions influence the strength of such relationships.

Theoretical background

This study builds on proactive personality theory and the Giessen-Amsterdam model of small business owners' success (Rauch & Frese, 2000), according to which business owners' personality and human capital can only translate into entrepreneurial success through entrepreneurial actions. In specific, we investigated whether proactive personality translates into entrepreneurial bricolage, and whether entrepreneurs' ability to recognize opportunities would strengthen this relationship. Bricolage in turn was expected to predict economic business growth. Adding the component that striving for success should not come at the cost of personal health and well-being, we also included two indicators of business owners' well-being (happiness and cynicism) to our model. Proactive personality was defined as a person's "stable disposition to take personal initiative in a broad range of activities and situations" (Seibert et al., 2001, p. 847). Entrepreneurial bricolage refers to making do with one's resources at hand to overcome new challenges.

Design and methodology

This study had a cross-sectional survey design. A sample of 291 Dutch entrepreneurs who owned and managed diverse organizations, 45% female, participated in an online questionnaire. Mean age was 41.76 (SD = 12.07). They worked in the cultural sector (24.10%), healthcare and welfare (11.7%), language media, and communication (10.3%), or other (15.10%). The number of employees ranged from zero (N = 91) to three (M = 2.21, SD = 1.22). The participants had been in business for on average 9.69 years (SD = 8.96). Variables were measured using existing and previously validated scales: The 10-item proactive personality scale (Seibert, Crant, & Kraimer, 1999; Cronbach's alpha = .68); the 9-item entrepreneurial bricolage scale (Davidsson, Baker, & Senyard, 2017; Cronbach's alpha = .87); a 5-item opportunity recognition scale (Kuckertz, Kollmann, Krell, & Stöckmann, 2017, Cronbach's alpha = .89); a 3-item scale measuring business growth (changes in number of employees, profit and financial turnover; based on Chandler & Hanks, 1993, Cronbach's alpha = .82), the 5-item cynicism subscale of the Maslach Burnout Inventory–General Survey (Schutte, Toppinnen, Kalimo, & Schaufeli, 2000) and a one-item happiness scale. Data were analyzed using structural equation modeling in R.

Results

In line with our predictions, entrepreneurs' proactive personality related positively to entrepreneurial bricolage, which in turn predicted economic business growth. As expected, moderated mediation analyses showed that entrepreneurs' ability to recognize opportunities

strengthened the positive relationship between proactive personality and bricolage. Proactive personality also related directly to entrepreneurs' happiness (positive) and cynicism (negative). However, this relationship was not mediated by entrepreneurial bricolage, because the link between entrepreneurial bricolage and happiness nor between entrepreneurial bricolage and cynicism was significant.

#### Limitations

The main limitations of this study relate to its cross-sectional design and reliance on self-report measures.

#### Conclusions

This study contributes to uncovering the black box of how entrepreneurs' personality may be related to business success and wellbeing. The results confirm expectations based on the Giessen-Amsterdam model that personality links to entrepreneurial success through entrepreneurial actions, such as being able to use one's resources in a novel way. Simultaneously, the findings indicate that these same actions do not automatically also relate to better (nor impaired) well-being.

#### Relevance to the congress theme "the future is now"

The world of work is constantly changing. Rather than to respond reactively, people need to be stimulated to act proactively. As this study once more underscores, running a business effectively means anticipating and self-initiating change, which includes being creative with the resources you have.

*Keywords: entrepreneurship, proactivity, performance*

## EXPLORING THE RELATIONSHIP BETWEEN MIDDLE MANAGERS' PROACTIVE STRATEGIC BEHAVIOR AND OTHER PROACTIVE BEHAVIORS

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science

### Research Goals and Why the Work was Worth Doing

How are middle managers proactively initiating changes in their organizations? Fast-moving, complex organizational environments leave only limited space for top-down decision-making (Ashford et al., 2018). Scholars have argued that organizations require every level, from front-line employees to middle managers and senior-managers and executives, to be proactive i.e., to anticipate and self-initiate changes (Crossley et al., 2013; Grant & Ashford, 2008; Strauss et al., 2009). While research has predominantly focused on proactivity oriented towards shaping one's own role and immediate work environment (e.g., by seeking feedback or job crafting), far less research has explored proactive behavior directed at the organization's larger goals, such as proactive strategic behavior (Parker & Collins, 2010). Given that especially for managers, contributing to the larger organization is expected and valued, we examine how middle managers' strategic behavior affects their performance. Specifically, we suggest that middle managers' proactive strategic behavior (i.e., strategic scanning) will improve their performance, especially when used in combination with proactive behavior focused on the fit with their immediate work environment (i.e., feedback-seeking) and proactive behavior focused on making improvements in their work environment (i.e., voice). In doing so, we advance research on proactive strategic behavior and contribute by increasing our understanding of the relationship between proactive strategic behavior and other proactive behaviors and the impact of proactivity on performance outcomes.

### Theoretical Background

By and large, proactivity literature distinguishes three different categories of proactive behaviors, i.e., proactive work behavior, proactive person-environment fit behavior, and proactive strategic behavior (Parker & Collins, 2010). Despite the advances of proactivity literature has made over the last two decades, research on proactive strategic behavior is still lacking and little is known about the relationship between proactive strategic behavior and other proactive behaviors. Building on prior research we develop a conceptual model to explore this gap in the present study.

### Methodology

We tested our model in a sample of 266 middle manager-supervisor dyads from different companies.

### Results

The results of the analysis show support for the hypothesized relationships in our model. Middle managers' strategic scanning positively predicts performance and voice acts as a mediator in this relationship, while high levels of feedback-seeking act as a moderator.

### Limitations

The main limitation is based on the cross-sectional survey design in this study.

## Conclusions

We show that middle managers use a combination of proactive strategic behavior, proactive work behavior and proactive person-environment fit behavior, which positively affects their performance. Our results indicate that middle managers who scan their environment to identify opportunities and threats can use voice and feedback-seeking to effectively communicate these in their organization and thereby increase their performance.

### Relevance to the Congress Theme

The present study on proactive behavior is relevant to topic areas [3] and [5].

### Relevance to the UN Sustainable Development Goals

Proactivity is an important aspect when it comes to achieving the “Decent work and economic growth” goal of the SDGs.

*Keywords: Proactivity, Proactive Strategic Behavior, Proactive Strategic Scanning*

## 7-minute science 7M158

### Exploring the relationship between neurotypicals and those with ASC when completing Situational Judgement Tests

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science&practice

Exploring the relationship between neurotypicals and those with ASC when completing Situational Judgement Tests – Gurleen Kaur Manku

Situational Judgment Tests (SJT) are commonly used as a psychometric measurement during the recruitment process, often for graduate roles especially. For hiring organisations SJTs are a cost-effective and convenient way to screen potential talent from a large pool of candidates (De Leng et al., 2017). It is therefore important to ensure SJTs are fully inclusive and made accessible to candidates, especially those with ASC.

Hypotheses:

H1: Those with ASC have increased difficulties with cognitive processing when sitting an SJT than neurotypicals.

H2: Those with ASC experience increased anxiety when taking the SJT compared to their neurotypical peers.

H3: Those with ASC do not find the typical SJT an accessible psychometric test.

The main theories underpinning my research is Theory of Mind (ToM) and Theory of Planned Behaviour (TPB). ToM is the cognitive ability to recognise the feelings or thoughts of others in order to develop an understanding of them and their behavioural patterns, so that they might then interact appropriately with them (Megías-Robles et al., 2020). There is very little academic research in this area but a recent article review by Balajo (2020) suggests that those who are neurodiverse (including those with ASC) are likely to find SJT more difficult than those who are not. Academic research has demonstrated strong connections between anxiety and those with ASC (van Steensel et al., 2011).

This qualitative study compared 8 graduates with ASC and 9 graduate neurotypicals on completing an SJT through the think-aloud protocol and thematic analysis. To explore the influence of anxiety in this psychometric test, all participants' anxiety levels pre and post SJT were collected using the GAD-7 anxiety scale.

Findings showed those with ASC reported struggles with several aspects of the SJT including hypothetical scenarios, interpretation of hidden meanings, the stress of taking the SJT and the uncomfortable scenarios on this. Those with ASC reported three times as much anxiety in comparison to their neurotypical peers.

There are limitations inherent in this study:

The study did not actively measure participants' anxiety during the SJT itself, and this could have compromised the internal validity of the study regarding H2.

Ethnicity has been shown to influence SJT performance (Whetzel et al., 2008), yet this study did not collect ethnic data. Participants from one group (i.e. neurotypical or ASC) could have been more ethnically diverse than those from the other, potentially impacting SJT scores and thus the analysis.

In terms of the practical implications of my study, it is evident that those with ASC found many barriers when completing the SJT. This study addresses a topic for which there is little academic research to compare the results to, however showing this is a novel topic. When circulating my study to those with ASC, I received positive feedback that this topic was being explored. Consequently, employers may need to review their accessibility of current SJT practices for candidates with ASC.

Intended audience: Both academic and practitioners

SDG: Reduced inequalities theme

*Keywords: Autism, psychometric tests, situational judgement test*

## 7-minute science 7M185

### **Factors influencing the participation of blue-collar workers in Worksite Health Promotion programs: a scoping literature review**

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science

#### Research goals:

The objective of this scoping literature review is to produce an up-to-date overview of studies on factors influencing participation of blue-collar workers in WHPPs, to identify gaps in research designs and themes on this topic, and to develop new implications from the results found for future research and for implementation strategies that may enhance the participation of this target group in WHPPs.

#### Theoretical background:

A growing number of employers implement worksite health promotion programs (WHPPs). Especially, workers in blue-collar jobs may benefit from these WHPPs. In general, these workers report more severe physical health complaints and lower work ability than other workers (van den Borre & Deboosere, 2018). However, participation in WHPPs among this group is lower than among white-collar workers (Tsai, Alterman, Grosch, & Luckhaupt, 2019). There is little known about which factors may influence participation of blue-collar workers in WHPPs.

#### Methodology:

Four databases were searched: PsycInfo, PubMed, Web of Science and Cinahl. We used search terms in different combinations so that each combination contained at least all the following 5 constructs: work, lifestyle, intervention, blue-collar and participation. The first search was undertaken in February 2020 and updates were performed in February 2021 and February 2022. The search strategy was limited to English language, peer-reviewed empirical studies published after 2000. Extracted determinants of participation were categorized into 6 groups. After categorization, similar determinants were clustered and the direction of the determinant was set.

#### Results

Nineteen papers describing 15 studies met the eligibility criteria: nine qualitative, six quantitative. Eighty determinants were studied (quantitative) or found (qualitative). Personal characteristics were the most studied determinants. Meso and macro level factors on participation are hardly studied. Barriers for participation include shift work, travel distance and inconvenient scheduling. Facilitators for participation include peer support and health culture. Furthermore, several attitudes may influence participation, such as the attitude that WHPPs are not able to change one's lifestyle or that workplaces do not have a role in their health.

#### Limitations

In this review we chose not to include design studies or needs assessments. These studies could provide information on the blue-collar worker's needs, motives and attitudes. However, the outcome of these studies often is not clear. A second limitation is that no inclusion criteria on the quality of studies were formulated. Therefore, it is good to be cautious in interpreting the results. Thirdly, most

included studies were on male employees. Found results may not be directly transferrable to female blue-collar workers.

#### Research implications

Future research may study the prevalence of determinants that are significant and relevant in explaining participation in general, among specific target groups, such as blue-collar workers. Qualitative studies could make a comparison between perceived barriers and facilitators by blue-collar workers and other workers. Future research could study which WHPPs and implementation strategies are effective in enhancing participation. And lastly, we recommend that process evaluations always should include a more thorough analysis of who participates and why. Moreover, theory should be used in studying factors influencing blue-collar workers' participation.

#### Practical implications

WHPPs that do not cost a lot of effort are preferred by blue-collar workers. More active WHPPs could be organised in groups. Possible implementation strategies are: incentives, communication strategies that focus on family responsibility, combining lifestyle interventions with safety programs, leading by example, and facilitation of participation by scheduling and shorter travel distances.

#### Relevance to the congress theme

In western countries, labour shortages are and will be more pronounced in blue-collar than white-collar work, due to retirement of baby boomers, and a more educated younger workforce (Levanon, et al., 2021). Therefore, investment in blue-collar workers' health is necessary to attract new workers and to keep the current workforce healthy and productive.

*Keywords: blue-collar workers, worksite health promotion programs, participation*

## 7-minute science 7M195

### **Fake it Till You Make it? – Not for the Emotionally Intelligent. Nurses' Emotional Intelligence, Surface Acting and Occupational Well-being**

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science&practice

**Research goals and why the work was worth doing :** This study investigates the relationship between surface acting and different aspects of work-related well-being, i.e., work engagement, job satisfaction, and burnout, with a special emphasis on the moderating role of emotional intelligence abilities. Inconsistent findings on the role of emotional intelligence (EI) in the relationship between emotional work and nurses' well-being emphasize the need for further analysis and a thorough understanding of its role. In our study we consistently use the ability model of emotional intelligence to conceptualize and measure EI . Therefore, we overcome an important limitation of previous emotional labour and employee well-being research which measured EI with the use of self-reports, which may represent respondents' core self-evaluations instead of EI abilities.

**Theoretical background :** In order to explain the role of EI, we apply the assumptions of objective self-awareness theory, which states that discrepancies from standards that arise in a self-standard comparison process evoke discomfort, unease, or psychological strain. We assume that surface acting can cause emotional discrepancy because a nurse presents a professional façade instead of expressing her real emotions. Therefore, we expect that the negative effects of surface acting might be higher for emotionally intelligent nurses who accurately recognize and understand their feelings and are consequently more self-aware of their emotional states.

**Methodology :** The data was obtained from 374 female Polish nurses who completed a performance measure of emotional intelligence and reported on their perceived surface acting, job satisfaction, work engagement and burnout using a paper and pencil survey.

**Results :** Surface acting was negatively related to job satisfaction and work engagement, but it was positively related to burnout. These relationships were stronger for nurses with higher emotional intelligence.

**Limitations :** The presented study is cross-sectional. Because some of the data were collected using self-report measures, common method bias was assessed by performing Harman's single factor test prior to conducting the primary analyses. The sample consisted only of women, therefore, the results may not generalize to men.

**Conclusions – research and or practical implications/Originality/Value :** These findings provide evidence that emotional intelligence may strengthen the negative relationship between nurses' surface acting and work-related well-being. Our findings contradict the widespread belief that emotionally intelligent individuals always have lower costs in emotionally demanding situations: the case seems to be more nuanced for emotionally intelligent nurses who engage in high levels of surface acting. By changing their work attitudes and investing less energy in their work, they can protect their authenticity, thus providing more organized functioning and better health. It emphasizes that awareness of inauthenticity in expressing emotions can be detrimental to health. This study provides healthcare organizations with insights into the importance of reducing expectations for surface acting and introducing emotional labour strategies that support self-consistency to promote well-being in nurses.

Relevance to the Congress Theme : Employee attitudes

*Keywords: emotional intelligence, surface acting, well-being*

## 7-minute science 7M156

### **From Training to Practice: A Multi-Context, Longitudinal Study on Gender Differences in Career Ambition, Aspirations, and Progression**

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science

**Aim:** Women represent 60.4 % of all completed undergraduate and postgraduate higher degree courses (WGEA, 2021). Despite holding this majority during training, women remain underrepresented in key decision-making roles across the Australian workforce (WGEA, 2021). Our research aims to unpack the drivers that contribute to this 'black box' of career ambition, aspiration, and progression within two particularly underrepresented contexts, academia, and the military.

**Background:** Since 2006, women have made up the majority of enrolments in Higher Degree by Research (HDR) programs across Australia (Department of Education, 2019), with women making up 54.3% of the 2020 HDR graduates. Yet, 37% of senior leadership positions in Australian universities are held by women; the same pattern is observed in the Australian Defence Forces (ADF). Although the ADF reached a new high of 19.7% women in 2021, only 31 of the 202 senior leaders (star rank and above) were women, with no female representation above the rank of Major General (Department of Defence, 2021).

Research exploring the factors that influence why women typically have lower career advancement relative to men (e.g., Barreto, Ryan, & Schmitt, 2009) are typically categorised into internal (e.g., ambition; Davey, 2015; Kim, Fitzsimons, & Kay, 2018; Ryan, 2022), or external factors (e.g., structural discrimination; Ellemers & Barrento, 2015). More recently however, researchers have advocated for better consideration of both internal and external factors - it is often the external environment that shapes our internal choices (Faniko, Ellemers, & Derks, 2022; Meeussen et al., 2022). Whilst we know that policies alone do not redress gender inequalities in academia (Stephenson, Broadbent & Strachan 2017) or the military (Stephenson, in press), institutions do influence women's experiences and representation.

This program of research aims to understand how career and life ambitions evolve from training to practice, and what internal and external factors, as well as decision-making processes, affect this. Focusing on the context of HDR candidates and military officers enables greater insight into two highly competitive training courses, and within industries where the gender leadership gap is especially prevalent. In turn, we hope to offer insight into why it is that women remain underrepresented in leadership positions.

**Design:** This study will employ a mixed methods, longitudinal design to explore the gender differences in career ambition, aspirations, and progression from time of training enrolment (i.e., HDR candidates and ADF undergraduates), across 10 years. Latent growth curve analysis will be the primary analytical approach.

**Method:** An online survey will be administered annually via an online portal to ADF and HDR students over a 10-year period. The baseline survey will be distributed within their first year of training, and will include both Likert-style items, as well as open response questions. Participants will be asked to reflect upon career aspirations and respond to corresponding ratings measuring ambition, perceived likelihood of achievement, motivation, and confidence. Additionally, participants will be asked about other factors such as supervisory relationship, workgroup characteristics,

available role models, workplace conditions (e.g., pay, leave), career progression, incidents of bullying, and social support, as well as demographic items.

Participants will then receive a shortened version of this survey each year. In this survey, participants will be able to respond to previous responses and provide qualitative reflections of key life and work changes over the past year.

Alongside the surveys, the institutions themselves (and policies) will be analysed using process-tracing methodologies allowing for analysis of individual experiences and wider institutional changes over time (Collier 2011). This methodology enables greater consideration and understanding of key institutional changes that may impact individuals.

Results: We anticipate that gender will play a key role in ambition and career aspirations. Further, factors like supervisory relationships, workgroup and organisational characteristics, as well as institutional policies are expected to influence this relationship.

Conclusions: These findings are expected to expose the real impact that discrimination and structural barriers have on women's personal choices (i.e., ambition, aspiration, and continuation) to pursue their desired career. In turn, this program of research will offer recommendations for reaching gender parity within Academia and the ADF.

Congress Theme Relevance: The topic of gender equality examined within a longitudinal design appeals to all Future is Now facets, addressing contribution, urgency, and delivery.

UN SDG Relevance: This research addresses the UN Sustainable Development Goals (2015) on gender inequalities in two contexts; HDR and military officers.

*Keywords: Gender Equality, Career Ambition, Longitudinal Design*

## 7-minute science 7M62

### **Gamified survey in an organizational Setting: Card Design with instant feedback as an Enhancement for employees' survey experience and data quality –**

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science&practice

**Research goals:** Surveys are important tools in organizations. Due to an increasing amount of survey use, survey designers should aim to avoid survey fatigue. A potential lever to increase participant motivation is gamification in survey design. To date, there is little systematic research on the effects of specific game elements in organizational surveys on participants' survey experience and response behavior. Therefore, we aimed to examine whether specific game elements (i.e., instant feedback, card design) would enhance survey experience and increase data quality in an employee attitude survey.

**Theoretical background:** The trend of an increasing number of surveys (Adams & Umbach, 2012; Karlberg, 2015; Porter et al., 2004) facilitates problems of survey fatigue (Turner et al. 2014) and therefore declining response rates (Stedman et al., 2019). Survey experience (SX; REF) assesses the pleasure and usability of a survey and may serve as a potential lever for the motivation to take a survey. SX may be increased through gamification in survey design. Keusch et al. (2017) showed specific effects of gamification in survey design on psychological and behavioral outcomes. However, there is a lack of systematic studies considering the implementation and assessment of gamification elements. Thus, Keusch et al. (2020) call for more experimental studies to examine effects of individual game elements on relevant outcomes.

**Design:** In an experimental between-group-design, employees were randomly assigned to a gamified survey version (instant feedback, card design) or a standard survey version (no feedback, matrix-design) of their employee attitude survey. The survey assessed job satisfaction, commitment, work engagement and employer attractiveness, and demographics. Survey experience served as the depended variable.

**Results:** Overall Sx, and pleasure were perceived as significantly better in the gamified condition. Usability did not differ significantly between the survey versions. Further, participants taking the gamified survey showed less straightlining and less item non response.

**Limitations:** This experimental design cannot provide any information about long-term effects like Mavletova (2015) and due to the high practical context not all items were taken from published instruments.

**Research/Practical Implications:** The study contributes to the growing research on gamification elements in survey design by systematically examining two game elements and their effects on survey response behavior. Practically, the results encourage survey designers to use instant feedback in a card design as a relatively easy to implement gamification design to significantly improve participants' survey experience and data quality. Addressing the challenges of lacking research on specific game elements, this study is another step towards a better understanding of single game elements and their effects on survey response behavior in the tradition of Harms (2015).

**Relevance to the Congress Theme –** Employee surveys are a popular tool to assess changes in the working world and may benefit from the use of gamification.

Relevant UN SDGs – “ Decent work and economic growth” – We investigate how employee surveys can be enhanced through gamification. The resulting data serve as a basis for measures that improve the employee experience of decent work.

*Keywords: gamified survey, data quality, survey experience*

## Ghosted? The Impact of Rejection Styles in Interpersonal Communication

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science

Nowadays, while technology has made online communication convenient, people can also easily procrastinate on responding or even withdraw from a conversation unexpectedly, as “ghosting”. This paper aims to investigate how people perceive ghosting (compared to explicit rejection) and how delaying responses moderate these perceptions. This work is particularly worth doing because it explores the underlying psychological processes of being rejected/ghosted, filling in the literature gap where rejection and ghosting were only studied at linguistic levels (not psychological) and through qualitative (not quantitative) methods. Admittedly, the communication dynamic of rejection and ghosting is widely applicable across domains, between dating partners, friends, colleagues, recruiters and applicants, and organizations.

As theories suggested, although being rejected is socially undesirable, rejection at least reciprocates the communication exchange between two parties; ghosting, on the other hand, violates this rule and may cause more intensified negative feelings and long-term consequences (LeFebvre, 2017; Pancani et al., 2022). Therefore, we hypothesized that ghosting (vs. explicit rejection) would be perceived more negatively (H1). Regarding the delayed response, we had competing hypotheses: people may either prefer immediate responses because they are risk-averse and avoidant to uncertainty (Kahneman & Tversky, 1979; H2a), or they in fact enjoy the waiting process as a pleasure of uncertainty (Bar-Anan et al., 2009; H2b).

To answer these questions, we launched an online questionnaire with a 2 (response type: rejection vs. ghosting) x 2 (response timing: immediate vs. delayed) design through Prolific (N=490). Under a social scenario, participants imagined inviting a friend to their birthday parties over a text message in one-month time and were randomly assigned to receive one of the responses from immediate rejection (friend rejected them right away), immediate ghosting (friend never responded), delayed rejection (friend was not sure then rejected them later), and delayed ghosting (friend was not sure then never responded afterwards). The dependent variables were negative emotions, interpersonal/friendship evaluations, and future engagement intentions (1-7 Likert scale for all).

The main effects supported our main hypotheses: people would rather be rejected than ghosted across all dependent variables. What appeared as the most interesting was that, while delaying a response did not make a difference between the two rejection conditions, it indeed dampened the negative perceptions of ghosting. Three individual differences were also assessed and discussed in the end, including Self-Esteem, Rejection Sensitivity, and Intolerance to Uncertainty.

One major limitation is the real-world validity, and thus we plan to apply the rejection/ghosting paradigm into business contexts later through behavioral lab studies as well as big data approaches to increase our methodological diversity and propose practical interventions. If the patterns are consistent, we would strongly advise against individuals stop responding messages to their friends, colleagues, students/professors, applicants/recruiters, etc. In conclusion, even though saying “no” is hard, ghosting might lead to worse outcomes.

*Keywords: Ghosting, Rejection, Communication*

## 7-minute science 7M41

### How can mindfulness promote leaders' respectful inquiry? Results of three experimental studies

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Prior research has shown that a key function of leadership is effective communication with followers. One concept that has recently been introduced in the course of leader communication is respectful inquiry (asking open questions and listening attentively; Van Quaquebeke & Felps, 2018). So far, research has mainly focused on the outcomes and mechanisms of these behaviors, but the question of how good communication can be promoted in leader-follower interactions has been left largely unanswered. However, knowing how to strengthen leaders' ability to listen and ask the right questions is important to improve team processes and performance. A promising way to improve communication skills is the practice of mindfulness. Being mindful means paying attention to present-moment experiences in a receptive and non-judgmental way (Bishop et al., 2004; Brown, Ryan, & Creswell, 2007). While organisational research on mindfulness mainly focused on intrapersonal aspects like emotion regulation (Hülshager et al., 2014) and job performance (Reb et al., 2015), only few researchers studied the effects of mindfulness on interpersonal aspects like leadership behaviour or relationship quality (Arendt et al., 2019; Nübold et al., 2020). Thus, in a multi-group lab experiment with 56 teams, an online experiment with 129 leaders, and a field experiment combined with a weekly diary study with 119 leader-follower dyads, the present research investigated whether practicing mindfulness increases the amount of leaders' respectful inquiry in leader-follower interactions. Results of all three studies support the effect of mindfulness practice on leaders' respectful inquiry when rated by observers or leaders themselves. This effect was not supported, however, when followers rated the communication behavior of their leader. Furthermore, the effects of the mindfulness intervention on respectful inquiry did not always extend to work outcomes (e.g., team performance). Despite their strengths, our studies also come with some limitations. For example, future studies should increase the time span of assessments to capture developments which potentially take longer (e.g., followers may need some time to recognize and identify new behavior patterns in their supervisors and also performance outcomes may be of more distal nature). Our findings highlight the importance of mindfulness in fostering effective communication strategies of leaders, thereby contributing to leadership theory and practice. In addition, high quality communication will be ever more important in a changing world of work, which is characterized by uncertainty, complexity and a plentitude of societal challenges. We believe that communication is key to contribute to decent work in the future.

*Keywords: respectful inquiry, mindfulness, experiments*

## 7-minute science 7M80

### **How do career resource levels differ by men and women, and how do they differentially predict career success? A systematic review.**

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science

**Research Goals:** Uncovering employability strategies which improve women's career success is an urgent current issue. Women accounted for the majority of employment losses during the COVID-19 pandemic (Dang & Nguyen, 2021) and were more likely to be furloughed for longer than men during lockdown (Jones & Cook, 2021). Career breaks, in turn, predict lower salary longitudinally (Evers & Sieverding, 2014). These recent events will likely aggravate the Gender Pay Gap (Peila-Shuster, 2017). Indeed, women already experience more work absences due to pregnancy, child-rearing, and other caring roles (Post et al., 2013).

**Theoretical background:** Women experience more boundaryless careers (Sullivan & Arthur, 2006), as they are more likely to balance work with family responsibilities which requires more workplace mobility and flexibility (Mainiero & Sullivan, 2005). Nevertheless, there is sparse systematic investigation of which strategies and behaviours enable them to successfully navigate this non-traditional career path (Frear et al., 2018).

**Methodology and Results:** Therefore, a systematic literature review will be conducted (predicted date of completion: 1st April 2023), compiling studies which report on gender differences in career resources and whether they differentially predict objective and subjective career success of men and women. Hirschi et al.'s (2018) career resources model will be used as a framework, as the human capital, environmental, motivational and career management resources predict career success longitudinally (Abele & Spurk, 2009; Haenggli & Hirschi, 2020). Inclusion criteria for peer-reviewed empirical studies will include testing gender as a moderator of the relationship between a career resource and career success. Also, studies which measure the mean level of a career resource by gender will be selected. The online search of databases will not be constricted by time range, as the individual components of the framework have been studied before Hirschi et al.'s (2018) operationalisation. For example, organisational career support cross-sectionally predicted women's salary and seniority more than men's (Melamed, 1995), which maps onto the environmental resource domain within the model.

**Limitation:** Despite ample support for Hirschi et al.'s (2018) framework, it is not an exhaustive list of employability resources. For example, Savickas' (2013) 'career adaptability' explains unique variance in subjective career success longitudinally, beyond career resources (Haenggli & Hirschi, 2020), and women show a significantly lower level of this construct than men (Hou et al., 2012). Hence, future reviews should systematically assess gender differences in other pertinent employability constructs.

**Implications:** It is hoped that the review will spark more quantitative, systematic research on gender differences in antecedents of career success. Moreover, the hallmark of career resources is their malleability, which allows the findings to bear implications for career counselling practice, tailoring interventions to improve the most crucial career resources for clients, considering their gender.

**Value:** To the author's knowledge, this will be the first review of gender differences in career resources according to Hirschi et al.'s (2018) framework, which answers the recommendation to

systematically investigate demographic differences and the societal need to promote gender equality in the workplace (Frear et al., 2018).

*Keywords: employability, gender, career resources*

## 7-minute science 7M162

### How does the reaction of the audience impact the process of sexual identity disclosure at work?

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science

#### Research goals

Disclosure of sexual identity at work is crucial to the experience of many lesbian, gay, and bisexual (LGB) workers. The literature has focused on the consequences of the act of revealing or hiding their sexual identity, yet little is known about the factors involved when considering the audience's reaction to disclosure. Taking the audience into account, we aim to understand how disclosure of LGB people is related to individual and contextual characteristics and to analyze the impact of disclosure dynamics on authenticity at work and psychological distress.

#### Theoretical background

Di Marco (2022) proposed that LGB people have a preference to disclose or conceal their sexual identity to others, but they must also deal with the willingness of the targets to respect and/or support their preferences. In this way, disclosure would not be a completely voluntary and controlled decision; it is also shaped by the behaviors of other people at work.

The act of coming out at work has been associated with positive factors such as authenticity, greater well-being, and inclusion, while concealing has been associated with negative outcomes such as depressive symptoms and perceived discrimination (Wax et al., 2018). Identity centrality, rejection sensitivity and internalized homonegativity have also been proposed as boundary conditions (Feinstein, 2020; Follmer et al., 2019). However, little is known about the mechanisms of disclosure when considering the audience's reaction to disclosure/concealment preferences in the workplace, and different outcomes are expected to result from this combination.

As a first step, Di Marco et al (2022) found that LGB people may encounter four different situations at work according to their wish to disclose/conceal and the reaction of the audience: segmentation, integration, distance violation, and intrusion violation. Segmentation and integration represent a successful and desired concealment or disclosure of LGB people' sexual identity, respectively. Distance violation occurs when there is a desire to disclose but third parties force concealment (e.g., not asking further about personal life). Finally, intrusion violation occurs when LGB people wish to conceal their sexual identity at work, but others force it into the spotlight (e.g., spreading rumors, asking non-wanted personal questions). These dynamics draw from boundary theory (Kreiner, 2006), based on the preferences of integrating/segmenting personal and work domains and the resources provided by the organization, in this case, the audience.

#### Design and methodology

251 LGB workers answered an online survey using crowdsourcing. Data analysis will include descriptive statistics, multiple regression, and mediation analyses.

#### Expected results

The data of this study has already been collected and data analysis is to be performed in the following month. We expect Inclusion Climate to be positively related to Segmentation and Integration, and negatively related to disclosure violations. Segmentation and Integration will be negatively related with psychological distress, while the opposite is expected to occur with Intrusion

Violation and Distance Violation. Rejection sensitivity will moderate the relationship between disclosure dynamics and psychological distress. Authenticity at Work will mediate the impact of disclosure dynamics on psychological distress. Finally, Identity Centrality and Internalized homonegativity will moderate the relationship between disclosure dynamics and authenticity at work.

#### Limitations

The study is limited to the experience of LGB people living in countries where legal protection and promotion exists. Data were collected at one time; therefore, causality cannot be established. Sample size does not permit comparisons between occupational sectors.

#### Conclusion

This study expands the boundaries of the concept of disclosure, from the personal decision to disclose to the reaction of others support or hinder this decision. It seeks to show that the reaction of the audience plays a role in the outcomes of disclosure. Implications for organizations include the need for supportive practices, yet resources must also be provided so that the preferences of LGB people who do not want to talk about their sexual identity are respected. Specific training may be provided to supervisors to understand and effectively manage the daily experiences of LGB employees.

#### Congress theme

The world of work is increasingly diverse. Organizations have made efforts to manage diversity in the past decade, although sometimes superficially. This study shows the nuances involved in the management of sexual diversity; a timely topic of which knowledge is rapidly changing.

#### UN SDGs

This study is related to goals 10 and 3 as it promotes adequate management of sexual diversity, which empowers and promotes their social, economic and political inclusion and health and well-being.

*Keywords: disclosure; workplace; LGB*

## 7-minute science 7M114

### **How social support buffers work-family conflict towards work ability - an examination of different facets in two European samples**

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science

Work and family are essential domains of human practice but work and family commitments are not always compatible. Previous studies have shown that a person's social environment can have a benevolent influence in challenging situations. While work-family conflict and social support have several facets, we know little about the specific buffering effects between those. Therefore, different types of social support may have various effects on different types of work-family conflict. Based on social support theory we hypothesize that perceived instrumental support has a stronger buffering effect on time-based work-family conflict, whereas emotional social support has a stronger buffering the relationship buffering effect on strain-based work-family conflict. We examine work ability as dependent variable.

We use two different samples and conduct moderation models in SPSS. The first sample consists of 505 working parents (391 female) from United Kingdom, Germany, and Slovakia and was collected from August to October 2022 (study 1: cross-sectional design). The second sample consists of 601 working parents (491 female) from Germany, Sweden, and Finland and was collected over 22 months from 2011 to 2013 (study 2: longitudinal design).

In summary, we find the interaction effects between strain-based work-family conflict and emotional social support in both samples. The interaction between time-based work-family conflict and instrumental social support is only found in study one. On a cultural level, interactions between facets of work-family conflict and social support are also only found in study one.

First, the validity of the study could be biased by self-assessment. Work ability is measured only by one item. It should be noted critically in study 2 that the two facets of social support are also only measured by one item each, so that the question arises whether the construct could be represented entirely. This limitation could be unfavorable to generalizability. Behavioral-based work family conflict is not addressed at all. The strength of the research project lies in a multiple study design and in the size and diversity of the European samples. In study 1 we use a cross sectional design, in study 2 we use a longitudinal design. We examine both perceived social support in the private context and actual received social support in the work context.

The study is able to make an important contribution to the understanding of work-family conflict in western European countries. It provides evidence on how social support as a potential resource can have a positive impact on work ability.

*Keywords: work-family conflict, social support, work ability*

## 7-minute science 7M71

### HRM reactions to the Covid-19 pandemic: A latent class analysis approach

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science&practice

Organizations react differently to crisis-situations, causing different implications for their workforce (Mithani, 2020). From a regulatory focus perspective (Beus, Lucianetti & Arthur, 2020; Johnson, Smith, Wallace, Hill & Baron, 2015), organizations can adopt a prevention focus (i.e., predominantly concerned with security, safety and responsibility), or a promotion focus (i.e., predominantly concerned with achievement, growth, and the realization of aspirations; Johnson et al., 2015; Sassenberg & Wolpin, 2008). Regulatory focus as a collective structure, is a multilevel construct representing the process by which members of an organisations self-regulate to bring action into alignment with organizational goals (Johnson et al., 2015).

In the current study, we explore the adoption of different combinations of HR-related actions taken to cope with the COVID-19 crisis (e.g., workforce on temporary unemployment, switch-over to telework). On five moments between April 2020 and April 2021, we distributed questionnaires among CEOs and HR professionals from a variety of industries, asking them about HR-related actions implemented during the crisis (N total = 954). Next, we take a latent class analysis approach (LCA; McCutcheon, 1987) in the first dataset (April 2020) to uncover how these HR-actions tend to be co-adopted at the beginning of the pandemic. Although our approach is exploratory and data-driven, we can make careful predictions about HR actions likely to be combined, based on the theory of collective regulatory focus (Johnson et al., 2015). We then replicate this latent class analysis approach in the following four datasets (June 2020, October 2020, January 2021, April 2021) to verify whether the preliminary combinations of HR actions prolong as the pandemic persisted. Note that we controlled for level of activity in the organization during the pandemic. Finally, we elaborate on the discerned clusters by describing the HR-outcomes (e.g., level of absenteeism, perceived trust employees-employer) that are consistently linked with them over the 5 times. Although the questionnaire was repeated five times, the design was not longitudinal.

The results show that, even under strict regulations, organizations have different ways of reacting to the pandemic in terms of HR actions. Specifically, we found three classes of HRM reactions: a prevention focus class (e.g., workforce on temporary unemployment, hiring freeze, asking employees to take leave), a promotion focus class (e.g., switch-over to telework, alternative assignments, digitization), and a passive class (i.e., switching to teleworking only). Preliminary analyses further show that the promotion focus class is linked to desirable outcomes in terms of HR-outcomes, more so than the prevention focus class. These analyses will be expanded upon during spring 2023.

Contributions: First, we further insight on organizations' responses and resilience to crises (Mithani, 2020). Second, this paper aims to increase our understanding of motivational processes in the workplace, that transcend the individual level. Although interest in collective motivational processes increased (Chen & Kanfer, 2006), still few studies on collective regulatory focus exist (Johnson et al., 2015). Finally, as a (preliminary) practical contribution, our results seem to recommend that organizations should adopt the set of promotion-focused HRM practices, as these are linked to the most desirable HR-related outcomes.

*Keywords: Human Resource Management, collective regulatory focus, latent class analysis*

## 7-minute science 7M31

### **I feel for myself! Effects of an online-guided self-compassion intervention on strain and task performance after failure**

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science&practice

**Research goals:** When stress is caused by failure experiences diminishing self-esteem, appreciation by colleagues and supervisor may be helpful. Unfortunately, supervisors and colleagues who may support the employee are not always available. As an alternative to appreciation, we propose that self-compassion (SC) may help employees to deal with stressors eliciting threat and feelings of failure. Therefore, we examine the effect of a brief online SC intervention on potential negative consequences of failure.

**Theoretical background:** According to the Stress-as-Offense-to-Self theory, experiencing failure threatens employees' self-esteem, leading to stress reactions. SC refers to a positive and caring manner toward oneself that can counteract threats to self-esteem, especially during difficult times (such as failures). However, recovery research has shown that a break after demanding tasks can already reduce potential consequences on well-being and performance. We propose that an instructed SC break after failure (compared to a simple break or continuing to work) will reduce negative strain reactions such as negative affect, fatigue, and deterioration in task performance.

**Methodology:** All participants in this online study were equally subjected to a task that evoked a sense of failure, i.e. ego-threat (difficult-to-solve anagrams that were claimed to be easy to solve). The experimental design comprised one measurement before and one after failure and intervention phase, comparing the SC intervention to a) a break and b) a working through control group. This was followed by a Stroop task. In sum, 420 participants were randomly assigned to one of the three conditions. After data cleaning, the final sample consisted of 330 participants (151 from Germany, 179 from German-speaking Switzerland). The majority were students (87%); aged 18 to 70 years; 75% were female. There were no initial significant differences in demographic and study variables between groups.

**Results:** The results revealed that participants in the SC condition reported significantly higher self-esteem, lower fatigue and negative affect as compared to break and working through condition. No significant differences between the conditions were found concerning performance in the Stroop task.

**Limitations:** The present study is based on an academic sample. Thus, future research needs to extend these findings to performance failure in other domains.

**Conclusions:** Flexible breaks are important, however, our results indicate that it needs more than a break to bounce back after failure. We present a brief SC intervention that can help individuals cope with failure in the absence of key sources of appreciation (e.g., supervisors or peers). Extending previous research, we highlight SC as an immediate coping strategy after failure that is superior to common recovery experiences (simple break).

**Relevance to the Congress Theme:** The COVID-19 pandemic has impressively demonstrated the need to adapt one's own way of working in terms of remote-work, virtual communication, and related technologies. Such changes may provide opportunities for individual learning and growth, but little

support in the face of failure. Taking a break to have compassion for oneself, can be seen as a valuable coping strategy that enables employees to bounce back and grow during times of change.

UN SDGs: Our study aims to promote decent work and economic growth, as well as health and well-being, as part of social sustainability.

*Keywords: failure, self-compassion, online intervention*

## 7-minute science 7M101

### **Improv(ing) interpersonal skills: Results of a pilot training intervention study**

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science&practice

#### Goals & Background

Career success, especially in virtual work settings, often comes down to one's ability to communicate effectively and to positively influence others. The prevalence of computer-mediated (remote) work of late has highlighted the importance for understanding outcomes of virtual training. In this study, we evaluate an "improv" intervention, an innovative new approach to training focused on being in the moment and attending to others. Specifically, we piloted a virtual improv training program with MBA students and investigated its potential to improve critical interpersonal skills as indicated by self-ratings of mindful communication (MC), transformational leadership (TFL), and helping behaviours. Mindful communication consists of being mentally present, having a non-judgmental attitude, and staying calm. TFL is a style that garners respect, trust, and admiration from others using idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation. Helping behaviours describe discretionary task-related organizational citizenship.

#### Intervention/Method

The intervention is an interactive improvisation training designed to foster adaptability, collaboration, and joy at work ([www.themakingbox.ca](http://www.themakingbox.ca)). An experienced improv instructor conducted standardized improv training for a group of MBA students in 4 1-hour-long sessions over 4 consecutive weeks. Participants responded to a pre-training survey (t1; N = 51), an immediate post-training survey after the last session (t2; N = 39), and a follow-up survey 1 month later (t3; N = 13). To evaluate the intervention, we compared the means of our variables of interest at t1, t2, and t3. To make the best use of the data (with decreasing sample sizes from t1 to t3), we conducted t-tests (t1-t2, t2-t3, t1-t3) with bootstrapping. Given the small sample size, we focus on effect sizes rather than significance.

#### Results

For MC, we found a significant increase from t1 to t2 and a significant decrease back to t1 levels from t2 to t3. For TFL and helping behaviours, we found significant increases from t1 to t2 and stability at these increased levels from t2 to t3. This suggests that for MC the benefits of improv training are stronger immediately after the training but become less noticeable as time passes after the training. For TFL and helping, the positive change persists.

#### Limitations

Due to the small sample size and self-reported data, the intervention effects need to be interpreted with caution. The study took place during COVID-19 when students interacted with each other online only; some variables of interest may have behaved differently if measured in an in-person rather than virtual context.

#### Conclusions/Originality/Value

This study introduces a promising (and fun!) intervention to improve interpersonal skills, particularly TFL and helping behaviours. Results, however, raise the question of stability of intervention effects, especially for mindful communication. Future research should test this intervention in larger (working) samples (e.g., leaders) and use active control groups. These results suggest that frequent practice may be integral to retaining some of the positive outcomes of improv training. Improv training has received limited empirical investigation and this tangible approach may hold promising potential for interpersonal skill development.

#### Relevance

The ability to improve interpersonal skills in virtual settings is important for the future of work.

*Keywords: mindful communication, transformational leadership behaviour, improv training intervention, virtual collaboration*

## 7-minute science 7M54

### Improving the empowerment of family members in organizations for individuals with intellectual disability

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This study was carried out in organizations for individuals with intellectual disability (ID). In this context, family members often feel powerless in satisfying the unique needs of their relative with ID, are vulnerable to stress and health disparities and struggle to sustain their family life. A small body of literature suggests empowerment interventions could aid such families, yet underrepresents quantitative, solid methodology. Respectively, we inquire whether an intervention oriented to increase empowerment, implemented in the aforementioned organizations, demonstrate gains in family empowerment among those family members.

Challenging individuals to overcome difficulties and to gain control is an essential strategy to amplify empowerment. Herein, family-centeredness, thus supporting families in finding themselves capable and responsible for positive changes, and collaboration appears to stimulate empowerment. Indeed, research indicates that interventions oriented to support family members in understanding the specific needs of their relative with ID and finding strategies to meet them leads to an increase in family empowerment.

Based on previous literature, we tested a family-centered intervention where family members needed to master two challenges, social inclusion and self-determination, of their relative with ID through collaborating with a professional in designing and implementing projects. Family members assigned to the experimental condition (N = 83) participated in the intervention while those assigned to the control condition (N = 92) did not participate. Professionals evaluated empowerment levels for the corresponding family member before (T1), 3 weeks (T2) and 6 weeks (T3) after the intervention, using a short family empowerment scale (Huscroft-D'Angelo et al., 2018).

Support for the one-factor structure of Family Empowerment and reliability of the scale ( $\alpha > .70 - .93$ ) was found. Two-way mixed ANOVA indicated that family members who participated in the intervention (compared to control) significantly increased their family empowerment ( $F(1,173) = 10.26, p < .01$ ). Post-hoc comparisons revealed significant gains for intervention participants overtime (T1-T3); between T1-T2, but not T2-T3; and for control participants between T1 and T2.

As our study was limited to the assessment through professionals, future studies could enrich the evaluation through further subjective or objective measures. Although not being our objective, longitudinal data could give more insights into the trajectory of the empowerment effect over time and allow to capture distal effects.

Our study entails theoretical, practical and societal contributions. We extend the knowledge on the effect of empowerment interventions through using methodologically solid methods and by providing novel insights into how to stimulate empowerment. Further, family members obtain a personal resource to cope with family difficulties and contribute to a higher quality of family life. Also, empowered family members are critical to improve the well-being of their relative with ID outside centres and are likely to participate in and facilitate service provision, paving the way for organisational progress. Societally, our study promotes disability rights.

Through targeting social inclusion and self-determination of individuals with ID, our research reduces inequalities . Our intervention contributes to health and well-being of families with unique challenges.

*Keywords: #family empowerment, #intellectual disability, #family-centered intervention effect*

## 7-minute science 7M165

### In Which Circumstances Does the Employability Paradox Exist?

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science

To achieve a sustainable competitive advantage, organisations need to provide employees with up-to-date knowledge to increase their flexibility and enhance their performance. Increasing employees' competencies improves their employability, providing them with greater opportunities in the internal and external labour market. Improving its employees' internal employability enables an organisation to make full use of their competencies. However, improved external employability (the potential for better job opportunities in the labour market) can increase the risk of employees taking their newly acquired skills to another employer. The contradiction between the benefit and cost of investing in employees called the employability paradox. The term means that developmental activities enhance employees' employability and increase the risk of leaving an organisation for another employer before that organisation has achieved a return on its investment.

The employability paradox phenomenon makes many employers reluctant to invest in their employees due to the fear from increased turnover. But organisations cannot achieve the competitive advantage without investment in their employees. Therefore, this research aims to explore the phenomenon of the employability paradox by investigating in which circumstances investment in professional development leads to either increased turnover or increased loyalty. The research will combine two analytical levels, organisational and individual, that have been rarely investigated together in the literature on employability.

The majority of employability research takes a narrow view, examining just one side of the impact of the investment in employees. For instance, most employability studies limit their investigation to the extent to which an organisation's investment benefits an individual's employability. Only a limited number of studies have focused on the impact of an organisation's investment on its competitive advantage and more research in this area is needed. The organisational level includes three aspects. First, "idiosyncratic deals", a term that refers to personalised agreements for a limited number of employees to develop the skills and professional competencies that will help them achieve their personal career objectives. Second, the concept of leader-member exchange (LMX), which is defined as the use of the relationship between employees and supervisors in the workplace as a strategy to identify valuable employees. Third, the role of human resource policies related to promotions and compensation as retention strategies for employees. The analysis at the individual level examines the impact of organisational investment practices on employees' perceived internal and external employability. The research will compare the impact on turnover of i-deals and LMX with that of HR policies that are intended as retention strategies. The research is based on social exchange theory, which states that investment in employees through the development of their competencies creates a sense of obligation among them to repay this investment with stronger performance, commitment and loyalty to their employer.

A structured questionnaire will be used to define the relationships between variables. The sample will consist of both employers and employees working in Saudi Arabia's financial industry due to the high competitiveness in this sector. The results of this study are expected to be available in about a year. However, based on previous findings in the literature, it is likely to be found that using i-deals and LMX will increase employees' perceived external and internal employability. However, improved

external employability can increase employee turnover, so HR retention policies like promotions and competitive salaries should be implemented to increase employee commitment.

The limitations of this study are related to the sample, which will be drawn only from Saudi Arabian companies. Therefore, the results and implications may not hold true for other countries. Further, the sample is limited to high-potential employees and using i-deals for this group might negatively affect other employees who are excluded from such agreements, creating a sense of unfairness among them.

In conclusion, the research can contribute to filling a gap in the literature by providing a broad perspective on the employability paradox. Combining two analytical levels, individual and organisational, can provide more conclusive results than those currently found in the literature on the employability paradox, which have been limited due to an overemphasis on the individual aspect. Further, the research aims to make a practical contribution by providing HR specialists with a clearer perspective on the circumstances in which the employability paradox might occur. This can help them to formulate more integrated investment strategies for training and development and HR policies to achieve a competitive advantage and employee loyalty.

*Keywords: Employability Paradox*

## 7-minute science 7M146

### **Intervene against sexual harassment: Testing the effect of a primary prevention intervention targeting bystanders**

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science

Intervene against sexual harassment: Testing the effect of a primary prevention intervention targeting bystanders

Research goals and why the work is worth doing

Multiple international studies have shown that sexual harassment is still a problem in many organizations (Svensson, 2020; Latcheva, 2017), with research pointing to both individual and organisational consequences of sexual harassment (SH). Adverse effects for victims include poor mental health (Rospenda, Richman & Shannon, 2009) and increased risk of for example depression (Friborg et al., 2017; Rugulies et al., 2020), self-harm (Jin, Lin & Strong, 2018) and suicide or suicide attempts (Hanson et al., 2020). Therefore, it is important to develop, implement, and test preventative SH interventions.

The goal of the research project is to test the effect of an intervention which focuses on bystander behaviour and the factors affecting this (e.g., aspects of the organisational culture, ethical infrastructure, and psychological safety). The study has two aims:

Testing the effects of the bystander intervention “Intervene – sexual harassment (I-SH)” through interviews and surveys. Effects are understood as changes in knowledge, attitudes, and actions of the employees regarding sexual harassment situations in the workplace. Realistic effects could be increased awareness of bystander behaviours and increased knowledge of sexual harassment and risk situations.

To investigate which organizational factors either inhibits or facilitates the implementation and effects of the intervention through group interviews.

Theoretical background

Research has shown that bystanders to bullying and SH may play an important role in how situations develop (Pouwelse, Mulder & Mikkelsen, 2018) and that interventions aimed at reducing workplace bullying by mobilising and engaging bystanders may contribute to changing a problematic group- or organisational culture (Mikkelsen & Høgh, 2019; van Heugten, 2011). Recent research suggests that mobilising bystanders [F1] also can be used for sexual harassment (Simonsson, 2020).

The I-SH is an adapted version of “Intervene” which has shown to affect factors that play a role in reducing bullying in the workplace (Mikkelsen, 2020; Mikkelsen & Høgh, 2019).

Design/Methodology/Approach/Intervention

The project is a mixed method investigation of the effects of the I-SH intervention. The intervention is a dialogue-based, user-friendly standardized intervention that organizations may employ themselves. The intervention uses short cases/vignettes, among other things, that portray real life situations, characters, and dynamics, which are easy to identify with. The aim of the intervention is to increase the participating managers and employee’s 1) awareness of what constitutes sexual

harassment, 2) awareness of the negative consequences of passive or colluding bystander behaviours, 3) awareness of risk situations for SH as well as 4) an increase in constructive bystander behaviour among participants. The intervention will include a one-day seminar or workshop for managers and employee representatives with the purpose of helping them plan and execute their own interventions.

The effect of “Intervene-SH” will be measured through baseline and 6 months follow-up surveys and group interviews in the participating organisation. The purpose of baseline group interviews is to explore employees’ and managers’ perception of local risk factors for sexual harassment and possible stimulating and obstructive factors that may affect the implementation and effect of the intervention. In follow-up interviews these factors are also explored as well as participant’s experiences of the intervention and its effects.

#### Results obtained or expected

The project is set to start baseline data collection Dec. 2022-Jan 2023. Planned intervention is in late March or April. It is expected that the preliminary results may be presented at the EAWOP conference.

#### Limitations

As this is a pilot study, the sample will be small with only one, maybe two, organisations participating. This limits the statistical power of the quantitative analyses and the generalisability of the findings. Another limitation is that the intervention is developed and tested for a specific sector. It is plausible that the intervention will need alterations to be effective in other sectors.

#### Conclusions

This research project is an important step towards creating empirically backed interventions to reduce sexual harassment in the workplace, of which there are few. With organisations having limited resources, it is important that the interventions they choose to invest in works.

#### Relevance to the Congress Theme

The presentations are highly relevant to the conference theme as it focuses on the very pressing issue of violence against women in the workplace. Since the #MeToo movement this issue have been a part of public debate in most European countries and must be addressed.

Relevant UN SDGs: Gender quality, Decent work, Reduced inequalities

*Keywords: sexual harassment, Intervention research, bystander behaviour*

## 7-minute science 7M168

### Interventions in Workaholism: A meta-analysis

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science

**Introduction:** Workaholism is related to a considerable amount of outcomes, such as burnout, work-life conflict, perceived stress, decreased levels of well-being, lack of physical activity, and even mental health. In turn, these outcomes lead to negative individual, interpersonal and organizational consequences. Considering past literature on the consequences of workaholism or work addiction, it seems crucial to investigate possible treatment measures. Therefore, the purpose of this study is to investigate literature data on treatments and interventions against workaholism.

**Method:** We conducted a literature search using Web of Science, PsycINFO, and Scopus, following the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines. Search terms included workaholism, work addiction, workaholic, work addict, working excessively, working compulsively, intervention, treatment, and treat.

**Results:** This study is in progress, but we will likely, in the end, retrieve about 895 research articles by December 2022. A brief inspection revealed that at least two research articles investigating possible treatment measures for workaholism are randomized controlled trials (RCT).

**Discussion:** Results discuss the number of studies eligible for the present meta-analysis, the relationship between different workaholism interventions and outcomes, and the following moderators: sociodemographic factors, personality traits, and work-family conflict; and offer a qualitative view of current trends on interventions tailored to treating workaholism.

**Keywords:** *workaholism, intervention, work addiction*

## 7-minute science 7M20

### Investigating Perceptions of Sexual Harassment in the Workplace

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science&practice

**Theoretical Background and Research Goals.** Sexual Harassment is commonly defined as unwanted or unwelcomed sexual behaviour that causes offence, humiliation, or intimidation (Charlesworth et al., 2011). Sexual Harassment in the workplace is a widespread global issue, effecting roughly 55% of European women in their lifetime (Violence Against Women: an EU-Wide Survey, 2015). The consequences for the targets of sexual harassment include decreased mental and physical wellbeing (Bergman et al., 2002), in addition to impacting job-related factors, such as decreased job attitudes and increased withdrawal behaviours (Chan et al., 2008; McDonald, 2012). Detrimental effects can also be observed in poor staff morale and performance, as well as reputational damage for the organisation and losing the confidence of stakeholders (Fitzgerald et al., 1997). Current research and government reports into workplace sexual harassment have shown there is a “lack of understanding about what constitutes sexual harassment” (Respect@Work Report, 2020). This is especially the case for more common and everyday forms of sexual harassment, where there is less awareness that behaviours such as gendered ‘jokes’ and remarks are harmful (McDonald, 2012). This lack of clarity may play a role in whether sexual harassment is appropriately dealt with by organisations. The inability to accurately label sexual harassment behaviour can also result in lower reporting rates, potentially leading to more problematic or escalating behaviour. Thus, more research is needed to determine what factors influence perceptions of sexual harassment. The aim of this project is to examine how the severity of the sexually harassing behaviour and the response of the target influences whether behaviour is labelled sexual harassment.

**Method and Results.** An online sample of 1,700 employees were presented with a workplace scenario manipulating the severity of sexual harassment based on Till’s (1980) continuum of sexual harassment. The target’s response was also manipulated. After reading the scenario, employees indicated how appropriate the behaviour was, whether the behaviour constitutes sexual harassment, and their confidence in this judgement. We also explored how participants’ demographics (e.g., gender, social skills) related to the propensity to label different behaviours as sexual harassment. The data have been collected and in the process of being analysed. The key factors influencing the labelling of sexual harassment and ratings of appropriateness will be discussed.

**Limitations.** Although the findings progress this area of research, scenario-based studies have limitations in fully capturing social realities.

**Conclusion and Relevance.** The goal of this research is to develop tools to foster a more inclusive and prosocial future workforce, in line with the congress theme of the future is now. This research will contribute important knowledge on what influences perceptions of sexual harassment in the workplace, which pertains to the UN Sustainable Development Goals of increasing gender equality and enhancing and protecting wellbeing.

*Keywords: Sexual Harassment, Gender, Sexism*

## 7-minute science 7M69

### Is this real? – Effect of context visual fidelity in virtual reality on mental model formation

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science

Research goals and why the work was worth doing – Driven by digital transformation and increasingly dynamic markets organizations must constantly redesign their work processes and ensure comprehensive understanding and effective training of employees who are affected by their implementation (Dumas et al., 2018, Berman, 2014, Guette & Vaenderbempt, 2013). Traditionally, work processes are conveyed using standardized modeling notations depicting task elements and their relations (Figl, 2017). This rather abstract and context-free nature (Poehler & Teuteberg, 2021) brings along information-pass-on barriers hindering effective understanding and implementation (Erol et al., 2010). Virtual Reality (VR) has been suggested as an educational medium with the potential to more effectively convey future processes (Straatmann et al., 2022). This study investigates how the contextualized presentation of work processes in VR with different levels of visual fidelity affects learning outcomes.

Theoretical background – We build on the multimodal theory of memory (Engelkamp, 1998) predicting superior learning outcomes when including the visual-imaginal and motor system into while learning. VR lets individuals experience processes like the real world (Botella et al., 2017), invoking a feeling of presence (Slater, 2018). Thus, learning in VR is expected to aid encoding and recall (Lokka et al., 2017) by utilizing spatial memory (Madl et al., 2015) leading to better memorization. Yet, cognitive load theory (Sweller et al., 1998) suggests that increasing context complexity (higher visual fidelity) may at some point impair the benefits stemming from its availability.

Design/Methodology/Approach/Intervention – We used a one-factor between-subject design with three conditions: No context (NC), low visual fidelity (LVF), and high visual fidelity (HVF). The N=90 participants were asked to learn a fictional work process in VR. Elementary and relational mental models of the work process were assessed via elicitation tasks (Harper & Dorton, 2019) along with control variables.

Results obtained – Results are being analyzed and will be presented at the conference. We expect mental models of participants in LVF and HVF to be significantly more complete than in NC. Further, we expect the mental models in LVF to be more complete than in HVF due to conflicting effects in presence and cognitive load.

Limitations – The experiment utilized a fictional process along with a sample of students. Future research should investigate the generalizability with a more diverse sample and within a real-world environment. Careful measures were taken to cross-validate results in the analysis and reduce subjectivity.

Research/Practical Implications – This study contributes to research on the effect of realism and presence on learning outcomes. For practice this study provides first insights of needs for realism in VR training applications, affecting cost-benefit considerations substantially.

Relevance to the Congress Theme – The present study relates to the changing world of work in assessing VR as a change management tool for training and development.

Relevant UN SDGs – The study investigates VR as a tool for qualitative education of employees ensuring decent work and economic growth.

*Keywords: Virtual Reality, work processes, visual fidelity*

## 7-minute science 7M104

### **Job? Adulthood? Not Yet! Procrastination and Self Perceived Employability at the transition between University and Work**

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science

#### Research goals

We investigate Polish University students' procrastination regarding career decisions. A recent study suggested that around 46% of undergraduate students and 60% of graduate students engage in the postponement of academic tasks (Rahimi and Hall, 2021). Our research goals include exploring attitudes to procrastination for contemporary undergraduate students; examining the relationship between procrastination, individual attributes and self-perceived employability; evaluating the potential implications for students' well-being, making recommendations or curriculum and policy initiatives relevant to Universities.

#### Theoretical background

Our research explores the relationship of procrastination, defined for our study as putting off acting on one's intentions (together with other individual attributes); with self-perceptions of employability, defined as the perceived ability to secure or sustain a desired role appropriate to one's qualification level. The originality of the research is in relation to University-work-transitions in the Polish Higher Education context, contemporary global concerns about individual engagement with work and concerns relating to psychological well-being.

#### Design

Our study is based on a survey of 522 first-year Humanities students at a Polish University. Research tools include the Polish Self-Perceived Employability Scale (PSPES), the General Procrastination Questionnaire; while temperamental traits were measured using the Formal Characteristics of Behavioral Temperament Inventory-Revised version.

#### Results

Procrastination was negatively associated with behavioral characteristics such as activity, endurance and lower levels of academic engagement. Respondents who perceived themselves as employable exhibited higher levels of goal-focused behavior, while those who procrastinated more had lower levels of self-perceived employability (SPE) with potential mental health implications due to increased hopelessness over time. Hence procrastination appears to be linked to employability as a contributor to causes of graduate under-employment, delayed adulthood and potential mental health concerns, understanding of which could inform pedagogic and policy development at an institutional and national level.

#### Limitations

There will inevitably be some attrition from the initial cohort. There may be continuing pandemic and geopolitical effects in relation to both student perceptions and labour market conditions. The Polish context may limit generalisability in the broader sense.

## Conclusions

The value of this study particularly pertains to mental health implications of contemporary students who should be future graduate employees yet may show a tendency to procrastinate over career-decision making. High levels of procrastination toward job-seeking may trigger hopelessness over time. This may result in deteriorating quality of life, well-being, or depression. Our research extends this perspective to investigate the potential longer-term effects on transitions into the workplace which would therefore be of concern to employers.

## Relevance to the Congress Theme

In relation to 'The Future is Now: Contribution' as well as 'Urgency' and 'Delivery', our concern is regarding the work-readiness of the graduate workforce, their sustainable livelihoods, as well as their ability to engage proactively with the world of work from a basis of sound psychological health.

*Keywords: employability, career decisions, individual attributes*

## 7-minute science 7M68

### **Learning new work processes by doing? – Effect of enactment in virtual reality on mental model formation**

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Osnabrueck University

science

Research goals and why the work was worth doing – Challenged by ongoing digitalization and increasingly dynamic markets organizations must continuously improve their work processes and ensure proper training of employees for successful implementation (Dumas et al., 2018, Erol et al., 2010). The training of employees is subject to high resource-intensity, especially with increasing specialization of work (Xie et al., 2021). With its advantages of effectively conveying cognitive, psychomotor, and affective job skills (Jensen & Konradsen, 2018), as well as cost- and time efficiency (Wismer et al., 2021), Virtual Reality (VR) provides a promising educational medium (Straatmann et al., 2022). This study investigates to what extent different learning conditions (observation, enactment) facilitate learning of new work processes in VR.

Theoretical background – We build on the multimodal theory of memory (Engelkamp, 1998) which predicts more effective learning outcomes through the inclusion of the visual-imaginal and motor system into the learning process. We assume that especially the enactment effect (Cohen 1981, Engelkamp & Krumnacker, 1980) improves memorization of actions in work processes compared to observational learning and learning by reading.

Design/Methodology/Approach/Intervention – We used a one-factor between-subject design with three conditions: learning by enactment (LE), learning by observation (LO), and learning by reading (LR). The N=90 participants were asked to learn a fictional work process in VR. Elementary and relational mental models of the work process were assessed via elicitation tasks (Harper & Dorton, 2019) along with control variables.

Results obtained – Results are being analyzed and will be presented at the conference. We expect the mental models of participants in LE and LO to be significantly more complete than in LR. Further we expect the mental models in LE to be more complete than in LO.

Limitations – The experiment utilized a student sample and a fictional work process. Future research should explore the generalizability with a real-world environment and a more diverse sample. Careful measures were taken to reduce subjectivity in analysis via cross-validation.

Research/Practical Implications – This study contributes to research on the effect of interactivity and presence on learning outcomes. For practice this study provides first insights considering the effectiveness of VR process training. This could yield high potential to implement a cost-effective, time- and location-independent educational medium within the organizational training program.

Relevance to the Congress Theme – The present study relates to the changing world of work in assessing VR as a change management tool for training and development.

Relevant UN SDGs – The study investigates VR as a tool for qualitative education of employees ensuring effective training to spur sustainable organizational transformation and economic growth.

*Keywords: Virtual Reality, work processes, enactment*

**Linking work events to work engagement: A proposal for a diary study on the moderating role of employees' psychological capital**

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science&practice

This proposed study aims to gain insight into the chain between work events, emotions, and behavior and the moderating role of personal resources in this relationship. Specifically, we want to examine whether daily positive and negative work events predict the daily level of positive and negative work-related emotions and work engagement. We also want to investigate whether employees with high (vs. low) in psychological capital (PsyCap) respond differently to positive and negative work events in terms of their emotions and work engagement. Following Affective Events Theory and Broaden-and-Build Theory, we hypothesize that experiencing positive events at work will increase employees' positive emotions while decreasing negative emotions, consequently increasing their work engagement. Similarly, experiencing negative events at work will decrease employees' positive emotions and elicit negative emotions, which in turn will disrupt work engagement. However, those relationships will be moderated by PsyCap. We view PsyCap as a buffer that helps employees cope with adverse events, leading them to experience significantly fewer negative emotions without suppressing the employees' positive emotions. According to our hypotheses, we expect PsyCap will stabilize employees' emotions in response to events at work and their work engagement. In addition, we hypothesize that PsyCap makes engagement at work less dependent on emotions resulting from events at work. Considering PsyCap as an additional resource, we expect its high level to maintain employee work engagement at a relatively constant, high level. A low level of PsyCap, in turn, will lead to a greater fluctuation in employee work engagement by making it more dependent on respective events at work.

The study will be conducted using a quantitative diary among 300 employees of the municipal transport company who will complete a diary questionnaire on ten consecutive working days, once a day after working hours. The study will use the Utrecht Work Engagement Scale (UWES-9 and UWES-3) to measure baseline and daily levels of work engagement, the Psychological Capital Questionnaire (PCQ-12) to measure baseline levels of PsyCap, the Positive and Negative Affect Scale (PANAS) to measure baseline positive and negative affectivity and its short version to measure the daily level of work-related emotions. We will also determine a set of positive and negative events at work in the baseline measurement by having participants indicate what situations they encounter at work. The study will be conducted in the first half of 2023.

In summary, by taking into account that PsyCap can be further developed through targeted training interventions, the insight into the role of PsyCap in building employee work engagement seems particularly important for today's organizations. By developing a high level of PsyCap in employees, organizations can provide them with resources to cope with difficult work situations, while enhancing their well-being and a high level of work engagement.

*Keywords: work engagement, psychological capital, diary study*

## 7-minute science 7M56

### **Love it or hate it: Antecedents and dynamics of employees' preference for remote work during the Covid-19 pandemic**

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science

**Research goals:** The Covid-19 pandemic led to massive changes in work design forcing employees into remote work fast. We propose employees' remote work preference as a key factor in determining employees' success in this setting. It is important to identify factors fostering the remote work preference to help employees thrive. To date, there is little and no systematic research on antecedents of remote work preference. The current pandemic with its changing work requirements provided the context to examine how organizational, work-related, and individual factors influence employees' remote work preference and how these influences change over time.

**Theoretical background:** The individual preference to work remotely predicts remote work success (Martinez-Amador, 2016). The dynamic situation during the pandemic regularly forced employees into changing work settings. We expect content (task digitalization), context (organizational support, physical working conditions, technical support, digital leadership), and individual factors (digital competence, boundary management) to influence remote work preference.

**Methods:** Data were collected in an online panel of employees (N=1009) over six months at three measurement points (Aug 2020, Nov 2020, Jan 2021). Data will be analyzed via multiple regression for all three time points to identify predictors for employees' remote work preference. To identify overall changes in the remote work preference latent growth curve modeling (LGCM) will be used. To investigate longitudinal influences of antecedents on remote work preference we will use bivariate LGCMs.

**Results:** Data analysis is ongoing and results will be presented at the conference. Organizational context, content, and individual factors should positively predict the remote work preference. Furthermore, we expect intercepts as well as slopes of antecedents to be associated with the change in remote work preference in bivariate LGCMs.

**Limitations:** The identified predictors are not exhaustive. However, they provide a first systematic integration of potential antecedents of the preference of remote work.

**Research/Practical Implications:** Our study systematically identifies potential antecedents of employees' remote work preference. Future research should expand this approach by also considering process factors. Additionally, the effects of employees' remote work preference on relevant outcome dimensions (e.g., job satisfaction, productivity) considering the actual work situation (e.g., through a fit approach) should be considered. On a practical level, organizations can gain insights on how to influence employees' remote work preference and support the adaptation to new work settings. Our study is the first to systematically examine antecedents of the remote work preference in a dynamic context. The results will provide indications for individualized support in fostering remote work preference in the context of new work concepts. Furthermore, this study provides a starting point for a larger research avenue addressing innovative and individualized work design in the context of new work.

Relevance to the Congress Theme – We address implications for successful work design in the context of new work, which has become crucial in the changing world of work.

*Keywords: remote working, individual preference, new work*

## Mapping employees' individual feedback processing skills: the conceptualization of employee feedback literacy

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science&practice

Feedback is often assumed to be beneficial for individuals' performance. However, this has been proven to not always be the case. In fact, feedback often seems to have no effect or even a deteriorating effect on performance (Kluger & DeNisi, 1996; Tseng et al., 2019). Scholars have, while researching the effectiveness of feedback interactions, looked into several explanatory factors, among which personal characteristics, contextual aspects, and properties of the feedback source or the feedback itself (Ilgen et al., 1979; Kluger & DeNisi, 1996). However, while feedback processing at the intra-individual level will most likely affect to which extent feedback will be effective, the individual differences in feedback processing skills have not been researched to this day. Processing feedback requires a lot of cognitive resources and individuals differ in their information processing skills (Ackerman, 1987). This implies that, while supervisors provide their employees with usable feedback, not every employee has the ability and skills to process this feedback and use it to improve their performance.

Therefore, we introduce the concept of 'employee feedback literacy'. Similar to other literacy concepts, such as information literacy (Widén & Karim, 2017), employee feedback literacy is defined and characterized by three dimensions: receiving, processing, and using information and, in this case, performance feedback. Thus, we define employee feedback literacy as 'the ability to receive, process, and act upon performance feedback at work'. This means that a feedback-literate employee has the necessary skills and is able to: 1) seek, recognize, accept, and evaluate feedback, 2) reflect on feedback and seek the necessary information to process feedback accurately, and 3) use the feedback to improve their performance, set new goals and monitor their progress.

Additionally, in a later stage, we will develop a scale to measure employees' feedback literacy. Theoretically, being able to estimate employees' feedback processing ability could explain the discrepancies in the extent to which feedback actually results in improved performances. It will, furthermore, disclose a new avenue in the limited literature on feedback processing. In practice, it would be interesting for organizations to be able to map and develop their employees' know-how with regard to feedback. In other words, measuring employees' feedback literacy will allow organizations to identify which specific skills should be addressed, for instance by means of training.

As the theme of the conference indicates, 'the future is now'. For years, researchers and practitioners have argued that there is no silver bullet or 'one size fits all'-approach regarding feedback and individual employees. Think about the ongoing discussions about the ideal feedback frequency, the way in which feedback should be provided, and the perfect time to give employees feedback. With the introduction of this concept, it will become possible to adapt feedback processes to individual employees, based on their ability and skills to receive and process feedback. In the future, in other words, feedback is based on a 'best fit'-approach. Feedback has been linked to employees' well-being and performance. Consequently, this research project is particularly relevant to the SDGs regarding 'good health and wellbeing' and 'decent work and economic growth'.

*Keywords: Feedback, employee feedback literacy, performance management*

## 7-minute science 7M92

### **Measuring Sustainable Employability among employees in low-skilled jobs: Adaptation of the Maastricht Instrument for Sustainable Employability (MAISE)**

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science

Research goals and why the work was worth doing

Due to demographic changes and a progressively complex labour market, employers are faced with a greying, overburdened workforce. Many employers develop interventions to improve their employees' sustainable employability (SE), but consider this a difficult task. SE measurement instruments based on the employees' perspective, currently fall short, particularly for the understudied group of employees working in low-skilled jobs. These workers generally have lower levels of education and a lower (health) literacy. Their work is characterized by low levels of job control and high physical demands. This may negatively impact the validity of SE measures in this target group. Earlier, the Maastricht Instrument for SE (MAISE-NL) was developed and validated. This study aims to adjust and validate MAISE-NL for use among employees in low-skilled jobs (MAISE-Easy).

Theoretical background

The MAISE builds on Van der Klink's conceptualization of SE which comprises four components: health, productivity, valuable work, and a long-term perspective.

Design/Methodology/Approach/Intervention

By means of focus groups consisting of employees with low-skilled jobs, items and response categories of MAISE-NL were aligned with the perceptions of these employees. Other items from subscales such as job control, self-efficacy and lifestyle were added. Language was checked for clarity and ambiguity. A questionnaire containing these items, and proxy variables (health and vitality) and demographics, was answered online by 1084 employees from five organizations (response rates 32-64%). Construct validity, reliability, and criterion validity were tested through PCA, CFA, Cronbach's alpha and correlations. We also performed sensitivity analyses (for sex, age and educational level). Additional data will be collected in the Spring of 2023.

Results

Analyses of the first data batch showed that MAISE-Easy comprises 10 scales divided over four areas: (1) Level of SE; (2) Factors affecting SE; (3) Overall responsibility for SE; (4) Responsibility for factors affecting SE. Reliability, and construct and criterion validity were adequate to good and robust across subgroups. Employees' SE was generally considered a shared responsibility of employee and employer, although the latter varied per factor. The analyses will be replicated for the 2023 data.

Limitations

Results may be influenced by common method variance, which is inherent to self-report and cross-sectional data. Further validation of the MAISE-Easy in larger and more varied samples is recommended.

Conclusions – research and or practical implications/Originality/Value

The MAISE-Easy is an adaptation of the MAISE. Very few survey-instruments are have been tested regarding their feasibility for employees in low-skilled jobs, and even less are adapted (research gap). Our new instrument was adapted based on both focus-groups with the target group and statistical grounds. We recommend researchers to use this instrument for SE studies in the understudied group of employees in low-skilled job. We recommend employers to use the MAISE-Easy as a needs assessment in order to develop SE interventions that will be readily accepted and effective for these employees.

#### Relevance to the congress theme

This research is highly relevant to the congress theme as it addresses a group of workers that is particularly impacted by recent global developments at workplaces and the labour market.

*Keywords: sustainable employability, employees in low skilled jobs, questionnaire*

## 7-minute science 7M21

### Micro-business adaptation during COVID-19 pandemic

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science&practice

Research goals and why the work was worth doing: This study sought to understand the adaptive capacity of micro businesses during an on-going crisis. This study was conducted in the context of New Zealand real estate agents to investigate how they adapted their business when confronted with the COVID-19 pandemic.

Theoretical background: Business adaptation is critical to navigate an increasingly turbulent environment (Reeves & Deimler, 2011) and the need for organisational adaptive capacity has increased during the COVID-19 pandemic due to the uncertainty and forced changes to business practices. This includes adaption of small and micro-businesses, which are key to many economies and are an integral part of many communities' make-up. However, a majority of studies in the literature focus on large organisations' collective adaptive capacity or large organisations' employees' adaptive capacity and resilience (Malinen et al., 2019; Nilakant et al., 2016; Tonkin et al., 2018). Little is known of micro-businesses resilience and how they may adapt during crises.

Design/Methodology/Approach/Intervention: This study was conducted in 2021, during the global COVID pandemic. We conducted 15 semi-structured interviews with New Zealand real estate agents, who had been in the industry a minimum of two years. Interview questions centred around participant experiences during the pandemic, learnings from past crises and strategies to maintain business operations during 'lockdowns'.

Results obtained or expected (if not available, it must be made clear when they will be): The key themes included learning from previous crisis experience, increased use of technology, and increased focus on client health and safety. In addition, participants spoke of innovative marketing techniques and increased communication with clients. The findings further suggest that real estate agents used a mix of social connections and sales techniques to continue providing their service. A strategic shift was observed, where real estate agents engaged in a more empathetic, humanistic approach where sales came second to the wellbeing of their clients.

Limitations. Key limitation of this study is sampling and only interviewing those participants who were still in business. Future research can investigate those micro-businesses who have not succeeded in their adaptation and have ceased to exist.

Conclusions – research and or practical implications/Originality/Value. This research contributes to our understanding of micro-business resilience, and demonstrates the creativity and adaptive capacity of small businesses. Learning from past crisis experience appears to be key for resilience, supporting findings from past research on large business resilience.

Relevance to the Congress Theme. Micro-businesses must be able to adapt to continuously changing circumstances. These small businesses are an important part of many community's make up, and therefore their resilience is likely to have wide-reaching implications for community wellbeing.

Relevant UN SDGs. Entrepreneurship and micro businesses are important drivers of social equity and economic security in communities.

*Keywords: Resilience, micro business, adaptation*

## 7-minute science 7M135

### **Modern Policing and the Use of Police Specific Measurements of Perceived Stress – Do We Get More Knowledge?**

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science

#### Background

Employees in the police services, either in civilian or police positions, are exposed to operational and organisational stressors in their professional practice (Violanti et al., 2017). The latter is identified as the police's predominant stress source (Shane, 2020). To gauge the character of policing, several scholars have developed police-specific measurements of perceived stress with satisfactory psychometric properties in a police population (Rabbing et al., 2022). As the number of civilian employees in the police service is increasing, they constitute an essential source of information that should be incorporated into the knowledge base for working conditions in the police. This study examines the usability of police-specific measurements when applied to the entire police population. We selected one of the most widely used police-specific measurements of stress; the Police Stress Questionnaire, PSQ-Op and PSQ-Org (McCreary & Thompson, 2006), in order to i) examine different factor structures when applied to our sample, ii) examine different aspects of validity (i.e., content and concurrent).

#### Method

A random sampling technique was used to select 4000 respondents from, at the time of the study, a total of 17.109 employees in the Norwegian Police Service; 560 of those invited responded, giving a response rate of 14%. Analyses of our sample verify significance according to representativity. We conduct confirmatory factor analyses (CFA) to examine how and if the factor structure that other studies using PSQ, have come up with fits our sample. For reliability, we use Cronbach's alpha score. For reliability, we use Cronbach's alpha score.

#### Results

Our sample, both when analysed through our entire sample and when stratified between police position (N=323) and civil position (N=237) shows poor model fits when tried on factor structures found in other studies.

#### Discussion

We discuss the construct of police-specific measurements of stress in general. We also discuss scale compositions and reflective vs formative, additive scales. For validity, we discuss associations between PSQ and generic scales of work-related stress, guided by established theoretical models like the Effort-Reward Imbalance (ERI) Model and the Demand-Control-Support (DCS) Model. We ask if police-specific measurements add more knowledge to the police population than general measurements may do.

## Conclusions

We do not find any of the same factor structures in our sample that others have found. This may be connected to the fact that the PSQ scales were created as formative in the first place.

*Keywords: Police Specific Stress Measurements, civilian and police employees, factor structure*

## 7-minute science 7M117

### **More fun in the sum? How team members' Big Five personality traits predict the emergence of humor in teams**

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science

1. Research goals and why the work was worth doing: Humor occurs in many team interactions at the workplace and has numerous positive consequences (Mesmer-Magnus et al., 2012). It is inherently social in nature: Successful humor requires an immediate reaction from listeners (such as laughter) and often leads to more humor in the interaction (as described in the wheel model of humor by Robert & Wilbanks, 2012). In this study, we focused on the emergence of humor in teams. Specifically, we examined how the production of humorous comments is influenced by one's own Big Five personality traits (= actor effects), by fellow team members' Big Five (= partner effects), and by the similarity between oneself and fellow team members.

2. Theoretical background: Team member personality characteristics have been shown to be important predictors of effective team collaboration. In this study, we refer to the Big Five model of personality, which distinguishes between extraversion, neuroticism, openness to experience, conscientiousness, and agreeableness. We base our reasoning on Moreland's and Levine's general theoretical model of group composition (1992). It distinguishes additive from interactive group composition effects (i.e., whether a group is more than the sum of its parts). A Group Actor-Partner Interdependence Model (G-APIM, Kenny & Garcia, 2012) enables us to test actor, partner, and similarity effects.

3. Design/Methodology/Approach/Intervention: Thirty-six teams with four to eight members each participated in this study (n = 201). They were recruited from different organizations in Germany via LinkedIn. Teams worked online on the desert survival task and were recorded via Zoom. The Big Five personality characteristics were assessed via a questionnaire before the team task. Humorous interactions during the team discussion were coded after data collection. We coded, for each humorous statement, who mentioned it, the target of the humorous statement, and whether fellow team members reacted with laughter.

4. Results obtained or expected: Data collection and discussion coding have been completed. Results will be available in December 2022. For the analyses, we are using a Group Actor-Partner Interdependence Model (G-APIM). We expect actor effects for extraversion and openness, and partner effects for extraversion.

5. Limitations: We examined actor and partner effects of humor in teams during a special phase of the pandemic when many people worked from home in 2021. Humor might have been especially important in those times to bridge the limited contacts. Therefore, results may be difficult to generalize.

6. Conclusions – research and or practical implications/Originality/Value: This study serves to deepen our understanding of humor in teams, specifically how personality characteristics shape the emergence of humor. The differentiation into actor and partner effects allows us to better understand the interdependencies in humorous team interactions.

7. Relevance to the Congress Theme: Our study focuses on online team collaboration, which has been prevalent since the start of the pandemic. It sheds a light on how humor emerges, which – in turn – can make online collaboration more energetic, creative, and fun.

*Keywords: Humor, teams, Big Five*

**Multi-level interplay among creative behavior, sustainable leadership, and industry 4.0 sophistication on sustainable innovation**

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science

Research goals:

Climate change, desertification, lack of water, pollution, and lack of raw sources are among the most important long-term challenges that the world is dealing with, which increases the importance of sustainability and sustainable innovation in light of achieving economic performance. Sustainability is not considered merely an extra strategic option for companies, but rather a vital factor for firms' survival. Sustainable industry and development need employee-level sustainable innovation and a new mindset in leaders (i.e., sustainable leadership) more than ever. Therefore, this research aims to investigate the multi-level interaction among creative behavior, sustainable leadership, and unit industry 4.0 (I4.0) sophistication on employee sustainable innovation. Also, multi-level theory shows that organizations are inherently multilevel systems. This research will contribute to developing a multilevel concept in the technology management-sustainability literature.

Theoretical background:

Increasing the emphasis on sustainability in the innovation process, innovation is increasingly becoming essential for achieving sustainable development. Due to this, sustainable innovation is defined as the employee development of new goods, processes, and services that reduce or remove the harmful effect of the production on the environment while they respond to the consumers' needs. It not only increases a firm's economic performance but also helps the environment which has both long and short-term benefits either for the company or for the environment and society. Creativity is defined as generating novel and practical idea, and putting these ideas to practice into new products and services is innovation. Depending on using and performing employees' creative idea, organizations can take advantage of these opportunities for growing and adapting to changes and competing in market. Therefore, a firm can function sustainably in innovation if its employees have creative behavior and participate in sustainable innovation activity.

H1: Creative behavior is positively related to employees' sustainable innovation.

Creativity and innovation are influenced by multiple elements. It is argued that team leaders' traits and behaviors affect and interplay with their employees' creativity. Thus, leadership plays an important role in workplace creativity and innovation. Sustainable leadership is not only concerned about creating short and long-term profits for a firm but also, improving the lives of people who are concerned. As innovation is the main key to sustainable development, it is vital for firms to complement their employees' creative endeavors with the sustainable leadership approach.

H2: Employee creative behavior interplays with sustainable leadership in predicting employee sustainable innovation.

I4.0 sophistication is indicated by a change through knowledge, information, and internet of things as the main concepts of an innovation-based economy, and it will turn old business operations into a new one in the digitalization era. It also provides efficient management and production and it could

have a specific contextual impact on employees' creative processes leading up to sustainable innovation.

H3: There is a three-way interaction effect among employee creative behavior, sustainable leadership and I4.0 sophistication predicting employee sustainable innovation.

**Methodology:**

Empirical research will be conducted on knowledge-working teams from a sample of small and medium-sized companies across a wide variety of industries and workplaces. Multi-level model will be tested through quantitative techniques using MLMED.

**Results obtained:**

Highest levels of employee sustainable innovation are expected when creative behavior, sustainable leadership and I4.0 sophistication are all present at high levels. Moreover, I4.0 and sustainable leadership assist in transforming creativity to innovation. Therefore, it is expected that I4.0 and sustainable leadership play the role of joint moderators between employees' creativity and individuals' sustainable innovation.

**Limitations:**

Adaptation of organizational-level measures for sustainable innovation to the individual level. Potential challenges in obtaining two-source (leaders and employees) data.

**Conclusions:**

Maintaining competitiveness is necessary for responding to I4.0 challenges for all companies, and improving innovation and its context with regards to leadership and I4.0 is considered as one of the main means to maintain competitiveness.

**Relevance to the Congress Theme:**

Our study provides additional insight into sustainable development particularly by investigating sustainable innovation microfoundations. Growing importance of sustainable innovation is obvious, and scholars are looking for answers to the question of how to adjust innovation for sustainability matters, then transform creative behavior to sustainable innovation by considering I4.0 and sustainable leadership.

*Keywords: Industry 4.0, sustainable leadership, creative behavior, sustainable innovation*

## 7-minute science 7M02

### **Negotiating perceived employability in the context of undergraduate work integrated learning**

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science

Prior research suggests work integrated learning (WIL) experiences constitute a significant route to perceived employability for undergraduate students (Jackson & Dean, 2022), facilitating mastery experiences (Cox & Simpson, 2016; Inceoglu et al., 2019), and leading to increased self-efficacy (Martin & Rees, 2019). However, the mechanisms through which perceived employability manifest from those experiences are less understood. Jackson & Dean (2022) suggest value in collecting more granular analysis by discipline of the impact of WIL on students' perceived employability. This study provides empirical evidence of the experiences of students completing placements in accounting roles.

Drawing on prior literature, Jackson & Dean (2022) offer a broad definition of individual (rather than organisational or societal level) employability, as encompassing work readiness, the development of generic skills and professional networks, career self-management and professional identity formation. They also recognise other important dimensions of employability, for example, career management competencies and professional socialisation. Perceived employability measured by Berntson & Marklund (2007) using an index constructed to include perceived skills, experience, network, personal traits, and knowledge of the labour market, refers to individual's sense of these employability dimensions and of their likelihood of securing work (Jackson & Dean, 2022). Higher levels of perceived employability enable students to become 'agentic learners' (Jackson & Dean, 2022, p.3), better able to compete in the labour market for graduate and subsequent roles and to navigate future careers. Empirical investigation leading to better understanding of the role of 'employment transitions' (Inceoglu et al., 2019, p.318) such as that offered by work-based work-integrated learning is needed (Inceoglu et al., 2019). Bonnard (2020) argue for an approach to employability that encompasses subjective dimensions of employability and that include students "representations of the world of work".

Using interview data gathered from 40 students before, during and following a six-month period of WIL in accounting roles, this study captures how students build representations of the world of work and their potential place in it. In effect through detailed qualitative analysis of students' subjective experiences of transitions into, during and out of WIL we track 'narratives of employability' across such experiences. In effect charting the processes by which they come to understand what an employable graduate might be and decide whether they wish to play in that game or not. The approach taken allows for variety in narratives to emerge, thus capturing differences in individual's perceptions of employability, some of which may stem from differences individuals bring to the WIL experience (Abrahams, 2017 in Bonnard, 2020) and some emerging from interactions and negotiations happening during WIL experiences e.g. whether employers affirm or negate students developing narrative of employability. The findings of this study contribute to our knowledge of how undergraduate students navigate and negotiate the subjective dimensions of perceived employability, highlighting how their interpretation of key events and organisational cues informs individual agency in securing future professional roles and determining desired career trajectories. Given rapidly changing workplaces and patterns these are important skills for graduates to develop. More broadly having a research focus that attends to future employees' subjective experiences of

workplace transitions and change will be an important element in assessing and building decent work and workplaces from all stakeholders' perspectives.

Keywords: *work-integrated-learning, perceived employability, career transitions*

**Objectification and self-objectification at work: a systematic review of the literature using PRISMA**

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science

Numerous studies on objectification and self-objectification at work aim to identify the antecedents and consequences of these processes. To our knowledge, no systematic review of the literature has been conducted. We used the PRISMA (Preferred Reported Items for Systematic Reviews and Meta-Analysis, James, 2020) approach to conduct a systematic review of literature on working objectification and self-objectification.

Objectification at work is a form of dehumanization that leads to perceiving and treating others (i.e., the worker) as an object (Nussbaum, 1995). More precisely, an objectified person is a person deprived of individuality or reduced to a specific function. Workers, victims of these objectification processes, tend to internalize objectifying thoughts towards themselves, and to see themselves more like a work instrument than a human (Baldissarri et al., 2017). This is referred to as self-objectification.

According to PRISMA recommendations, the review consists of two stages, the preparation and the completion, which is itself divided into three phases, namely identification, selection, and inclusion. First, the preparation stage consists of designing the framework in which the review will be conducted. Second, the execution stage aims at sorting the different references considered. We used the following search equation (objectification {title}) AND ((work) NOT (sexual)).

It emerges that the characteristics of the activity (repetitiveness, fragmentation, dependence) and the subordinating relations are sources of objectification. Moreover, the consequences of objectification are extremely harmful both for individuals, who are more likely to conform and are less happy in their work, and for organizations, which are more likely to see an increasing quitting intention or decreasing work performances. The main finding of this review is that only one study was conducted with the objective of identifying protective factors, showing the moderating effect of self-awareness in the relationship between perceived objectification and self-objectification.

We know that there are different processes of dehumanization at work (biologization, animalization) which would allow us to complete our knowledge of these mechanisms. Also, sexual objectification, from which objectification at work originates, could provide a lot of information about the functioning of objectification at work. It is therefore necessary to reiterate this review, taking into account the factors of dehumanization in general.

This review has identified current research directions in terms of predictors, consequences and protective factors of objectification at work.

This work integrates the theme 12 of the conference „Research Methods”.

The objective of this systematic review is to promote the well-being of workers who are victims of these dehumanizing processes and to promote professions that are victims of inequalities in terms of consideration and recognition.

Keywords: *dehumanization, objectification, PRISMA*

## 7-minute science 7M15

### **On the Verge – Investigating When the Observation of Prosocial Behaviors in the Workplace Can Turn from Positive to Negative**

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science&practice

Research goals and why the work was worth doing

Prosocial behaviors are acts that promote or protect the welfare of individuals, groups, or organizations (Brief & Motowidlo, 1986). While previous research either focused on the actor or on the target, literature on observers of prosocial behavior is scarce. In this study, we examine whether observing prosocial behaviors also positively impacts the observer's well-being and job satisfaction. Furthermore, by adding social connectedness and competitive psychological climate as moderators, we examine in which conditions an apparently positive event such as the observation of prosocial acts can either be beneficial or detrimental.

Theoretical background

Prosocial behaviors have a positive impact on the individual and organizational level with both engaging in and receiving prosocial acts improving employees' well-being (Hui et al., 2020) and performance (Grant, 2008). Furthermore, preliminary evidence suggests that observing prosocial acts has a positive effect on well-being (Chancellor et al., 2016), but the boundary conditions of this effect are unknown.

On the one hand, we argue that observing prosocial behaviors have more positive impact when observers are socially closer to actors and targets (Chancellor et al., 2016). This suggests that social connectedness, defined as the experience of belonging to a social network (Lee & Robbins, 1995) might therefore be a circumstance enhancing the positive effect on well-being and job satisfaction.

On the other hand, however, we argue that observing prosocial acts might have a less positive impact in a competitive environment (Hardy & Van Vugt, 2006). Indeed, prosocial behaviors can be used to enhance reputation and status (Berman & Silver, 2022) and therefore make others look bad in comparison. Particularly in a competitive workplace, prosocial behaviors may threaten the observer's reputation (Kawamura & Kusumi, 2020), self-evaluation (Parks & Stone, 2010), and hence well-being. Organizational competitiveness, characterized by contesting for resources, may therefore invert the positive impact of observing prosocial acts into a negative one.

Design/Methodology

Data is collected with an online two-week daily diary study among 200 participants. The observation of prosocial behaviors, positive mood, and job satisfaction will be measured daily at the end of the workday; whereas the moderators (i.e., social connectedness and organizational competitiveness, considered as rather stable characteristics) are measured in the baseline survey.

Results obtained or expected

Data will be collected in November 2022; results will be available in December and ready to be presented at the conference in May 2023.

Limitations

All measures are self-reports.

## Conclusions

The positive impact of being a giver or a recipient of prosocial acts is well established but testing both upsides and downsides of observing prosocial acts offers new insights that are of theoretical and practical importance and answers recent calls (e.g., Bolino & Grant, 2016) to investigate prosocial organizational behavior in more detail.

## Relevance to the Congress Theme

The workplace being more and more relational (Grant, 2007), engaging, experiencing, and observing prosocial behaviors would seem beneficial, both for the individual and the organization.

*Keywords: Prosocial behaviors, Well-being*

## 7-minute science 7M163

### Optimal Functioning in Society: A New Perspective on Flourishing

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science

Goals Studies show there are no clear boundaries between wellbeing at work and in other life spheres (Bianchi et al., 2021). Thus, to grasp workers' wellbeing, we need to understand what it is to be fully functioning in many life domains. Scholars in positive psychology have tried for decades to identify in which spheres flourishing people are optimally functioning. No consensus emerged and they failed to consider aspects of work, even if the World Health Organization (WHO, 2001) identified productive work as central to mental health. In two studies, we present the Optimal Functioning in Society (OFIS) model/scale, support its validity and assess longitudinally its nomological associations with passion for work.

**Background** The WHO (1948) posits that healthy people are mentally, physically, and socially well. It adds that positive mental health is the capacity to realize one's abilities, cope with stresses, work productively, and contribute to the community (WHO, 2001). The OFIS encompasses these dimensions by assessing psychological, physical, and social wellbeing (two facets romantic/non-romantic relationships), performance at work, and contribution to the community. Passion for work is a motivational force that can take a harmonious (HP) or obsessive (OP) form (Vallerand, 2015). HP occurs when people freely engage in their work out of love for it. OP occurs when people compulsively engage in their work because they love it and to get contingencies like self-esteem. Studies showed that HP promotes wellbeing and OP hinders it (Vallerand et al., 2019).

**Method** Items were created to reflect the six dimensions of the OFIS and reviewed by experts. In Study 1 (cross-sectional) 434 U.S. workers completed the OFIS and measures of key correlates. In Study 2 275 U.S. workers completed the OFIS and passion scales on two occasions (3 months).

**Results** Study 1 EFA supported the OFIS 6-factor structure. Latent correlations supported convergent validity and showed the OFIS factors were positively and negatively associated with positive (.15 <  $r$  < .89; flourishing, satisfaction, vitality, positive emotions, physical health) and negative (-.45 <  $r$  < -.11; negative emotions, physical illbeing) correlates. Study 2 An autoregressive model supported the OFIS temporal stability (.51 <  $\beta$  < .86). A cross-lagged model showed that HP at T1 was related to psychological ( $\beta$  = .20), physical ( $\beta$  = .15), and social (romantic  $\beta$  = .22; non-romantic  $\beta$  = .25) wellbeing at T2. OP at T1 showed small relations with performance ( $\beta$  = .11), romantic relationships ( $\beta$  = .10), and physical wellbeing ( $\beta$  = -.11) at T2. Contribution at T1 was related to HP at T2 ( $\beta$  = .14). Multigroup analyses supported the OFIS discriminant validity across age, sex, and relationship status.

**Limits** Both studies relied on self-reported measures.

**Conclusion** This research validated the OFIS scale, which includes spheres of functioning at work and in people's lives. It is the first study to assess directional relations between passion and a multidimensional flourishing model. These results support that HP promotes healthy functioning (psychological/physical/social), but not positive mental health (performance/contribution). OP seems to have a limited contribution to flourishing. The OFIS multifaceted nature could help obtain fine-grained observations of workers' flourishing.

Theme/SDG This research aimed at better defining wellbeing and identify its motivation antecedents (Topics 18 & 5) and pertains to the “Good health & wellbeing” SDG.

*Keywords: Optimal functioning in society, Wellbeing, Passion for work*

## 7-minute science 7M190

### **Orchestrating Voicing as organisational intervention to resolve and prevent conflicts at workplaces**

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science

Problems with work-related stress caused by role conflicts, interpersonal conflicts, and “Stress as an offense to self” (Semmer et.al 2007) is documented as having negative consequences on employees' mental health. (Meier, Gross, Spector, & Semmer, 2013; Semmer et al. 2015 Mikkelsen & Einarsen, 2001; Nielsen and Einarsen 2012; Hogh, Mikkelsen & Hansen 2011). Companies' ability to prevent and manage conflicts is furthermore decisive for whether conflicts escalate to bullying. (Einarsen & Hoel; 2008, Mikkelsen, Hogh and Puggard 2011).

This study is an action research project that provides capabilities to the working environment committee in designing sustainable conflict management processes. Through three full-day workshops, the leaders and employee representatives together worked with their own organizational conflicts management system both present and for the future. The four intervention workplaces were from building construction, production, social welfare, and childcare branches.

Data were obtained through interviews before and after the intervention program and with a short questionnaire after the last workshop (N= 54) which showed high satisfaction with the workshop days. Especially the opportunity to “talk about difficult topics in a peaceful and agreeable atmosphere” and engage in a common language was secondly pinpointed by the participants as an important way of sharing, analyzing, and designing dialogue processes to handle and prevent conflicts.

The interview part of the evaluation showed that the training program moved the workplace overall attitudes toward conflict prevention, and members of safety- and cooperation committees intervened earlier and more often in conflicts. The dialogue on how to intervene in conflicts and prevent them as facilitators were pointed out as the main contribution to the workplace capability. This capability will be unfolded under the concepts of voicing, silent voicing, and pseudo voicing and how to orchestrate dialogues to move conflicts to develop workplace activities and reduce the negative impact on mental health.

#### Voicing

Voicing is a framework for understanding when and why employees point out objectionable conditions. In a summarized article, Elisabeth Morrison proposes a description of voicing as employees' communication of ideas, suggestions, concerns, or opinions about work-related problems with the aim of improving the functioning of the organization or units (Morrison 2011 p.375). Companies need employees to pass on information about unwanted conditions to those who can prevent damage or errors. Whether or not employees choose to come forward with reports of unwanted conditions is, in Morrison's overview, a complex trade-off of contextual and individual conditions of whether the risk of coming forward is offset by a safe organizational environment, and whether it is worth the trouble to present criticism in relation to the possibility of whether the criticism is heard and acted upon.

#### Silent Voicing

Managers' response to inquiries is the most crucial contextual factor for whether employees believe that it is useful to bring up conflicts and criticism. Surprisingly, in a Dutch study, the degree of

response to the employees' inquiries is rated as higher by the employees than by the managers themselves. In the four case-workplaces the employees expressed that their choice of voicing behavior was a direct extension of the experience of whether the management was willing and able to do something about the conflicts. And when the conflicts were not resolved, along the way they gave up pointing out problems and instead took over "silent voicing" (Morrison 2011), withholding information, suggestions, ideas, questions or concerns about potentially important work- or organization-related topics in silent resignation. Here, the risk of conflict level increases as studies show that the more silent voicing, the higher the risk of intragroup conflicts in the workplace (Morrison 2011).

#### Pseudo Voicing

A lack of response can also develop into an experience of pseudo-voicing, when the management, via e.g. well-being measurements and workplace assessments, ask for the employees' assessment of conditions at the workplace without responding to the collected information (Morrison 2011).

Not being able to resolve concrete and recurring disagreements about the work tasks is described by the employees at the case workplaces as their biggest problem. The dialogue was closed down, as management had a different notion of the causes of the disagreement. At one workplace management's description of the biggest working environment challenges was the high amount of tasks and disagreements with the clients. However, conflicts with the clients were assessed by the employees as far less severe than internal disagreements about the work tasks.

How these concepts of Voicing can contribute to orchestrating conflict-handling dialogues will be presented in the oral presentation.

*Keywords: Conflicts, voicing, dialog-orchestrating*

## 7-minute science 7M40

### Peer Influence on Depression – Co-brooding as Underlying Interaction Mechanism in Social Networks

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science

Over the last years, several studies reported peer influence effects on depressive symptoms, showing that friends became more similar in their levels of depressive symptoms over time (Prinstein, 2007; Stevens & Prinstein, 2005, Van Zalk et al., 2010). Little is known, however, about the interactional mechanisms that explain how peers may affect depression. Co-brooding is an maladaptive form of interpersonal emotional regulation and its usage is associated with high levels of depressive symptoms in both partners in close relationships (Horn & Maercker, 2016). One possibility is that co-brooding explains how peers affect depressive symptoms.

We conducted a pre-registered (<https://osf.io/qazvd>) longitudinal social network analysis to examine a) whether peer influence explains changes in depressive symptoms and b) whether co-brooding functions as an underlying interaction mechanism of peer influence; we hypothesized that higher levels of depressive symptoms predict more co-brooding over time, and co-brooding, in turn, predicts increased peer similarity in levels of depressive symptoms.

We did a social network panel study, where one cohort of psychology freshmen was invited to participate for four waves (four-week intervals). At each wave, a round-robin design was used, where participants (n = 98) were asked to indicate their relationship (e.g., acquaintances) and their co-brooding with each of the other participants. Additionally, self-reported depressive symptoms were measured. These data were analyzed using Stochastic Actor-Oriented Models (SAOM) with the R-package RSiena (version 1.2-27; Ripley et al., 2021).

Findings show evidence for peer influence on depressive symptoms, because peers became more similar in depressive symptoms over time. However, contrary to our hypotheses, co-brooding could not be identified as an underlying interaction mechanism for peer influence.

Considering limitations regarding our sample, we used a network with clear boundaries, a cohort of psychology freshmen. Therefore, influences from people outside the analyzed network might have overshadowed influences within the analyzed network. Additionally, the changes in depressive symptoms were few because of the short time intervals, which limit the power of longitudinal network analysis (Stadtfeld et al., 2020). Finally, we exclusively focused on one negative interpersonal interactional mechanism, namely co-brooding; however, other (more positive) interactional mechanisms (e.g., co-reappraisal; Horn & Maercker, 2016) have been found to explain depressive symptoms in relationships and should be examined in future studies.

To conclude, this preregistered study widened the view on influence processes as evidence showed that acquaintanceship networks provide a potential in preventing and treating depressive symptoms. To identify underlying interaction mechanisms, more research is needed that includes a wider range of interactional mechanisms across different time spans.

Our study contributes to research on coping and social support as well as management of emotions, as it underlines the potential of influences on mental health within social networks. The results contribute to understanding how to achieve the UN sustainable development goal 3 (i.e., good

health and well-being) by emphasizing the relevance of peer influences on mental health in social networks. Identifying these influences can help to promote well-being via social networks, e.g., in the work context.

*Keywords: social network analysis, depressive symptoms, co-brooding*

## 7-minute science 7M107

### **PERCEIVED EFFECTS OF TELEWORKING ON ADAPTIVE PERFORMANCE: A MODERATED MEDIATION MODEL OF LEADERSHIP EFFECTIVENESS AND NEGATIVE AFFECT**

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science&practice

Due to the increasingly dynamic, complex, and frequently unpredictable nature of businesses and organizations, adaptive performance is becoming more and more important in challenging and unpredictable business situations. Due to the COVID-19 epidemic, teleworking has gained popularity as a paradigm of employment and is now employed by many enterprises to guarantee business continuity. The factors that can improve employees' ability to deal with uncertainties in their occupations, when working remotely, specifically those that may encourage their adaptive performance, have not yet been the subject of enough empirical investigations. We contend, based on the conservation of resources theory, that adaptive performance will be negatively impacted by the perceived effects of telework, and that this indirect effect will be moderated by the perception of leadership efficacy. We obtained data from teleworkers (N=227) to evaluate these hypotheses. Results showed a substantial indirect effect of perceived telework effects on adaptive performance via negative affect. Additionally, the indirect effect was moderated by leadership effectiveness, making it stronger for those who thought their leaders were effective (versus ineffective). The implications for employees and organizations are discussed.

*Keywords: Adaptive performance, telework.*

## 7-minute science 7M52

### **Perceived Sustainability Transparency of Organizations: A Scale Development and Validation Study**

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science&practice

**Research Goals.** The dimensions that individuals apply in evaluating the transparency of organizational sustainability information bear great theoretical and practical relevance. However, there is no standardized scale for the measurement of sustainability transparency. Thus, the purpose of this study is to develop an instrument to measure the perceived organizational sustainability transparency from a customer's perspective.

**Theoretical background.** We synthesize prior research on transparency and sustainability to advance a theoretically sound scale. A particular strength of our study lies in the twofold foundation of the construct. First, we consider the three transparency dimensions disclosure, clarity and accuracy based on the concept of Schnackenberg et al. (2020). In addition, we integrate the triple bottom line sustainability model by combining the transparency dimensions with social, environmental, and economic information of the organization.

**Methodology.** Based on an extensive literature review, an item pool was generated. Sustainability experts were involved in the development and refinement of the items. To test the questionnaire across contexts, information material on three hypothetical organizations from different industries was developed. The criteria for the industries' selection, the material itself and the content validity of the scale was pretested ( N 1 = 19; N 2 = 21). In the main study, 313 participants of 48 different nationalities completed the questionnaire. The assumed factor structure of the items was tested by means of confirmatory factor analyses.

**Results.** The item reduction process retained 27 items overall, yielding nine three-item subscales. Based on comprehensive validation procedures across different industries, we found strong support for the three-dimensional transparency model, with excellent factorial, convergent, and discriminant validity and internal consistency. The sustainability model yielded acceptable psychometric values except for a lack of discriminant validity.

**Implications.** The study sheds light on how customers perceive the transparency of organizational sustainability information and offers the opportunity to add to our understanding of the concept and its impact on other factors such as trust or sustainable consumption. The scale could serve as a flexible measure to examine the perceived status of sustainability transparency of companies and identify gaps and leverage points for improvement.

**Relevance to the Congress Theme.** Recently, scholars, politicians and consumers alike have called for more transparency on the sustainability activities of organizations in the future, though instruments for the assessment are still lacking. Drawing on established frameworks and combining the dimensionalities of both constructs, we advance research by developing and validating a measure of perceived sustainability transparency.

**Relevant UN SDGs.** The work is relevant to the SDG 12 as consumers and institutions are provided with guidance for the appraisal of sustainability transparency and can better identify (in)transparent

choices. Likewise, organizations can be supported in the construction of a transparent sustainability communication.

*Keywords: sustainability, transparency, scale validation*

## 7-minute science 7M173

### **Perceptions of applicants' personality traits from their resume: the role of specific cues in influencing readers' inferences**

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science&practice

**Research goals.** Recruiters' perceptions of applicants' personality traits can influence employability judgments. With this contribution we aimed to study the role of some resume cues in shaping those perceptions.

**Theoretical background.** The presence of some specific cues was found to be related to self-reported personality traits. Including volunteer activities or teamwork skills have shown positive relations with agreeableness scores. Since recruiters use resumes to infer individual characteristics, making inferences also on applicants' personality traits, we expect to observe that a) the presence of at least one of those two information related to agreeableness could influence the same trait rater-reported scores, and b) the personality trait-specificity of the same two cues should be supported by the absence of relations with other rater-reported personality traits.

**Method.** In study 1 we created four CV versions, experimentally manipulating only the presence of agreeableness related cues. We randomly administered them to 173 students, asking them to read it and rate it using an other-reported personality questionnaire (Big Five Inventory). In study 2 we aimed to study the same relations in a real selection context, thus collaborating with four recruiters from two organizations and using real CVs (120 for every organization). According to study 1 manipulation, we divided archives' CVs into four groups, and asked to the recruiters to rate them using a shorten version of the BFI.

**Results.** In study 1, MANOVA partially confirmed the hypotheses, supporting the role of trait-relevant information in influencing personality traits perceptions. ANOVA conducted to study agreeableness showed a significant effect, with participants who read a CV version presenting at least one of the two manipulated information, assigning significantly higher agreeableness scores, compared to those who read a version lacking such trait-relevant information. The manipulation had no significant effect on the other personality traits' assessment, except for extraversion, for which the presence of both trait-relevant cues led to significantly higher extraversion ratings when compared to their absence, consistently with previous evidence. Data collection for study 2 is ongoing and will be completed in summer 2023.

**Limitations.** In study 1, information presented inside the experimental CVs are not fully representative of real CVs contents' heterogeneity. Secondly, other-reported personality ratings were collected between students. In study 2, we had limited experimental control on the presence of other specific cues inside resumes.

**Conclusions.** Results obtained so far support the idea that the presence of trait-specific resume cues can influence recruiters perceptions of applicants personality traits. Evidences like these could be useful both to recruiters – enhancing their awareness about their own inference strategies – and to applicants – striving for presenting their own qualities.

**Relevance to the Congress Theme.** Insights gathered from these studies are consistent with the evolution of recruitment and selection procedures, because of the wide use of resumes for

applicants screening, and also for their generalizability to newer instruments used for the same purpose (e.g. LinkedIn profiles).

Relevant UN SDGs. Decent work and economic growth

*Keywords: Job applications, Person-job fit, Talent acquisition*

## 7-minute science 7M70

### Personal Resources and Digital Work

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science&practice

Employees are facing new and multiple challenges of digital transformation process and the digitalized work itself. Past research has shown that job resources and personal resources can aid in coping with new demands, especially if resources match the demands (e. g. triple-match principle, person-environment-fit). Despite the prevalence of digital work, attempts have been made to explore the potential of personal resources particularly with regard to facilitating digital work. The aim of this study was to test whether interactive digital agency, a newly developed personal resource (Kaesmayr – under review) may buffer negative effects of digital demands while facilitating benefits digitally provided resources bring. Past research of the JDR model (Demerouti & Bakker, 2007) showed that personal resources buffer exhaustion caused by high demands. It furthermore strengthens job resources leading to a gain spiral. The digitalization of work comprises new job demands and resources. Recent studies indicated individual differences may determine whether individuals suffer or thrive in these work environments. Interactive Digital Agency (IDA, Kaesmayr - under review) as a hierarchical model whose higher order factors contain individual dispositions regarding digital work can be summarized as digital competence and digital affinity, which may function as a personal resource in the workplace. Against the background of an expanded JD-R Model reflecting digital work (Steidle et al. in preparation) the personal resource and digital work differentiating the degrees of digital information, interaction, integration, data processing and transaction were assessed. 519 public servants participated in an online survey providing information about how digital the processing of administrative action was including job demands and resources, exhaustion, job engagement, and work performance. Structural equation modeling of the digital work reflecting JD-R model (Steidle et al., 2022) confirmed the expected serial mediation. Based on these findings moderations with IDA for the dimensions interaction and transaction were detected. Participants displaying low digital competence perceived an increase in digital interaction as a higher workload, leading to more exhaustion and ultimately a lower job performance. No such relation was found for participants with high digital competence. Similarly, participants with high digital competence perceived a reduced workload when digital transaction increased, which positively affected job performance. The data collected was of a selfreported and cross-sectional sample due to practical constraints. The present research which digital personal resources may aid in thriving in a digital workplace. From a theoretical perspective, the results confirm focusing on digital personal resources in order to successfully navigate digital demands associated with digital work. The results furthermore provide insights pertaining to challenges of digital work which can be met by strengthening employees' digital personal resources. This study contributes to the congress topic "The Future is Now: the changing world of work" as it demonstrates the buffering effects of new or high demands associated with digital work. It furthermore provides guidance for individual based strategies to aid employees cope with new digital demands. Lastly, this research contributes to the goal of achieving good health and well-being.

*Keywords: personal resources, well-being, JDR*

## 7-minute science 7M34

### Profiles of co-worker social undermining on older workers' mental well-being

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science

#### Research goals

Older workers face different types of workplace mistreatment due to their age. An example of workplace mistreatment examined in this study is social undermining by co-workers. Social undermining is argued to be a form of unethical workplace behaviors (Mostafa et al., 2021). To improve the mental well-being of older workers, it is crucial that we identified how ethical leadership could reduce social undermining and improve job satisfaction.

#### Theoretical background

This study is informed by social learning theory (SLT) and affective events theory (AET). Social undermining by co-workers is an example of negative affective events in the workplace (e.g., Guenter et al., 2014), which could impact on job satisfaction and mental well-being. By complying with social rules, social undermining behaviours would not be tolerated. SLT explains how employees learn what is acceptable or not acceptable from their supervisors; thus, developing a positive work environment. Hence, ethical leadership is hypothesized to have a positive impact in improving older workers' job satisfaction and mental well-being while controlling for psychosocial safety climate (PSC).

#### Methodology

Cross-sectional data were collected from 1,127 workers from Australia in April 2020. We conducted a latent profile analysis (LPA) to identify the underlying social undermining profiles. Previously validated scales were used to measure the constructs. One way ANOVA was conducted to establish if there was any difference between class in relation to ethical leadership, job satisfaction, and mental well-being. A multiple regression was undertaken using Model 59 of Hayes (2016) Process macro was then used to test the hypothesized mediated moderation model.

#### Results

Using Latent Gold 5.1 software, three latent class membership profiles were identified: (1) from no exposure [43.7%], (2) little exposure [22.5%], and (3) exposure [33.9%] to social undermining from co-workers among older workers. One way ANOVA showed significant differences in ethical leadership behaviors, job satisfaction, and mental well-being between these profiles. Multiple regression showed there was a partial mediation of job satisfaction on the relationship between social undermining profiles on mental well-being. This mediation relationship was moderated by ethical leadership such that high level of ethical leadership resulted in higher level of mental well-being and job satisfaction. Ethical leadership also moderated the relationship between social undermining and mental well-being such that higher ethical leadership reduced social undermining. While this study could be affected by common method bias (CMV) due to the collection of cross-sectional data in a single time point, we conducted post-hoc statistical checks for CMB.

#### Conclusions

This study offers theoretical and practical insights into the role of ethical leadership in promoting and creating a healthy work environment for older workers in order to improve their job satisfaction

and mental well-being. Our findings can be explained by AET and SLT as ethical leadership develops and reinforces the ethical conduct in the work environment via the process of social learning.

#### Relevance

This study is relevant to the congress theme as we examine the experience of older workers in the context of an ageing workforce in Australia. Therefore, the study examines the changing world of work as experienced by older workers. The study responded to UN's SDG #3 and #10.

*Keywords: ageing workers, ethical leadership, social undermining*

## 7-minute science 7M63

### **Reaction to Covid-19-induced remote work in German public administrations: Challenges, chances, and the role of person-environment fit**

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science

**Research goals:** The Covid-19 pandemic led to a sudden and forced implementation of remote work for public administrations, regardless of employees' preferences. However, whether remote work is successful depends on the individual's preference to work remotely (Martinez-Amador, 2016). Moreover, Otsuka et al. (2021) stress that misfits between employees' remote work preference and the actual work setting lead to higher reported stress. Hence, the present study aims to understand how public administration staff perceived the abrupt shift towards remote work (e.g., challenges and opportunities), which effect the fit between preference and actual work situation has on job-related outcomes, and how this effect changes over time.

**Theoretical background:** Even though, the influence of individual and job factors on job-related outcomes in the context of remote work have been studied separately, the effects of the fit between the two have been neglected so far. Therefore, the concept of Person-Environment (P-E) fit as the congruence between an individual and its environment (Edwards et al., 2007) is applied to the remote work context (i.e., the fit between an employees' preference for remote work and their actual work setting) to examine effects on relevant outcomes in the context of public administration settings.

**Design:** Employees (N=483) of four public administrative organisations were surveyed three times over six months (Aug 2020, Nov 2020, Jan 2021). We will use content analysis by Mayring (2019) to cluster challenges and opportunities of remote work. Moreover, we will use polynomial regression and response surface analysis to analyse the effects of remote work fit on job satisfaction and perceived productivity.

**Results:** Data analysis is ongoing. Results will be presented at the conference. A high fit between remote work preference and the actual work setting is expected to positively influence job satisfaction and perceived productivity regardless of the direction of fit.

**Limitations:** Two main limitations are that, first, the study solely relied on self-reports. Thus, future studies should also consider key performance indicators. Second, the study only used data from four organisations. Thus, future studies should aim for more diverse samples.

**Research/Practical Implications:** This study newly considers the fit between remote work preference and actual work setting in a dynamic environment, thus stimulating further research in this field. The results potentially provide important insights for organisations on how to improve important outcomes by considering individual preference for remote work in flexible and individualized work design. Our study applied the concept of P-E fit in a remote work context examining effects on important outcomes. Furthermore, results on the development of fit over time may foster flexible and individualized work design in the future.

Relevance to the Congress Theme – We address challenges and chances associated with the abrupt shift towards remote work in public administrations as well as the role of P-E fit in the remote work domain.

*Keywords: remote working, person-environment fit, public administration*

## 7-minute science 7M145

### Relational, Emotional, and Affective Nature of School Leadership

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science

#### GOALS

This study explores the relational, emotional, and affective (REA) aspects of educational leadership in Irish primary and post-primary schools. The relational aspect relates to the interpersonal i.e., between school leaders and other people within the school community. The emotional aspect relates to aspects including emotion display rules and emotional labour. The affective aspect then in this context refers to motivations, values, enthusiasms, and attitudes.

#### BACKGROUND

The emotional nature of academic leadership has received increasing attention (e.g., Schutz and Pekrun 2007; Schutz and Zembylas 2009; van Veen and Lasky 2005), arguably reflecting an "affective turn" (Kostogritz, 2012). Coupled with the increases in distributed leadership and the promotion of more collaborative practices (King & Nihill, 2019; Slater, 2005), calls have been made for research on the REA aspects of academic leadership (Kostogritz, 2012). Additionally, human-centred leadership which has been referred to as the "key to the 21st century" (Howard, 2015, p.1) requires REA leadership skills and practices. Relational aspects allow for greater knowledge sharing (Engelsberger et al., 2022) and trust (Brower et al., 2000) between leaders and followers. Emotional aspects facilitate positive social interactions (Hochschild, 2003) and positive affective states in followers (Edelman & Van Knippenberg, 2017). Affective skills allow for the greater engagement between followers and leaders (Hoy et al., 2006) and for leader self-reflection and greater evidenced based decision making (Hoy et al., 2006). Due to the importance of REA practices and skills for the achievement of a human-centred leadership approach, it is important to understand the REA nature of leadership as it currently exists.

#### METHODOLOGY

This is a correlational and cross-sectional design based on self-report measures of currently practising school leaders. A questionnaire was distributed to assess areas relevant to REA aspects of leadership. Participants provided demographical info and completed scales for constructs relevant to relational, emotional, and affective aspects i.e., School Leader Identity (Leach et al., 2008), Emotional Labour (Brotheridge & Lee, 2003), Turnover-intentions (created for this study), Burnout (Riley et al., 2017), Negative Acts Questionnaire (Notelaers & Einarsen, 2013), and Authentic Leadership Questionnaire (Walumbwa et al., 2008). The questionnaire finishes with open-ended questions for participants to add any additional information if they would like to. Participants were school leaders i.e., principals, assistant principals, deputy principals, year heads, department heads, and others who hold a senior or middle leadership position.

#### RESULTS

Data is currently being collected and results are expected in January, 2023.

#### LIMITATIONS:

This study only includes participants from Ireland, however, this can form the basis of future, widespread inquiry across Europe and beyond.

## CONCLUSIONS

It is expected that the findings of this research will shed light on the REA nature of school leadership and has the potential of identifying areas of concern that need to be addressed and areas of positivity to be embraced and supported. Considering the high rate of turnover and increasing interest in sustainable leadership, this research is expected to be highly beneficial to an international body of stakeholders.

## RELEVANCE TO THE CONGRESS THEME

Future is now: As European countries and schools become more diverse in their student cohorts, it is imperative that schools evolve to reflect these changes and ensure inclusivity and quality of education for all future citizens. School leaders play a pivotal role in ensuring cultures of learning, cultures of inclusivity, and the implementation of policies. Unfortunately, school leader numbers are in crisis due to recruitment and retention issues, and if this is not addressed, the future of education is bleak. To address these concerns, calls have been made to identify factors which promote an increase in numbers. This research aims to do just that by exploring the REA nature of school leadership and in so doing, identify positive factors to be promoted and negative factors to be resolved.

## RELEVANT TO UN SDGS

Quality Education : School leaders play a significant role in the provision of quality education through multiple platforms. School leaders influence school culture, staff, and student wellbeing, and can be the instigators or terminators of change and policy implementation. School leader recruitment and turnover is becoming an increasing problem across the globe which is having a direct negative impact on the provision of quality education. This research seeks to identify some of the factors that may be directly influencing this dynamic through the exploration of relational, emotional, and affective aspects of school leadership.

*Keywords: educational leadership, academic organisations*

## 7-minute science 7M17

### Respectful Leader Communication is a Booster for Debriefings in High-Risk Contexts

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science

Research goals and why the work was worth doing

After exercises or operations, leaders in high-risk contexts usually conduct debriefings with their followers to improve learning. We tested our assumption that respectful leader communication is a simple yet effective way to increase the effectiveness of such debriefings by enhancing psychological safety.

Theoretical background

In debriefings, sensitive topics such as errors during an operation are discussed. In order to facilitate open discussion and learning processes, psychological safety is essential. We assume that leaders can establish psychological safety through respectful communication behavior. By offering appreciation, revealing own insecurities, and soliciting supportive feedback, leaders make followers feel valued and model a proactive approach to error management. Thus, we propose that respectful (vs. neutral) leader communication leads to higher psychological safety (H1), and to higher follower satisfaction with the debriefing (H2). Furthermore, we expect that positive effects of respectful communication are qualified by leaders' gender due to gender role stereotypes, leading to lower acceptance when displayed by female (vs. male) leaders (H3).

Design/Methodology/Approach/Intervention

We conducted a preregistered experimental online study with the within factor leader communication during debriefing (respectful vs. neutral) and the between factor leader gender (male vs. female). A total of 268 firefighters (97% male, a typical gender distribution within fire departments) read two vignettes of operations and subsequent debriefings. We asked the participants to put themselves into the described situations and to report perceived psychological safety and satisfaction with the debriefing.

Results obtained

Variance analysis indicated that psychological safety ( $d = 1.16$ ) and satisfaction ( $d = 1.41$ ) were higher in the respectful communication condition, confirming both H1 and H2. There were no differences in the outcome ratings between male and female leader, so that H3 was rejected.

Limitations

The ecological validity of vignette studies is limited. To address this issue, we will conduct an additional field study with more valid measures of learning outcomes. Results are expected to be available in May 2023.

Conclusions – research and or practical implications/Originality/Value

By using easy to apply communication behaviors, leaders have a significant impact on psychological safety during debriefings. Our findings suggest that respectful communication is a prerequisite for followers' learning success, and that this positive effect is not qualified by leader's gender even in a highly hierarchical and male-dominated context such as firefighting. However, given that

communication behavior is often neglected in firefighting training programs, it should be integrated into regular leader training courses.

#### Relevance to the Congress Theme

High-risk contexts such as the fire services have long been infamous for strict hierarchies and authoritarian leadership. Our research shows that things can be different – respect pays off.

#### Relevant UN SDGs

Effective debriefings increase the resilience of fire services and other public rescue organizations. We thus contribute to Goal 11 “Sustainable cities and communities”.

*Keywords: Learning, Gender, Fire services*

## 7-minute science 7M12

### Shut Up and Rot Inside? Through Anger Expression Toward Goal Attainment and Well-Being

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science&practice

Research goals and why the work was worth doing: Pent-up anger at work has resulted in devastating outcomes, including aggression, murder, and suicide. Given these devastating outcomes, much research has recommended to inhibit anger all at once. Yet, anger should perhaps not be inhibited or even pacified via anger-management techniques, but instead constructively canalized toward solving the actual problem. We offer a theoretical extension of the workplace anger literature with a problem-focused coping perspective, arguing that the controlled expression of anger does favorably affect goal attainment and resource depletion via the increase of confrontive coping and the decrease of anger rumination.

Theoretical background: Our study is informed by Appraisal Theory as well as its a problem- and emotion-focused coping perspectives. We construct a dual-pathway model which conceptualizes confrontive coping as a constructive problem-focused coping strategy and anger rumination as a destructive emotion-focused coping strategy. While the problem-focused coping pathway captures the constructive energy expression of anger, the emotion-focused coping pathway captures its destructive inhibition. We extent the conceptual model by exploring person-level trait variables, reflecting potential intraindividual moderators affecting the emotion process.

Research methodology: We pre-registered our hypotheses at the Open Science Framework ([https://osf.io/3tdwv/?view\\_only=dcf7c1a7f0944c03ad466b92c37229cf](https://osf.io/3tdwv/?view_only=dcf7c1a7f0944c03ad466b92c37229cf)). We test our hypotheses by conducting a comprehensive field study with participants from various organizations and industries using an experience-sampling research design. We ask 150 participants to fill in structured questionnaires thrice each workday (9:30 am, 12:30 pm, 15:30 pm) across ten workdays in addition to a baseline survey. We conduct a series of multilevel confirmatory factor analyses in Mplus to verify the construct validity of the core measures. Next, we apply a series of (Bayesian) multilevel structural equation models in Mplus to test for the effects present in the dual-pathway model.

Expected results: We expect that anger felt in the moment increases confrontive coping and anger rumination during the next couple of hours. We further anticipate that anger favorably affects goal attainment and resource depletion if it is mediated (i.e., dealt with) by confrontive coping, and unfavorably if it is mediated by anger rumination. We also believe that “anger confronters” are less resource depleted at the end of a workday compared to “anger ruminators”. Final results are expected to arrive by March, 2023.

Limitations: The use of self-report measures raises concerns of common-method-bias. The repeated-measures design raises concern of method-biases (i.e., fatigue, boredom, habituation, and the Socratic effect).

Conclusions: Taken together, our hypothesized results will distinguish between the proper and improper handling of anger at work, directly serving to increase the continuous productivity and well-being of workers.

Relevance to Congress Theme: Futures changes in the world of work will lead to problems arising which may cause anger. To guarantee the continual success in the implementation of these changes, finding ways for constructively coping with them will be required. Our paper directly offers solutions

to this matter by outlining how anger can be used constructively to resolve urgent and change-obstructing issues.

*Keywords: Anger, Confrontation, Rumination*

## 7-minute science 7M35

### **Signalling diversity and inclusion: How do organisations with high commitment to gender diversity and inclusion signal it in their job adverts?**

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science&practice

This study sought to understand explicit and implicit messaging within job adverts and how this signals belonging and inclusivity to women. Previous research has considered the negative impact of gendered wording, such as 'competitive' and 'dominant' (Gaucher et al., 2011) or non-genuine diversity signals (Kroeper et al., 2020) on women's intention to apply. Meaning that organisations that are committed to D&I should be positively signalling this in their job adverts.

#### Theoretical background

The literature so far has shown that there are barriers to women moving into leadership roles caused in part by implicit expectations of a leader (Eagly, 1987, 1997; Schein and Davidson, 1993; Offermann and Coats, 2018). When faced with this socially constructed idea of a 'male' leader, women may feel an identity threat where the description of a role they identify with (leader) is ascribed to men (Petriglieri, 2011). Since people are less likely to apply for a job where they don't think they will 'fit/belong' (Scholarios et al., 2003; Petriglieri, 2011), it has the potential to impact gender diversity in leadership positions.

Although good work life balance (WLB) is beneficial for all genders (Firfiray & Mayo, 2017; Stich, 2020), women may experience a greater need for flexible work options (FWO) due to a higher likelihood of having caring responsibilities; however, they may worry that offers of flexible work are non-genuine. Despite the need for FWO, many people are hesitant to request them due to concerns about how genuine the offer is (DeRue & Ashford, 2010; Kelly et al., 2010; Ryan & Kossek, 2008), or the impact it might have on their future careers (Cohen & Single, 2001; Cuddy et al., 2004; Kmec et al., 2014). Starting this conversation as early as possible in the recruitment process can signal a genuine willingness to be flexible and demonstrate an inclusive approach.

#### Method

This study took a qualitative approach to content analysis looking at the way organisations signal their gender diversity and inclusion commitment through job adverts. Ten adverts were analysed from ten professional services or banking organisations selected from The Times Top 50 Employers for Women (2020) list (100 in total).

Content analysis as described in Erlingsson and Brysiewicz (2017) was used to identify meaning units the length of a sentence or bullet point which were built into themes.

Autonomous counting (Hannah and Lautsch, 2011) was used to identify the number of gendered terms.

#### Findings

The findings indicate that companies are considering the information they provide from a diversity point of view, but are failing to signal true inclusion which would make women feel welcomed. Two key themes were identified:

Flexibility – genuine offers of flexibility Lead like a man – how male based descriptors are used in the role profile

#### Limitations

The scope of this study was deliberately restricted to ensure the correct level of depth could be achieved; however, future research would benefit from considering a wider range of diverse characteristics including race and socio-economic background.

#### Practical implications

This study identified the following practical implications for hiring managers and HR departments. Consider:

what wording can be used to demonstrate that full role flexibility? using gender neutral wording assessing job descriptions to determine whether they are based on ideal worker norms that are not necessary for the role.

*Keywords: Gender Diversity, Recruitment*

## 7-minute science 7M61

### **Social baseline theory and the leader-follower relationship. Investigating the principle of load sharing**

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science

Why the work was worth doing: The pandemic caused an increase in remote work (e.g., home office). Consequently, knowledge is needed to better understand how this change in the social environment influences work life. Our study sheds new light on this issue.

Theoretical background:

Social Baseline Theory (SBT) proposes that the human brain expects proximity to social resources, and that in the absence of these resources, the brain will budget and predict the future differently (e.g., when alone, people perceive potential threats as more threatening). A key element of SBT is the principle of load sharing, and the idea that in close interdependent relationships, brain activity becomes more synchronized and responses to demands in the surroundings are dealt with at the dyadic level. Our study investigates load sharing in leader-follower dyads by measuring basic psychological needs satisfaction (i.e., need for mastery, autonomy, and relatedness). Applying the principle of load sharing, one would expect that leader and followers' perception of own basic needs satisfaction would gradually become more similar and synchronized over time. Therefore, we propose that in leader-follower dyads, the relationship between the individual ratings of own basic need satisfaction is moderated by dyadic tenure, such that the two ratings will become gradually more similar when dyadic tenure is high.

Methodology: Data was gathered from seven mid-size companies, representing a variety of branches (e.g., retail, construction, IT, and professional services) within private sector. Among the 443 first line- and middle-managers asked to participate, we ended up with 168 matched leader-follower dyads (a response rate of 37,9%). Both leader and follower filled out the 20-item Work-related Basic Need Satisfaction questionnaire by Van den Broeck and colleagues (2010). Followers reported on the length of the relationship (i.e., dyadic tenure).

Results: Two stepwise multiple linear regression analyses were conducted. In line with our hypothesis, follower basic needs predicted leader basic needs, and vice versa, when dyadic tenure was introduced as a moderating variable. Further, a simple slopes test showed that the interaction effect was significant only in the high dyadic tenure condition. Therefore, our hypothesis was supported, suggesting that when interdependence and trust between leader and follower develops, sharing of psychological states becomes more prominent (i.e., shared intentionality)

Limitations: As this is, to our knowledge, the first SBT study in a workplace setting, there is a strong need for more empirical studies in this area.

Originality/value: Our study introduces SBT, a theory that has received extensive attention in other areas of psychology, to the leadership literature, and present empirical evidence demonstrating the relevance of this framework in organizational settings.

Practical implications: Our findings are in line with the SBT view that human beings benefit from having access to the social resources that develop gradually in long-standing, close relationships. For

example, remote work could be a social environment that, in SBT terms, has the human brain expecting less sharing of burden and threats, hence causing a decrease in well-being.

Relevance to the Congress Theme: Our paper highlights the social nature of human beings and the need for connectedness when shaping tomorrow's workplaces.

*Keywords: Leader-follower relationship, Social Baseline Theory*

## 7-minute science 7M23

### **Somebody's watching me! Effects of information about evaluators on applicants' use of impression management in asynchronous video selection interviews**

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science

Research goals and why the work was worth doing

In asynchronous video interviews (AVIs), applicants videorecord their answers to questions usually asked in written form or by an avatar. Answers may be analysed by algorithms. The lack of interaction with a human recruiter impacts applicants' communication, especially how they engage in impression management (IM) (Lukacik et al., 2022). Self-promotion, a self-focused tactic, and ingratiation, an other-focused tactic, are the two most used IM tactics (Stevens & Kristof, 1995). This study investigates how applicants' use of IM differs according to available information about the evaluator (goal 1). Moreover, another goal is to identify the cognitive and emotional processes in responding to AVI-based questions (goal 2).

Theoretical background

Applicants react more negatively to AVIs than other interview formats. This is due to the lack of social presence which prevents them from effectively self-presenting (Basch et al., 2020). It may be especially unclear to applicants who will evaluate their performance. Thus, AVIs may impact how applicants engage in IM. Indeed, they engage less in IM in technology-mediated interviews (Blacksmith et al., 2016). Still, this format should allow self-focused IM tactics. But as applicants do not have a target to ingratiate, there should be fewer opportunities for other-focused IM tactics. In addition, little is known about applicants' cognitive and affective processes in responding to AVI-based questions. This experiment compares the use of IM tactics (i.e., self-promotion and ingratiation) in AVIs where interviewees are informed or not about who will evaluate their responses. We predicted that information about the evaluator should lead to more other-focused IM tactics.

Design/Methodology/Approach/Intervention

160 undergraduates took part in a mock interview. They were randomly assigned to one of two conditions. In one condition, they received information about the person evaluating them. In the other one, they received no information. Then, they watched the videorecording of their interview and wrote down the thoughts they experienced (i.e., commented on their cognitive and emotional processes). Finally, they completed an IM scale (Bourdage et al., 2018).

Results obtained or expected (if not available, it must be made clear when they will be)

Participants who received more information about their evaluator engaged significantly more in ingratiation compared to those who received no information. But there was no significant effect of information on self-promotion.

Coding of participants' written comments about their emotional or cognitive processes is under way, and results will be presented at the congress.

Limitations

The study relies on mock interviews with undergraduate students (i.e., low stakes and thus lower motivation to manage impressions).

Conclusions – research and or practical implications/Originality/Value

Giving applicants an IM target gives them more opportunities for other-focused tactics (ingratiation). This could be an approach to increase applicants' perceived social presence in AVIs.

Relevance to the Congress Theme

The study's focus on a technological innovation (AVIs).

Relevant UN SDGs

Like all digital technologies, AVIs carry potential for bias. Better understanding their functioning may help limit bias.

*Keywords: AVIs, Impression Management, Ingratiation*

## 7-minute science 7M78

### **Speed Dating in a Professional Context: An Innovative Measure for Workplace Health Promotion in Hospitals**

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science

Research goals and why the work was worth doing :

Interruptions are a common and well-known source of stress in hospitals. In many cases, they are caused by work organisation problems at the interfaces between groups and departments. However, measures to reduce interruptions are often not implemented due to a lack of time resources. This is where the newly developed concept of speed dating in a professional context comes in. The aim is to achieve an interdepartmental and interprofessional exchange in a short time and to implement solutions directly by the participants.

Theoretical background :

Interruptions are classified as stressors for employees based on theories such as action regulation theory or the job demands-resources model. The concept of speed dating focuses on reducing disruptive interruptions at the interfaces between departments and professions in the hospital.

Intervention :

Speed dating in a professional context involves employees from different departments and professional groups discussing work organisation problems and solutions in short rounds of six minutes each. The procedure is structured in the following steps: collecting questions, voting, exchange rounds, documenting and implementing in daily work. The speed-dating concept was tested in practice in a hospital with ten participants. The participants included nurses, doctors, ward managers, ward assistants and representatives from the nursing science and digitalisation departments. The concept was formatively evaluated using a short digital questionnaire. Nine participants took part in the evaluation.

Results obtained:

Many ideas, such as daily team time-outs for doctors and nurses and the creation of a digital platform for up-to-date information, were developed by the participants. The results of the short survey showed that the speed-dating sessions were generally well received. The six-minute exchange and the subsequent documentation on flipcharts were rated very good or good by all participants. Regarding the implementability of the results, the majority rated it as good or rather good. The participants see potential for improvement in the scheduling of the event. Eight out of nine participants would take part in the speed dating again.

Limitations :

This is a newly developed measure that has only been tested once with a small number of participants. Therefore, statements about the generalisability of the results are not yet possible. In addition, it is not yet possible to assess the extent to which the developed solution ideas will be consequently implemented in practice.

Conclusions :

A low-threshold concept such as speed dating can contribute to strengthening the exchange at interfaces in a professional context. In order to facilitate the transfer of the Speed Dating concept to organisations in other settings, the materials produced have been prepared for cross-organisational use.

Relevance to the Congress Theme :

Hospital staff are under particular strain due to the challenges of the coronavirus pandemic. Research in occupational and organisational psychology can help reduce stressors through innovative approaches.

*Keywords: Interruption, Cooperation at interfaces, work design*

## 7-minute science 7M172

### Stay wit us – create, test and replicate a PLS-SEM Model of turnover Intention

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science

Research Goals: Mobley, Griffeth, Hand, and Meglino (1979) established a highly regarded model of turnover intention as early as the 1970s, discussing the constructs of job satisfaction and organizational commitment as critical influencing factors. The aim of this project is to recreate and replicate a modified model and test it for validity and stability over time in a longitudinal study.

Theoretical Background: The relationships presented in the model Mobley et al. (1979) of have been frequently discussed and largely confirmed in further studies and meta-analyses (Hom, Lee, Shaw, & Hausknecht, 2017; Tnay, Othman, Siong, & Lim, 2013). Based on an extensive literature review, several models that are based on Mobley et al. (1979) are discussed. Different possible influencing factors as well as the possible relationships between them were discussed. Based on this, a modified turnover intention model was created.

Humphrey et al.'s (2007) study identified three levels of work characteristics that can lead to turnover intentions: motivational, social, and contextual. Motivational characteristics are considered job characteristics in this framework (Hackman & Oldham, 1976). Social characteristics are considered critical to workplace well-being and have been identified as a level of factors by Morgeson and Humphrey (2006) and Humphrey et al. (2007). In this study, leader-member exchange (LMX) is used to operationalize social characteristics. Work context variables, such as HR practices, are also considered, while fulfilled expectations are considered a contextual characteristic (Ababneh, 2020). In summary, the model includes job characteristics, LMX, and met expectations as influencing variables, job satisfaction and commitment as mediators, and turnover intention as a target variable.

Replication is an extremely important approach in empirical science as well as it provides the important link between existing and new knowledge and thus contributes towards generalizing theories. For this reason, the modified model was tested with different datasets from different years (2012, 2014, 2016, 2018 and 2020), to show a validity and stability of the model.

Methodology: The model is examined using data from the Swiss Human Relations Barometer. The analysis of the model is conducted using the partial least squares structural equation modeling (PLS-SEM) method (Hair, Hult, Ringle, & Sarstedt, 2022) and the SmartPLS software. First, the measurement model is tested to ensure the reliability and validity of the measurement. Second, both the various effects and mediation relationships of the model are analyzed. Third different data sets used are tested for measurement model invariance and a multigroup analysis was performed to test for stability over time. A comparison was also made with other possible models in order to select the model with the best fit.

Results : Analyses of the reflective constructs were conducted using indicator loadings, internal consistency, average variance extracted, and discriminant validity. Results show that all values for all years for Cronbach's alpha, composite reliability, and AVE are above recommended thresholds. Discriminant validity is also given, as the HTMT value is below 0.85.

The VIF values of the formatively measured constructs were tested and all were below the threshold of five. Indicator weights were tested for significance and although not all were significant, they were maintained in all five survey years examined.

The assumed path coefficients for all five surveys in the model are significant and meaningful. The relationship between the influencing variables (job characteristics, LMX and met expectations) and turnover intention is mediated by job satisfaction and commitment,

Limitations: The datasets used are cross-sectional and not panel data. Thus, it is not possible to observe eventual changes within the sample. In addition, the study is limited to the variables used in the Swiss HR Barometer. Methodologically, the use of a single item to measure job satisfaction is to be criticized, since single items usually have a significantly lower validity and reliability than measuring a construct with the help of several items.

Conclusion: This project presents valid and representative results that are less susceptible to chance due to replication. The established model of turnover intention can thus be used as a valid basis for further research. One possibility would be a comprehensive cross-country analysis. Moreover, due to the high stability and validity of the model studied, it can be usefully extended in a next step.

Relevance: The explanation of quits or turnover intention has intrigued researchers and practitioners for over a century. At the same time, there is debate about whether the causes change over time and for different generations. This research project is a long-term study that focuses on establishing a stable model that also analyzes the changes over the years.

*Keywords: Turnover Intention, Job Satisfaction, PLS-SEM*

## 7-minute science 7M95

### Stimulating life crafting: a one-week online intervention study to improve mental wellbeing

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science

**Research goals** The coronavirus and the following lockdown measures increased individuals' mental stress and strain. Life crafting could be an effective strategy for people to manage and reduce life strain because life crafting is positively related to mental wellbeing and meaning in life and negatively related to job burnout (Chen et al., 2022). The current study performed an online intervention in which we developed a life-crafting training program that stimulates the three life-crafting strategies (Chen et al., 2022): cognitive crafting, seeking challenges and seeking social resources. Our study contributes to the literature on improving mental wellbeing by suggesting how people proactively manage and reduce stress.

**Theoretical background** Chen et al. (2022) defined life crafting as the conscious efforts individuals exert to create meaning in their lives through (a) cognitively (re-)framing how they view life, (b) seeking social support systems to manage life challenges, and (c) actively seeking challenges to facilitate personal growth. Specifically, these strategies should better align with life goals, personal needs, values, and capabilities. Life crafting can be viewed as a proactive strategy that uses people's personal strengths and social resources to better cope with difficult times.

**Design/Methodology/Approach/Intervention** The whole intervention lasted seven days in total: pre-measurement (day 1), the intervention and daily reflection (days 2-6), and post-measurement (day 7). The participants were randomly assigned to one of two conditions: a life-crafting intervention group or a control group. The control group could follow the intervention upon completion of the post-measure, i.e. waitlist controls. Both groups filled out the baseline questionnaire about life crafting, stress, and meaning in life on day 1. In the following five days, people in the Life Crafting intervention took a five-day training to improve life crafting. In contrast, people in the control group just reported their daily life crafting behaviors and daily emotions. Finally, both groups filled out the post-measure questionnaires regarding life crafting, stress, and meaning in life on day 7.

**Results obtained or expected** Results of repeated measures ANOVA revealed that there are differences of cognitive crafting, seeking social resources, and seeking challenges, and stress between intervention group and the control group. In addition, Results of paired sample t-test showed that seeking social resources improved ( $t = -5.46$ ,  $p < .001$ ) and stress reduced ( $t = 2.12$ ,  $p = .037$ ). There were no changes in cognitive crafting and seeking challenges in the intervention group.

**Limitations** This study's first limitation is the intervention group's dropout rate was relatively high. The second limitation is that the procedure to collect data is not totally randomized. Thirdly, we only assessed changes over one week.

**Conclusions** our results showed that an online intervention to stimulate life crafting was able to foster seeking challenges and seeking social resources and reduce stress.

**Relevance to the Congress Theme** The life crafting intervention training encourages employees to reflect on their work and life in general which helps employees feel and perform well given the vague boundary between work and life.

**Relevant UN SDGs** life crafting contribute to ensure healthy lives and promote wellbeing for all ages by improving mental wellbeing.

**Keywords:** *Life crafting, Stress, Mental wellbeing*

## 7-minute science 7M26

### **Strengths-Based Leadership, Deficits-Based Leadership and Employee Job Performance: A Longitudinal Study**

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science

#### 1. Research goals and why the work was worth doing

Although positive psychology emphasizes the importance of bridging the positive and negative, there is a lack of research on how deficits-based leadership and strengths-based leadership interact with each other and how these two leadership practices contribute to employee job performance. In this paper, we aim to explore how strengths-based leadership and deficits-based leadership influence employee strengths use and employee job performance.

#### 2. Theoretical background

Strengths-based leadership helps employees identify, utilize, and develop their strengths while deficits-based leadership facilitates employees to spot and remediate their weaknesses. Strengths-based leadership can be seen as a resource that helps employees to align strengths with their job tasks, which aids the achievement of performance goals. Deficits-based leadership can also lead to higher employee job performance but in a different way, namely by helping employees to work on their deficiencies and acquire a broader repertoire of abilities. Based on Job Demands-Resources (JD-R) theory, this study hypothesizes that both strengths-based leadership and deficits-based leadership positively affect employee job performance (task performance and innovative behaviour), but that only for strengths-based leadership, this relation is mediated by employee strengths use.

#### 3. Methodology

We collected data among 599 Chinese workers at three different time points with a one-month interval (N = 36 teams). We used multilevel structural equation modelling to test our hypotheses.

#### 4. Results obtained or expected

In line with our expectations, strengths-based leadership was positively related to employee task performance and employee innovative behaviour via employee strengths use, whereas deficits-based leadership was not related to task performance and innovative behaviour through strengths use. However, the direct effect of deficits-based leadership on employee task performance and innovative behaviour was significant and positive.

#### 5. Limitations

Only employee-rated data were used to test the theoretical model.

#### 6. Conclusions

Our findings show that strengths-based leadership improves employee job performance by increasing strengths use, whereas for deficit-based leadership, this relation is not significant. However, most of the leadership practices in organizations are still deficits-oriented and focus on coaching employees in making up for their shortcomings. Our research results underline the importance of nurturing employees' strengths in order to help them flourish in the work context.

## 7.Relevance to the Congress Theme

The congress theme is “The Future is Now: the changing world of work” and it mainly concerns about how to develop competences and make changes in this turbulent world and prepare for the future. Our research sheds new lights on how nurturing strengths can build up competences and bring positive energies in the workplace to get through tough times and how in the future optimal functioning of workers can be promoted by building on their personal strengths instead of criticizing their weaknesses.

## 8.Relevant UN SDGs

Our research is relevant to two SDGs: a) good health and well-being, and b) decent work and economic growth. Our study shows that strengths-based leadership practices that promote strengths instead of weaknesses will contribute to the creation of a healthy work environment and the prosperity of productive employment.

*Keywords: strengths-based leadership, deficits-based leadership, job performance*

## 7-minute science 7M27

### Successful Leadership in Top-Level Positions in Fire Services: A Competence Model

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science

Research goals and why the work was worth doing. The number and complexity of emergencies has increased over the last years. Fire services, and in particular their top-level leaders, play a central role in coping with these challenges. In addition to their deployment in emergency operations or crisis management teams, top-level leaders perform operational and strategic management tasks (e.g., personnel management).

Theoretical background. Our research is based on competence modelling and leadership research (e.g., Campion et al., 2011; Yukl, 1989, 2012). Previous research has either focused on leadership styles in emergency operations or studied management competences in companies. However, it does not elaborate on the concrete competences that the top-level leaders in fire services need for their diverse tasks at the interface between public administration, fire services, and politics. This raises the question what competences these top-level leaders need to successfully manage their day-to-day work.

Design/Methodology/Approach. The first study inductively developed a competence model of top-level leaders in fire services. We used the Critical Incident Technique (Flanagan, 1954) as an explorative, qualitative research method for semi-structured telephone interviews with a total of 22 leaders ( m = 21, f = 1). We followed up with a second study ( N = 140) asking top-level leaders in fire services for importance ratings of the competences included in the competence model. They rated the competences in terms of their work in general and regarding certain working areas (Internal Service, Emergency Service, External Representation, Research, and Teaching).

Results. The developed competence model comprises Professional, Methodological, Social and Personal Competences for top-level leaders in fire services. The validation study supports the main findings regarding central competences included in the model. The participants rated most of the competences as at least “rather important”. Overall, the three most important competences were Communicative Competence, Decisiveness, and Planning and Organising. The validation study revealed systematic differences regarding the competences needed for the different working areas.

Limitations. The interview study and the validation study concentrated on top-level leaders assessing the needed competences themselves. Future research should add supervisor and subordinate ratings.

Conclusions – research and/or practical implications/Originality/Value. From the present competence model, we derive implications for the highest level of leadership in high reliability organisations. For the first time, an empirically based competence model is available for the highest leadership level in non-police emergency response. Based on this competence model, we propose practical implications for the competence-oriented training of top-level leaders in fire services.

Relevance to the congress theme. The developed competence model for top-level leaders in fire services enables optimal personnel selection and development. It can be used to adapt fire services to the changing world of work and build the foundation for further strategic changes.

Relevant to UN SDGs. Fire services as strong institutions are crucial for the civil protection and sustainable cities and communities in every country. Also, high-skilled and well-trained leaders can foster healthy work environments for fire fighters as essential part of our societies.

*Keywords: Leadership, Fire Services, Critical Incident Technique*

## Suicidal Ideation in the Working Population: Testing a Moderated Mediation Model

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science&practice

Suicide is among the leading causes of death in the working population (Mustard et al., 2010; Yip & Caine, 2011). Employee suicide incurs enormous emotional and financial costs not only to family members, but also to co-workers and the organization itself (Jordan, 2017; Kinder & Cooper, 2009), presenting a clear motivation for organizations to address and prevent suicide at the earliest possible stage. However, little research has explored the role of work-related factors in employee suicidal ideation and how organizations could help prevent the development of suicidal thoughts.

To address the research gap, the current study aims to investigate workplace factors that might exacerbate or alleviate suicidal ideation among employees. Building upon the Conservation of Resources Theory (COR; Hobfoll, 2011), this study explores the role of workplace resources in the process by which job characteristics influence suicidal ideation. Specifically, the goal is to test a moderated mediation model, in which job stress, transformational leadership, and meaningfulness of work are associated with depressive symptoms and hopelessness (Attell et al., 2017), which are further associated with suicidal ideation (Howard & Krannitz, 2017), while transformational leadership and meaningfulness moderating the mediation paths.

Using a cross-sectional survey design, the current study aims to collect data from 400 working individuals by February 1 st , 2023. Participants will complete questionnaires online on job stress, meaningfulness of job, leader's transformational leadership, feelings of hopelessness and depression, and suicidal ideation. Data will be analyzed using the PROCESS macro (Hayes, 2013). It is hypothesized that elevated job stress, low levels of transformational leadership, and lack of meaning of work, representing resource depletion at work, are associated with heightened suicidal ideation through increased feelings of hopelessness and depression. Transformational leadership and meaningfulness of work, on the other hand, might promote resource gain and prevent resource loss, which buffer the negative impact of job stress on hopelessness, depression, and suicidal ideation. Accordingly, it is expected that higher job stress is associated more severe feelings of hopelessness, depressive symptoms, and suicidal ideation with decreasing sense of meaning and transformational leadership, and vice versa.

Findings from the current study might provide insights into the influence of workplace factors on suicide and have important implications for workplace suicide prevention programs. Despite the cross-sectional nature of this study, which limits the ability to draw causal conclusion, findings from this study could provide basis for future longitudinal and field intervention studies. Organizational researchers and practitioners might benefit from this study and gain a better understanding of the relationship between job characteristics and employees' mental health and wellbeing.

*Keywords: Employee Suicidal Ideation, Job Stress, Leadership*

## 7-minute science 7M81

### Taking time to look at time perceptions – Investigating individual time-related dimensions in organizations

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science&practice

**Research goals:** Time is a central variable in organizational life and fulfills important functions as a valuable resource and for creating structure and meaning. However, research on the measurement of time-related dimensions and investigations of how these dimensions relate to important variables of organizational functioning remains scarce. Thus, the aim of the present research is two-fold: a) to test a questionnaire for the measurement of individual time perceptions in an organizational context, and b) to systematically test relationships between selected time-related dimensions and personality dimensions as well as measures of change readiness.

**Theoretical background:** Interest in time as an important organizational construct has been growing. Still, there are few studies suggesting systematic frameworks and questionnaires to conceptualize different time-related dimensions. More specifically, a questionnaire that allows for the integration of time-related dimensions from previous research while also differentiating between different levels of abstraction and specifying direct relations to work-related tasks and activities is important.

**Design:** The questionnaire for individual time perceptions developed in this study is based on a framework for organizational time-related dimensions developed by the authors in a previous study. This framework conceptualizes 21 relevant organizational time-related dimensions (e.g., future orientation, time scarcity) within six categories (e.g., temporal focus, time as resource, time as social structure). These time-related dimensions were conceptualized in terms of individual time perceptions. In an online survey, each dimension was measured with four items and answered on a seven-point Likert scale. Additionally, correlational hypotheses of selected time-related dimensions and personality dimensions as well as change readiness were investigated.

**Results:** Results on internal consistency and exploratory investigations of the factor structure of the dimensions will be reported. Furthermore, confirmatory factor analyses employing structural equation modeling of the dimensions will be presented. The frameworks' category structure on the level of dimensions is further investigated. Lastly, relations between selected time-related dimensions and personality dimensions as well as individual change readiness are analyzed.

**Limitations:** As time is a complex construct, the dimensions of the framework can be interrelated and might not be exhaustive. The study has exploratory character and the questionnaire will need further validation in a future study.

**Conclusions:** The developed questionnaire can constitute a starting point for a comprehensive conceptualization of the role of individual time perceptions in an organizational context. Thus, the questionnaire can be employed to analyze relations between different time-related dimensions as well as between time-related dimensions and important organizational variables such as change readiness. We provide practical implications of how individual time perceptions interact with personality dimensions and the role they play for the specific context of organizational change support.

**Relevance to the Congress Theme:** To adequately assess factors relevant to a changing world of work, individual perceptions of time should be considered. To this end, a questionnaire to measure

these perceptions and implications of these perceptions for individual change readiness are provided.

*Keywords: individual time perceptions, time-related dimensions, change readiness*

## 7-minute science 7M192

### Talking about cooperation: exploring workers' expectations about the introduction of a collaborative robot

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science&practice

Collaborative robots (cobots) are fenceless robots that are meant to collaborate directly with humans. Cobots can support workers with non-automated tasks, thereby improving product quality and overall working conditions [1]. However, workers are frequently reluctant with respect to cobots because of aversion to change, unfamiliarity with robotics, and the possibility of a change in the working conditions [2]. Several studies have been conducted in laboratories to understand and improve human-robot collaboration, but there is a critical lack of research regarding the introduction and user acceptance of cobots in actual industrial settings [3].

In the present preliminary study, we explored the expectations and acceptance of a group of workers employed in a large company manufacturing electronic components, where a cobot was about to be installed at the assembly line. More specifically, the introduction of the cobot was meant to reallocate one worker, who was responsible of a repetitive task. We conducted a series of semi-structured interviews (approximately 10 minutes on average) that were audio-recorded for subsequent transcription and thematic analysis [4].

The sample consisted of five workers employed at the assembly line where the cobot would be introduced, they were on average 46 years old (age range 33-54). Almost all of them had a low to medium education level ( $M= 10.6$ ;  $SD= 2.5$ ). On average, they had worked in the industry sector for 14.33 years ( $SD= 17.1$ ). None of them had previous experience with cobots. They were in charge of different jobs: three of them were responsible for the assembly of the full electronic key. One was responsible for the pre-assembly of one component to be used for the full electronic key, which was extremely repetitive and tedious. Finally, one was responsible for replenishing the raw components needed in the assembly line. The pace of her work depended on her colleagues' assembly pace.

Overall, all participants reported to be satisfied with their work unfolded and was organised. However, the worker responsible for the pre-assembly was not gratified by her job, because of the high level of tediousness.

Regarding the expectations toward the introduction of the cobot, the majority of the participants ( $n= 4$ ) were not worried about the changes of their social interactions with their colleagues. Respondents' main concern ( $n= 4$ ) was related to the expected additional workload that the introduction of the cobot might bring. More specifically, they stressed the possibility that the cobot might not work properly, resulting in extra responsibilities for them. Two other employees also highlighted that cobot could cause production delays, and all of them believed that the quality of the components prepared by the cobot would be lower compared to their colleague's pieces. Moreover, one worker reported that she hoped that it would be easy and fast to learn how to use it, and two told us that they were curious about how the cobot would work.

Interestingly, they were all aware that the cobot would release a colleague from a tedious and monotonous task. They also underlined that it could be an advantage for the company to reallocate a human resource to a different task. Overall, the cobot was expected to support human work, rather than to replace human operators. Future research is meant to closely follow the introduction of the

cobot and systematically assess employees' reactions, to investigate whether their expectations would be met or would change.

Keywords: *Collaborative robots, Acceptance, Industry 5.0*

## 7-minute science 7M119

### Team voice interactions: How team members respond to voice during team meetings

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Team voice refers to “team members as a whole expressing suggestions, concerns, and ideas about work-related issues” (Li et al., 2017, p. 1259) aimed at improving their work practices (Van Dyne et al., 2003). Recently, scholars have pointed out that team voice can benefit team performance (e.g., Huang & Paterson, 2017; Li et al., 2017). However, this also depends on the type of team voice: whether the voicing is promotive (expressing new ideas or suggestions) or prohibitive (sharing concerns or problems; Liang et al., 2012). The former can benefit the team’s performance through innovations and creating a positive mood (Chang et al., 2017), whereas the latter can negatively impact a team (Chamberlin et al., 2017). Although employee voice at the individual level has received considerable scholarly attention (Podsakoff et al., 2015), voice as a team-level phenomenon remains underexplored (Frazier & Bowler, 2015; Huang & Paterson, 2017). This lack of understanding is surprising as teams tend to take concerns and ideas suggested by the whole team more seriously than from individual employees (Frazier & Bowler, 2015).

Team voice occurs through team interactions, for example, during meetings. While typically valuable to teams, speaking up during team conversations can be considered challenging to its members because it demands courage to express suggestions and question the team’s status quo (Liang et al., 2012). Scholars have emphasized the strong relationship between team interactions and meeting outcomes (Kauffeld & Lehmann-Willenbrock, 2012; Lehmann-Willenbrock et al., 2017), yet it remains unknown how team voice interactions shape how members perceive their meetings and those who voice.

Therefore, in this study, we examine the micro-dynamic role of team voice as an important factor that could impact essential (meeting) outcomes. In contrast to existing research, we propose that prohibitive voice could also induce favorable results. That is, team meetings could be perceived as more effective and satisfactory when team members perceive the sharing of problems as helpful or as backup behavior. Moreover, we suggest that this requires team members and their leaders to respond positively to voicing behaviors during team interactions. Such praising reactions could spark other team members’ confidence to share their own ideas or concerns during team interactions.

During a ten-week period, we gathered data from eighteen team meetings of an HR team with a one-hour duration each. After transcribing these meetings, we behaviorally coded 7331 statements by team members and their leaders using the act4team coding scheme (Kauffeld et al., 2018). Also, all team members and their leaders filled out a survey after each meeting indicating their perceived meeting effectiveness, meeting satisfaction, and promotive/prohibitive team voice during the meeting. Currently, the data is also coded for specific instances of promotive and prohibitive team voice to examine how both shape team meeting interactions. This additional coding further allows us to explore whether team members and their leader endorse, accept, or reject these suggestions (voice endorsement; Burriss et al., 2012). Results can reveal crucial insights about how team members can most effectively speak up and respond to voicing employees during their team meeting interactions.

*Keywords: team voice, team interactions, team meetings*

## 7-minute science 7M167

### Testing the relationship between Decent Work, Life Satisfaction and Stress in Portuguese Social Economy Organizations

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science

The current study aims to explore the interactions between Decent Work (DW) and Life Satisfaction (LS) and between DW and Stress and verify the impact of Stress on the Life Satisfaction of employees of the Portuguese Social Economy sector. The sample comprises 313 participants from Portuguese Social Economy organizations. The Decent Work Questionnaire (DWQ), the Satisfaction With Life Scale (SWLS) and the Perceived Stress Scale (PSS) were applied. Confirmatory factor analyses and simple and multiple linear regressions were performed. The results suggest that: (a) higher Decent Work (especially some of its dimensions) positively impacts Life Satisfaction; (b) lack of DW is associated with high Stress; and, (c) low Stress could promote Life Satisfaction. There were also interesting results found when the selection variable Gender was applied, giving us a portrait of the Portuguese working woman. The study's relevance is to expand the knowledge of the existing literature on Decent Work, Life Satisfaction, and Stress. It can also be innovative and helpful to understand the theoretical and practical impacts of the interaction of these variables in the third sector organizations, in agreement with the 2030 Agenda for Sustainable Development proposed by the United Nations. Limitations and future research conclude this study.

*Keywords: decent work, life satisfaction, stress, social economy*

## 7-minute science 7M115

### The association between Executive Function and Thriving at Work

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In the modern workplace, employees need to be adaptive to constant change due to pressure on businesses to remain competitive in a global and dynamic market. Research shows our ability to adapt to change is controlled by our Executive Function (EF); higher order brain processes that regulate our behaviour to meet specific goals, where habitual behaviour is not possible or appropriate. Although there appears to be an obvious link, research on the association between EF and work is sparse, yet the limited findings showing associations between EFs and better job success and sales performance and deficits in EFs on work-related rumination and burnout warrant further investigation. One gap needing attention is how employees reach their potential to support positive health and wellbeing. Positive NeuroPsychology is gaining attention in the neuroscience space, influence by the Positive Psychology movement. However, this area is in its infancy and therefore work-related literature is, again, sparse. This study proposes a focus on the association with EFs and Thriving at Work as a valuable starting point. Thriving at Work is defined as “the psychological state in which individuals experience both a sense of vitality and a sense of learning at work”. It is a self-regulating state that leads to adaptation to the expectations, challenges and opportunities in the work place. As an exploratory investigation, we simply hypothesised that EF will predict Thriving at Work and, using the BRIEF-A (an ecologically valid measure of Executive Function), investigated whether specific EF sub-scales predict Thriving at Work more strongly than others. A snowball sampling method was used to recruit participants from various industries and job roles (N= 140). A digital recruitment flyer was posted on social media platforms, and circulated to the researcher's personal and professional contacts to forward on to their own networks. Multiple regression analysis showed that EF significantly predicts Thriving at Work. Specifically, the Initiate EF sub-scale was a significant predictor variable. The model implies that issues with commencing an activity are associated with lower thriving at work. Findings warrant future research into the relationship between cognitive functioning and human flourishing. EFs are malleable and can be manipulated, therefore further research might provide a basis for introducing interventions to strengthen EFs to support individuals to be adaptive to the work environment. In particular, the association with the initiate sub-scale may point to a link with procrastination and difficulties with problem solving as impediments to Thriving at Work. However, the limitations of a cross sectional study should be noted, as this research cannot predict causality. Further research will need to probe further into the associations found. This study relates to the conference theme as the focus on human -centred organisations and human flourishing is the future of work. Support with cognitive function at work could strengthen employee's ability to reach their potential; to have the tools to thrive amidst constant change.

*Keywords: Executive Function, Thriving, Work*

## 7-minute science 7M46

### **The bright and the dark side of digital technology use at work: A study among knowledge workers in Lithuania**

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science

#### Research goals

The present study explores the technological progress and its implications on employee well-being. The use of information, communication technologies and digital solutions has become increasingly prevalent in the contemporary world of work. While it facilitates job performance and has numerous benefits for businesses, it may also pose serious psychosocial challenges that cannot be ignored (Day et al., 2019). However, a large part of prior research on the topic is still based on a rather technocentric approach that places an emphasis on technological arrangements per se rather than employees' personal experience using them. In light of this, the I/O psychology literature calls for a better integration of a human-centred view in research on technology at work (e.g., Parker & Grote, 2020).

In the current study, we address this aspect by providing an in-depth account of positive and negative experiences (i.e., critical incidents) that employees face when using digital tools in their work tasks. In doing so, we seek to unravel key psychosocial aspects related to the "smart" component of the work environment – such as challenges, benefits, or hindrances – and link them to employee well-being.

#### Theoretical background

Our study is broadly situated within the framework of job demands and resources and self-determination, which we aim to apply for the interpretation of results. However, we relied on an inductive rather than deductive approach when developing this study. For this reason, we did not raise a priori hypotheses but formulated the following research question instead.

RQ: What are the key psychosocial aspects of the subjectively (un)successful use of digital technologies at work?

#### Method

The study is based on the enhanced critical incident technique (Butterfield et al., 2005). This method allows to collect information about "critical" events of interest in a semi-structured format and identify their underlying social, behavioural, or emotional elements. We will survey up to 50 workers (ISCO group 1-4), collecting 80-100 reports of events related to digital technology use at work. Qualitative content analyses will be used to analyze the data.

#### Results

The data collection is currently in progress. We expect to have our first results in February 2023. Data analyses will be conducted in March and April 2023, which will enable us to present the findings in due course.

#### Limitations

The reports of critical incidents may be prone to some recall bias. Despite the rich findings yielded by our chosen method, they are not subject to generalization due to the qualitative nature of the study.

#### Research/practical implications

Our findings unravel the psychological side of digital technology use at work. They can provide useful managerial insights into designing smarter workplaces and will also enhance current understanding about the interaction between the person and the changing work environment.

#### Relevance

Digitalization has a huge impact on how work and workplaces will look like in the future. The current study explores how this trend is experienced from an individual well-being perspective, thus falling in line with the congress theme and addressing the third UN sustainable development goal (good health and well-being).

*Keywords: Digitalization, employee well-being, job design*

## 7-minute science 7M200

### **The dynamics of resilience promoting factors: A weekly diary study with entrepreneurs during the first ten weeks of the Russia – Ukraine war**

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science

#### Research goals

The question of what entrepreneurs actually experience and do when operating their businesses under adverse environmental conditions is becoming a top priority for business leaders and policymakers. The period following the Russian invasion is particularly interesting to study because under such harsh and overwhelming external conditions entrepreneurs face intense competition caused by a lack of resources, market decline and smaller profit margins. There is very little research on the within person dynamics of peoples' resilience promoting factors under adversity. Resilience promoting factors are existing, internal resources or narrower motivational and social-cognitive individual differences that are present regardless of whether someone experiences adversity, but can still serve a protective function when adversity occurs. In this study, as resilience promoting factors, we consider entrepreneurs' character strengths (CS) and examine the dynamics of entrepreneurs' CS during the first ten weeks of the Russian invasion of Ukraine. In this research, we examine entrepreneurs' trajectories of curiosity, perseverance and zest over time, autoregressive (or carry-over effects) of CS states and the moderating role entrepreneurs' dispositional affectivity.

#### Theoretical background

CS are individual differences in traits at the lower levels of personality and largely determine how individuals cope with adversity. Existing empirical evidence shows that CS change little, or not at all after adversity. However, it is plausible that different types of adverse events affect CS in different ways and especially when adversity is central to people's lives. We hypothesize that the mean level of entrepreneurs' enactment of character strengths will change in the weeks following the Russian invasion and the onset of expected harm or loss to their firms. This change reflects the strenuous and active process of entrepreneurs to achieve short-term goals related to their firm's survival.

#### Methodology

We conducted a weekly diary survey in which a sample of 67 entrepreneurs completed a structured questionnaire for ten consecutive weeks, beginning one week after Russia's invasion of Ukraine. The weekly study design spanned a reasonable time frame, allowing entrepreneurs to operate their businesses while examining dynamic fluctuations and growth in CS. Multilevel structural equation modeling growth and first order autoregressive (AR1) models were used for data analyses.

#### Results obtained

We found that over a period of ten weeks, beginning after the Russian invasion of Ukraine, entrepreneurs' enactments of curiosity and zest was dynamic exhibiting a positive linear trend. Perseverance enactments exhibited non-linear trends. Positive carry-over effects of character strength states were also found. Finally dispositional affectivity moderated with-person relationships such the rate of change and carry-over effects of CS.

#### Limitations Conclusions.

In this research, we go beyond previous cross-sectional studies, and retrospective self-reported perceptions of change in CS following adverse events. However, since we do not have pre-event assessments, these changes detected, are not necessarily associated with genuine growth in CS. We argue that changes in entrepreneurs' CS reflect primarily changes in the short-term functions of strengths to meaningfully adapt to the adverse event. Thus, we provide evidence on the dynamic role of CS in changing environmental conditions.

*Keywords: character strengths, resilience, diary study*

## **The Effect of Ethical Leadership on Intentions to Resist Future Change: The Role of Followers' Moral Attentiveness and Trust in the Supervisor**

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science&practice

**Purpose:** To maintain their competitive edge and adapt to market dynamics, organizations must change in order to adjust to the current macroeconomic scenario (Claus, 2019; Herscovitch & Meyer, 2002; Shin et al., 2012). However, about two-thirds of change processes fail (Choi, 2011; Shin et al., 2012), and resistance is the main cause (Reger et al., 1994; Szabla, 2007). Thus, we examine the mechanisms and conditions under which ethical leadership (Avey et al., 2012) is effective in reducing intentions to resist future changes.

**Theoretical background:** Ethical leadership is important because in the long-term it can prevent company scandals and ethical dilemmas while boosting employee morale and increasing in-role and extra-role performance (Sharif and Scandura, 2014). Furthermore, leaders can influence employees' perception of what is ethical and beneficial for them and the organization (Yukl, 2013). While other leadership theories underline the importance of ethics for leadership, only ethical leadership aims to clarify the influence of leaders' ethical behavior on followers' ethical behavior (Brown & Treviño 2006).

The relevance of ethical leadership for change management has been previously examined (Neves et al., 2018). However, we still know little about the mechanisms and boundary conditions that influence its impact on intentions to resist future change.

We argue that ethical leadership will reduce intentions to resist future changes because it signals trustworthiness. When leaders exhibit and promote normatively appropriate behaviors (Brown et al., 2005) during change processes, employees will feel the need to give back the treatment received by placing their loyalty to the organization and the leaders who represent it.

We also propose that moral attentiveness, which is “the extent to which an individual chronically perceives and considers morality and moral elements in his or her experiences” (Reynolds, 2008, p. 1028) will influence the strength of the relationship between ethical leadership and trust in the supervisor. Individuals high on moral attentiveness should develop a greater level of trust in their (ethical) supervisor, since they will automatically make moral interpretations of their leader's behavior, namely whether the behavior or its results are ethical, and consequently if the leader is trustworthy. These individuals will also perceive a violation of moral norms (by the leader) as a violation of the relationship of trust with the leader (Treviño & Brown, 2005).

**Design/ Methodology:** We test our hypotheses with a sample of employees from a manufacturing company using a time-lagged design. We provide to each employee two surveys with a four-week lag between them.

**Results:** We analyze the data with bootstrapping using the Process macro. We examine whether a) ethical leadership is a predictor of intentions to resist future changes four weeks later via an increase in trust in the supervisor, and b) if employees' moral attentiveness moderates the first path of the mediated-moderation model.

Limitations: Generalization may be a limitation because the data were collected in one organization operating in a specific sector.

Research/Practical Implications: This study contributes to ethical leadership and change management literatures. It demonstrates the relevance of ethical leadership for reducing intentions to resist future changes and highlights the importance of moral attentiveness. To anticipate and prevent potential resistance to change from employees, organizations and its leaders should take a long-term approach to change management, namely by stimulating ethical leadership during times of stability. The concern that an ethical leader shows when having the best interests of employees in mind, the openness to listen to new or divergent ideas, and the quest for making fair and balanced decisions on matters important to employees result in a greater propensity for the leader to be seen as a role model in the eyes of his followers, depending on their attentiveness to his ethical behavior (Brown et al., 2005; Mayer et al., 2005).

Originality/Value: This study opens a new path on ethical leadership and change management literature. Given the competitive and dynamic environment organizations face, we aim to have a deeper understanding of the circumstances under which ethical leadership is more effective. We also build on a recent trend (Neves et al., 2018, 2021) that argues that organizations need to prepare for change during times of stability in an effort to predict potential reactions to change.

Relevance to congress theme: Our examination of intentions to resist future changes is directly related to the idea that 'the future starts now'.

Relevant UN SDGs: Decent work and economic growth (8); Peace, justice, and strong institutions (16).

Intended audience: Academic and Practitioners.

*Keywords: Ethical leadership, Intentions to Resist Future Change, Trust, Moral Attentiveness*

## 7-minute science 7M18

### **The Effects of Psychosocial Safety Climate on Employees' Burnout: Testing the Multilevel Longitudinal, Multisource Mediation Role of Supportive and Ci**

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science

Psychosocial Safety Climate (PSC) is an important aspect evaluating the effect of managers' actions on employee behaviour and health. We operationalize the effect of PSCs on supervisors' supportive behaviours and employees' OCB-I on burnout, over time. Drawing on PSC work stress theory (Hall et al., 2010; Dollard & McTernan, 2011), we used multilevel longitudinal, multisource mediation outcomes to assess these behaviours and burnout. This process (with a 4-month gap) retrieved information from 538 multi-occupational employees at 70 companies in Malaysia (i.e., 73.5% response rate). We used MPLus and conducted multilevel longitudinal path analyses (SEM) to examine the mediating role of: (1) supervisors' supportive behaviour between PSC on employees' OCB-I, and (2) supervisors' supportive behaviour and employees' OCB-I between PSC on employees' burnout. Supervisors' supportive behaviour and employees' OCB-I mediated the negative relationship between PSCs on employees' burnout. Interpreting the effect of PSC (espoused PSCs) on enacted supportive supervisors' behaviour are important among employees' OCB-I in reducing other employees' burnout over time.

*Keywords: positive organisational climate, supportive behavior, multisource mediation effects, multilevel longitudinal path analyses*

## 7-minute science 7M170

### The effects of Teleworking on Job Performance: the moderator role of Basic Psychological Needs

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science&practice

Research goals and why the work was worth doing

Telework is a growing trend used by companies and employees worldwide, that has skyrocketed in the last two years due to the pandemic. The implications of this new work arrangement are not always clear, especially concerning the performance of the employees. In this regard it is important for policy makers to understand which factors can moderate the relationship between teleworking and job performance, especially nowadays, after the COVID-19 pandemic strike. In this paper, a moderation model is proposed to understand the possible effects of teleworking on job performance depending on the satisfaction of the work-related basic psychological needs. We first assessed the difference between teleworkers and non-teleworkers regarding their satisfaction of work-related basic psychological needs (autonomy, competence, and relatedness), and their performance.

Theoretical background [IT1]

Previous literature has supported a positive relationship between teleworking and job performance. However, the conditions on which teleworking can boost employees' performance are still not clear. In Self Determination Theory, psychological motivation passes through the satisfaction of three basic psychological needs: Autonomy, Competence, and Relatedness. The satisfaction of these three basic psychological needs at work could positively moderate the relationship between teleworking and performance, so that the positive relationship is stronger when the satisfaction of the needs is high.

Methodology

Our sample was composed of 100 individuals (32% teleworkers), found through a respondent panel. Data were collected in April 2021 over two time points separated by two [IT2] weeks. Independent sample t-test was used to check for mean differences. Multiple regression analysis with SPSS was used to test the moderated model. Simple slopes for the significant moderated effects were estimated with PROCESS.[IT3]

Results

Results did not indicate any differences in the satisfaction of the three work-related psychological needs between teleworkers and non-teleworkers, but job performance was higher for teleworkers ( $t=2.50$ ,  $p<.05$ ). The positive relationship between teleworking and performance was supported ( $b=.21$ ,  $p<.05$ ). Only the moderator effect of the satisfaction of relatedness at work was statistically significant ( $b=-.004$ ,  $p<.05$ ), but contrary to our expectations, showing a negative moderating effect.

Limitations

The main limitation of our study is that all the data were collected through self-reported questionnaires and from the same source (employees). Additionally, generalization of the results can be compromised as our sample was collected in Spain, between a specific population into a respondent panel. Another limitation of this study is the absence of information about economic condition, or about the presence of an appropriate space to work at home.

## Conclusions

Our results support the positive relationship between teleworking and job performance. In addition, it seems that for those who have a high satisfaction of relatedness at work, working from home or working from the office does not affect their performance. Instead, those who have a lower satisfaction of relatedness in the workplace, have lower performance when working from the office, but a greater job performance while teleworking. It seems reasonable to assume that, if they do not feel connected with the work social environment, home environment could be more suitable for their working necessities, by having a private space and avoid interruption from colleagues.

## Relevance to the Congress Theme

Teleworking is becoming more and more a reality for workers worldwide. Even before the pandemic, teleworking was growing rapidly; and the COVID pandemic has contributed to increase its widespread. Understanding the effects of teleworking on job performance and the factors that can moderate this relationship is essential to design interventions which contribute to introduce remote working in companies in the better conditions.

## Relevant UN SDGs

Good health and wellbeing. Results of this study can help to design interventions that contribute to increase performance but also the adjustment of the workers with their workplace. This adjustment can also contribute to increase wellbeing and health of workers.

*Keywords: teleworking, performance, self-determination theory*

## 7-minute science 7M116

### The Emergence and Development of Organisational Values (OV)

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science

#### Research Goals

Research about OV has mainly focused on either the strategic top-down processes or the personal values of an organisation's members. There is a significant gap in research about how values manifest at different organisational levels, and how they develop through social interactions.

In any organisation, the values involve both a process and a content element (Agle and Caldwell, 1999). While there are several theoretical constructs around the content of OV, very few methods or studies have been developed to track their processes (Gehman et al., 2013). Thus, the research goals are:

- study three levels of OV, espoused, enacted, embedded, and their processes,
- to understand how people make sense of OV throughout their interaction.

#### Theoretical Background

Feldman and Pentland (2003) argue that the only way to apply abstract concepts is through performance. Thus, this research offers a framework that looks at both the abstract value and practice as interrelated, with an ongoing recursive relationship between the two.

The research uses both sensemaking and social network perspectives to gain a comprehensive understanding of OV process within social interaction.

#### Design

The study was conducted in a large private company in Saudi Arabia, interviewing 48 people from four different departments, across a range of seniority levels and tenure, using semi-structured interviews.

#### Results

Using thematic analysis and social network analysis approach, initial results show that OV are manifested in the organisation through three main social processes; sensegiving, seeking, and enacting. These processes lead to either values creation, values matching, and values blockage. Findings also showed that the level of alignment between the values types is different. While some participants have their values aligned, other participants' espoused and enacted values are in conflict leading to the different processes of sensemaking.

#### Limitations

Ideally, studying the development and emergence of OV would combine ethnography with interviews, however this was not possible due to Covid-19. The research examined the process of OV during a single period therefore questions remain over how values develop over a long period of time. Doing a longitudinal study for future research could be fruitful.

#### Conclusion and Value

This research aimed to introduce a framework for the process of OV emergence and development. The aspired contribution of this research is showing, both theoretically and empirically, how OV is a dynamic and interactive process that involves a variety of organisational actors, and is shaped by different organisational and social processes. By integrating both sensemaking and social network perspectives into the investigation of daily practices of OV, we can open up a new set of research questions. In addition, showing the link between social processes, daily practices, and OV helps us to understand why a certain value system exists and how it could be changed.

#### Relevance To the Congress Theme

The research is mainly related to communication and relationships, group dynamic, and engagement and motivation.

#### Relevant UN SDGs

Examining the level of alignment between espoused and enacted values in a company provides an important contribution to employees' and leaders' health and wellbeing. This research helps organisational members to be more aware of an existing gap that affects their interaction, and finds solutions to align them.

*Keywords: Values and Practice, Sensemaking*

## 7-minute science 7M118

### The Impact of the Covid-19 Pandemic on Personality, Behaviour, and Working Life

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science&practic

#### Research Goals

Conducted in 2020, this research addresses three key questions:

- 1) How has the pandemic and related restrictions affected our behaviour?
- 2) How has our personality impacted our response to the pandemic?
- 3) What are employees' attitudes towards remote and hybrid working?

Five hypotheses were tested in the research:

- 1) Individuals with more introverted tendencies would prefer to work remotely
- 2) Extraverted behaviours would decrease as a result of pandemic-related restrictions
- 3) Behaviours associated with neuroticism would increase as a result of the pandemic
- 4) Conscientiousness would impact working hours while working remotely
- 5) Individuals already working remotely before the pandemic would feel less emotionally impacted than those new to remote working

#### Theoretical Background

The research builds on industry research on attitudes towards remote working, the relationship between personality and remote working, and mental health risk factors, such as research by Volk et al (2020).

It also aimed to produce innovative research into the challenges faced by remote workers, associated emotional effects, and the reciprocal impact of personality and new ways of working.

#### Design and Methodology

Participants were invited to complete a range of assessments, including:

- 1) Lumina Spark (a Big Five based personality assessment)
- 2) General Health Questionnaire (a clinically-validated measure of mental health)
- 3) Attitudes towards remote working
- 4) Demographic measures (employment, nationality, country of residence etc)
- 5) Attitudes towards risk-taking

4,414 participants form the final sample, mostly employed white-collar professionals, spread across the world.

Data was analysed through a range of methods assessing correlations between various variables and comparisons between groups.

## Results

Results from the research as relating to the five hypotheses:

- 1) Individuals with more introverted tendencies would prefer to work remotely - rejected
- 2) Extraverted behaviours would decrease as a result of pandemic-related restrictions - accepted
- 3) Behaviours associated with neuroticism would increase as a result of the pandemic - accepted
- 4) Conscientiousness would impact working hours while working remotely - accepted
- 5) Individuals already working remotely before the pandemic would feel less emotionally impacted than those new to remote working – accepted

## Limitations

The research was conducted on a largely convenient sample, consisting of a mostly homogenous group of white-collar professionals.

## Practical and Research Implications

Further research is required among a more diverse sample, encompassing the experiences of blue-collar workers, where remote working might not be accessible.

Research on the ongoing impact of the pandemic, as we move out of restrictions, is required, in order to assess the effects of new ways of working, and how best employees can be supported as we move towards a new working world, with particular focus on mental health and new working practices.

## Originality and Value

This research, building on disparate sources of information, aims to provide a holistic view of the relationships between personality, new ways of working, the Covid-19 pandemic, and mental health, aiming to provide suggestions for intervention with regards to how organisations can adapt to post-pandemic life and new ways of working.

## Intended Audience

This talk is suitable for both academics and practitioners, where there is interest in the practical applications of academic research.

*Keywords: Lumina Spark, Covid-19, Remote Working*

## 7-minute science 7M67

### The Interaction between S.A.F.E.R. Leadership and Safety Management Systems

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science

The purpose of this research is to further examine the characteristics of safe workplaces by looking at the interaction between S.A.F.E.R. leadership (a model of safety leadership) and safety management systems (SMSs). Given that the average person spends one-third of their life working (Ahmad, 2013), it is critical to create workplaces that encourage the health and wellness of workers. One way this can be achieved is through preventing safety-related incidents in the workplace. By examining how the role of leadership and the characteristics of an organization interact to influence individual safety behaviours, we can better understand what characteristics aid in creating a healthy workplace.

There is an abundance of research on leadership (Clarke, 2013) and on the role of SMSs (Robson et al., 2007) and their effect on safety outcomes in the workplace. However, little research has focused on how these two elements interact to influence safety outcomes. We propose that safety leadership and SMSs interact to improve individuals' sense of safety control, which in turn influences their safety motivation and safety behaviours. Safety control can be conceptualized as a sense of self-efficacy and a sense of autonomy. Both feelings of autonomy and self-efficacy have been associated with stronger motivation in individuals (Jungert et al., 2012), thus we predict that safety control will positively influence motivation.

Using a 3-wave longitudinal design, this study asks participants about their perceptions of their workplace SMS, their own safety behaviours, and their leader's safety leadership behaviours. It is expected that feelings of safety control and safety motivation will sequentially mediate the relationship between SMSs and safety behaviours and that S.A.F.E.R. leadership (Wong et al., 2015) will moderate this relationship. Analysis of the data is expected to be completed in April 2023.

The principal limitation of this study is the reliance on self-report data; however, the risk of common method variance inflating the relationships of interest is mitigated by the use of longitudinal data and the explicit testing of moderating effects. This study will address a gap in the literature on leadership and SMSs by providing information on the mechanisms through which they work and by providing information on the utility of the relatively novel S.A.F.E.R. leadership model. Overall, this research ultimately hopes to provide organizations with suggestions for improving workplace safety by identifying key characteristics of safe workplaces and by providing information on which leader behaviours are most pertinent in the workplace, ultimately informing leader training practices.

This submission is relevant to the congress theme as it focuses on the contribution of safety research to future leadership and SMS practices. There has been a continuous discourse on addressing the gap between research and practice, which the S.A.F.E.R. model of leadership does by providing concrete behaviours that leaders can base their behaviours on (Wong et al., 2015), which makes it ideal for practical use. This research is particularly relevant to the UN SDGs of good health and well-being. The WHO notes that a healthy workplace is one that promotes the health and safety of workers (WHO, 2010), and this research hopes to positively impact worker health and well-being by improving safety in the workplace.

*Keywords: leadership styles, risk management, safety climate*

## 7-minute science 7M60

### The paradox mindset – Influenced by personality, influencing intrinsic motivation?

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science

Research goals/why the work was worth doing : Digital technologies have increased the variety and occurrence of paradox tensions in the workplace (e.g., Danneels & Viaene, 2022; Schad et al., 2016; Schneider & Kokshagina, 2020). Paradoxes are “contradictory yet interrelated elements ... that seem logical in isolation but absurd and irrational when appearing simultaneously” (Lewis, 2000, p. 760). They persist over time, challenging one to balance the diverging elements continuously (e.g., Jarzabkowski et al., 2013; Smith & Lewis, 2011). Individuals perceive paradox tensions differently – depending on their paradox mindset: While some people perceive tensions as dilemmas, others accept and embrace paradoxes as normal and energizing (Miron-Spektor et al., 2018). Consequently, understanding the antecedents and effects of one’s paradox mindset is crucial. This study aims at explaining the effect of personality traits on one’s paradox mindset and the effect that one’s paradox mindset has on intrinsic motivation.

Theoretical background: In part one of this study, we combine paradox theory (e.g., Lewis, 2000; Schad et al., 2016) and the Five-Factor Theory (e.g. McCrae & Costa 1996, 1999) to analyze the impact of personality traits on the paradox mindset (Miron-Spektor et al., 2018). In the second part of the study, we use Hackman and Oldham’s (1975) Job-Characteristics-Model to propose a moderating effect of paradox mindset on the relationship between job autonomy and intrinsic motivation.

Design/Methodology : This study applies a deductive, quantitative research design comprising a survey and an experiment with a sample of n=207 participants.

Results obtained : The findings show that out of five personality traits, solely neuroticism negatively affects the paradox mindset, possibly as they feel distressed by and try to avoid paradoxes. The results further reveal that individuals with a paradox mindset seem to be generally higher in intrinsic motivation. Yet, they are more extrinsically motivated when not experiencing autonomy in their job and vice versa, possibly as they compensate for its’ lack through extrinsic incentives.

Limitations : Limitations of this study include the usage of a convenience sample and the reliance on self-reported scales.

Conclusions : This study identifies neuroticism – a tendency towards negative feelings such as anxiety, or self-doubt – as a personality trait that is an inherent antecedent negatively affect one’s paradox mindset. Practically, this provides insights for recruiting criteria for roles in which a strong paradox mindset is beneficial (e.g. in creative work). Further, this study reveals a relationship between paradox mindset and intrinsic motivation, which provides managerial implications for job and organizational design.

Relevance to the Congress Theme : The Congress focuses on the changing world of work. One of the changes experienced by employees and managers at all levels is the rising necessity to effectively deal with paradox tensions (caused by the diffusion of digital technologies in the workplace). This study tackles the antecedents and consequences of paradox mindsets.

Relevant UN SDGs : This work acknowledges that individual paradox mindsets differ and thereby provide an inequality in the digital workplace. Job and organizational design can help to align

personalities to roles and to reduce negative effects for those experiencing paradoxes as more challenging than others.

References available on request.

*Keywords: paradox mindset, personality traits, intrinsic motivation*

## 7-minute science 7M87

### **The Relationship between e-Leadership Competencies for Satisfaction with Telework and Workplace Isolation: The Mediating Role of Leader-Member Exchange**

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science

Digitalization is reshaping the way in which organizations function, with telework becoming more commonplace. Research has suggested that e-leadership competencies can be central to improving the work environment when working remotely. However, the relevance of these competencies for different types of outcomes in telework as well as the mechanisms through which they occur needs to be explored. Thus, this study examines the importance of e-leadership competencies for telework by analysing their relationship with employee satisfaction with telework and workplace isolation. Moreover, we consider the role of the quality of leader-member exchange (LMX) as a mediating mechanism in these relationships.

The current research is framed in the context of an E-leadership competence model and LMX theory (Graen & Scandura, 1987). The Six E-leadership competencies model (SEC, Roman et al., 2019) defines six competencies that might be relevant for leadership in telework: e-communication, e-trust, e-change, e-social, e-teams, and e-tech. Previous literature suggests that leadership competencies should have an impact on employee satisfaction and workplace isolation (Gallatin, 2018; Zeike et al., 2019) based on their effect for development of a good working environment. Leader-member exchange theory focuses on how leaders develop high-quality work relationships with their followers that produce effective results (e.g., performance and satisfaction). This theoretical approach has considered leadership competencies and skills as key factors for leaders to develop high-quality relationships with the members of their teams.

In a cross-sectional survey design, data were collected from 229 participants from different parts of the world using convenience sampling through an online survey. Participants worked remotely at least two days per week and reported to a supervisor or manager.

Structural equation modelling was used to test the mediating role of LMX. Two models were developed. The first model included the six e-leadership competencies as independent variables, LMX as the mediator, and satisfaction with telework as the outcome. The second model was the same but with workplace isolation as the dependent variable. In both models LMX was found to fully mediate the relationship between three of the six e-leadership competencies: e-trust, e-teams, and e-social. No significant mediated relationship was found for the other three competences: e-communication, e-tech, and e-change. The study sample size, use of convenience sampling, and the cross-sectional design limit the generalization of results.

E-leadership competencies were found to have a positive relationship with employee satisfaction and a negative relationship with workplace isolation. LMX was found to mediate the relationship between three leadership competencies and both outcome variables. This study extends the literature on e-leadership competencies, contributes to the digitalization of leadership competencies, provides guidance for leadership training (specifically in telework), and gives insight into improving the well-being of teleworkers.

Relevance to the Congress Theme

Digitalization of organizational processes is arguably one of the main characteristics of our changing world. This work helps to better understand the importance of e-leadership competencies for work arrangements that are becoming widespread in the global work environment.

Relevant UN SDGs

This study contributes to the UN SDGs 3 and 8.

*Keywords: E-Leadership, Well-being, Telework*

## 7-minute science 7M48

### The relationship between Playful Work Design and Performance

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science&practice

Research goals and why the work was worth doing:

The present study aims to investigate the relationship between Playful Work Design and Individual Performance, including task, extra-role and counter-productive behaviors. Playful Work Design (PWD) is a recent concept, introduced by Bakker and colleagues, and its consequences are until now little known.

Theoretical background:

PWD is the process by which people create proactive conditions within their work activities, without changing the nature of their work. Based on the theory of the duality of play, PWD has been empirically distinguished by two dimensions: designing fun, i.e. the use of ludic activities during work, and designing competition, i.e. the search of challenge with themselves. In line with proactivity theory, previous studies supported the positive effects of PWD on creative performance, although its relationship with performance domains (task and extra-role performance, and counter-productive behaviors) is yet unexplored. We hypothesized that PWD dimensions' will have a positive effect on task and extra-role performance, and negative effects on counter-productive behaviors.

Design/Methodology/Approach/Intervention:

Sample was recruited via email by researchers, using convenience sampling, in a cross-sectional design. Participants were 253 employees, well-balanced by gender and age. Participants filled an online questionnaire, composed by 12-item of PWD-Questionnaire and 18-item of Individual Work Performance Questionnaire. A multiple regression model via SEM was performed to test hypotheses.

Results obtained or expected (if not available, it must be made clear when they will be)

Preliminary results pointed out the PWD dimensions' were positively correlated to task and extra-role performance; however, only designing competition was negatively correlated to counter-productive behaviors. Furthermore, the results of multiple regression model suggested that only designing competition had a positive and significant effect on both task and extra-role performance. Contrary to hypothesis, PWD dimensions' had not significant effects on counter-productive behaviors.

Limitations:

Some limitations should be considered in the present study. First, the self-reported measures of PWD and individual performance may lead to measurement bias. Second, the sample size does not allow generalizing our results. Finally, cross-sectional design does not allow test causal relationship among variables.

Research/Practical Implications:

Despite previous limitations, the present study allow shedding light about importance of PWD dimensions in predicting performance domain. Furthermore, the results emphasize the distinctions about designing fun and designing competition; only the latter significantly affects task and extra-

role performance. Therefore, organizations may propose training interventions about self-competition in order to improve employees' performance.

Relevance to the Congress Theme: Relevant UN SDGs:

Good health and wellbeing.

*Keywords: Playful Work Design, Well-being, JD-R*

## 7-minute science 7M141

### The relationship of the ideology of psychological contracts and psychological-affective states

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science&practice

Research goals: how ideology psychological contract affects turnover intentions through commitment and identification among the young professionals within their organisation.

Theoretical background: Many workforce outlooks reports that Young professionals have an increasing concern with personal values and decreasing confidence about the positive impact their organizations have on society. The psychological contract (PC) as a supportive theoretical framework is based on Blau's (1964) social exchange theory (SET) and Gouldner's (1960) reciprocity norm and Tajfel's (1981) social identity theory (SIT). The reciprocal exchange can have a positive or negative consequence when the promises are (un)met enhancing the motivation to exit the company (Zhao et al., 2007; Coyle-Shapiro et al., 2019). This emotional behaviour as its route in the working relationship with the employer where a one-way exchange (benefiting only the employer) can be harmful to the employee's affective commitment (AC) and organizational identification (OI) when viewed through an ideology lens and employee has a "connection" with the employer from a shared valued-cause with expectations embedded within this relationship, whereas unmet promises as the potential to decrease their identification and commitment with the employer (Mowday, Steers, & Porter, 1979; Story & Castanheira, 2019). Following this, we raise the question of AC and OI as the potential to mediate the relationship between breach or fulfilment and intention to leave the organisation when unmet promises are perceived.

Design: We examine the relationship between an ideology-infused psychological contract with a cross-sectional methodology. We emailed surveys to young professionals through LinkedIn, obtaining a final sample of 358 participants. The majority came from branches of banks, insurance, engineering, and consultancy companies among others.

Results: We tested our hypothesis using structural equation modelling. We found that ideology fulfilment was positively related to AC ( $B=.14, p<.05$ ), and AC impacted negatively turnover intentions (TI) ( $B=-.81, p<.01$ ). The AC mediation effects in the relationship between IF and TI had a statistically significant negative effect ( $B=-.11, p<.05$ ), thus supporting a mediation relationship through the AC. For OI, we found a positive direct relationship with IF ( $B=.12, p<.05$ ), as well a negative direct relationship with TI ( $B=-.67, p<.01$ ). After our bootstrap, we found that IF had no significant indirect effect relationship on TI through OI ( $B=.01, p>.05$ ).

We predicted that ideology breach (IB) was positively related to TI, and the results supported this direct effect ( $B=.66, p<.01$ ). We also found support for a negative relationship between ideology breach (IB) and affective commitment (AC) ( $B=-.58, p<.01$ ). In addition, we found a statistically significant positive effect ( $B=.38, p<.01$ ), thus supporting our mediation relationship between IB and TI through AC. Regarding OI, we found a negative direct relationship with IB ( $B=-.23, p<.01$ ), and OI had also a negative direct effect on TI ( $B=-.52, p<.01$ ). When assessing the indirect effects of OI, we found that OI had a positive indirect effect on the relationship between IB and TI ( $B=.12, p>.05$ ) thus confirming our mediation relationship through OI.

Limitations: problems with common method variance and a need for longitudinal studies among this professional's framework. Other studies must focus also on another age framework to include a more broadening measure within HR management.

Conclusions : These results shed light on the growing importance of ideology-infused psychological contracts within the HR framework. Following the evidence, if employees are affective committed to their organization, they should find what they do in the organization to be meaningful and be able to connect with their work (Poon, 2013). Additionally, the breach of promises (i.e., ideology breach) will increase the odds of a young employee leaving the organization.

Relevance to the congress and UN SDG's : The ideology contract as a small body of literature and this paper sheds light on the growing importance of cause-driven organisations and their power to attract and retain young professionals. There's a direct importance to the United Nations SDG's, because the cause addressed by organisations through their employees can be from SGD 1 all through the 17 (e.g. reduce inequalities through financial help or employees volunteers programme to help the most needed community), varying on the organisation's strategy.

*Keywords: ideology; psychological contracts; Commitment ; Identification*

## 7-minute science 7M142

### The role of consultants in promoting the acceptance of a stress-management intervention

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science&practice

A positive stress management intervention appears to be a viable solution to improve personal and work-related resources that can offset the burden of job demands and promote positive psychological outcomes in healthcare professionals. However, these interventions are relatively new and there is a lack of scientific evidence on what factors may influence outcomes. The main aim of our study was to analyse and understand the potential impact of a range of process measures on the proposed intervention. More specifically, we investigated whether the training design would influence individual acceptance of the intervention and whether the role of the consultants and how they are perceived by participants would influence this relationship. Greater importance was given to acceptability because even in a well-designed intervention, low acceptability may contribute to the techniques not being adopted by participants and the intervention not being implemented effectively.

The study used a cross-sectional approach and the questionnaires used to assess the study's process measures were adapted from previous studies that focused on individual perceptions of the training design, their acceptance and the learning transfer system inventory. The sample included 100 participants from an Italian hospital, most of whom were female.

The results of our study show that the training design is associated with a higher likelihood of individual acceptance of the proposed intervention and that consultants play a moderating role in the relationship between these two variables. Moreover, the data show the importance of the consultants in the intervention implementation process, as the interaction between individual acceptance and training transfer becomes less significant depending on the strength of the moderator (i.e. how positively consultants are perceived). Indeed, the results also shed light on the value of the consultants' work. A well-perceived performance of the consultants may contribute to an individual's perception of the usefulness of the skills learned in the programme and to a higher level of motivation and acceptance towards learning. In addition, consultants may also promote individual perceptions of self-confidence and optimism, as well as an open climate in which stressful events can be shared and discussed with other co-workers, which in turn may have an impact on job resources.

The limitations of this study are related to the gender distribution and sample size, as well as cross-sectional data collection. In future studies, the same intervention and model could be tested with a larger sample and in a different setting, which would help to support and enrich the conclusions of this study.

In summary, the greatest significance of this study is the possibility of transferring the specific design of this intervention to other contexts and workers, which has proven problematic in the past when testing effectiveness. However, it is also important to remember that this information can be extremely useful for practitioners, particularly because it highlights the importance of consultants and training design to the expected outcomes of the intervention. In line with the congress theme, the implications of this study are directly related to creating a better link between the scientific approach to interventions and the practical use of knowledge. It also supports UNSDG Goal 8 to promote decent work for all. **Keywords:** *Positive Stress Management Intervention, Process Measures, Consultants*

## 7-minute science 7M197

### **The role of co-workers' team affective climate on job conflicts involving employees with disability: The hidden effects of team shared stigma against disability**

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science

Research on disability and work has shown that most cases of discrimination at work were those involving employees with disability who experienced conflicts with other employees accentuated by a hostile work environment. Consequently, the main objective of this study was to contribute to bridging the existent research gap on how to deal with conflicts related to disability at work, considering mechanisms to reduce the negative impact of work conflict. In this sense, we examined the role of the affective climate and the stigma against disability at team level to understand how task and relational conflicts influence the job performance of employees with disabilities (EWD). Specifically, we analyzed the influence of task conflict perceived by EWD on their job performance informed by their coworkers without disability as a main indicator of EWD's job inclusion. First, we examined the double mediation role of relational conflict perceived by EWD and team affective climate perceived by their coworkers without disability in the task conflict-job performance relationship. Second, we used a cross-level moderating approach to examine how the stigma shared by team members without disability impacts on these relationships. Our sample was composed by 258 employees included in 66 teams from 15 organizations. Each team included one worker with disability. The study had a cross sectional design and variables were obtained by questionnaires. Two sources of information were used: EWD to measure task conflict and relational conflict, and team coworkers to measure team affective climate towards disability, team stigma against disability and EWD's job performance. Team level variables were aggregated testing previously conditions for aggregation. We used SEM and cross-level moderation with MPLUS to test our hypotheses. Our results showed that EWD's perceptions of task and relational conflict decreased coworkers' team affective climate. Nevertheless, the team affective climate increased coworkers' estimation of EWD's job performance. Additionally, team stigma against disability decreased the team affective climate and negatively moderated the relationship between EWD's perceptions of task conflict and relational conflict. Opposite to our predictions, high levels of team stigma decreased the positive influence of EWD's task conflict on EWD's relational conflict, maybe due to the avoiding interaction effect on their coworkers when the level of team stigma is high. Our research presents some limitations. First, we are unable to conclusively establish any causal relationships due to the cross-sectional design. Second, self-report measures may result in potential problem of common-method bias. Nevertheless, we followed Podsakoff's recommendations to avoid common-method variance bias. The main conclusion of our study was that adequate levels of team affective climate buffers the negative effects caused by conflicts (task and relational) on EWD's job inclusion. Finally, this study is related to the EAWOP topic "Diversity and Inclusion". Organizations must be prepared for an increasing diversity in the workforce and this diversity cover the job inclusion of people with disabilities. Likewise, this research is aligned with the "Reduced Inequalities and Decent Work" goal of UN Sustainable Development Goals (2015).

*Keywords: task and relational conflict; team affective climate; team stigma; employees with disabilities; job inclusion*

## 7-minute science 7M86

### The role of leaders in identifying employees' experience of failure at work as a positive resource

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science&practice

People's overall satisfaction with life is more influenced by their relationships than by their job, income, or even physical health (Campbell et al., 1976). This belief is well founded: research shows that our relationships with others make us healthy and happy (Robies et al., 2014; Slatcher, 2010; Giles et al., 2005; Barth et al., 2010) And if we interpret job satisfaction and well-being in the context of work, we find that all theories of well-being at work include work relationships as a significant factor influencing our global sense of well-being at work (e.g., Warr's Vitamin model (2007), the ASSET model (Cooper & Cartwright, 2009), or Siegrist's (1996, 2009) job control-reward model). If our well-being and happiness are so significantly influenced by our relationships, what role might they play in helping us to cope with and process difficulties, failures, or mistakes at work? After all, failure is universal and part of our lives, meaning that we all face it in our lives. In the following, I will look for answers to this question and to the question of what role the relationship with the manager plays in dealing with a failure or mistake. In my thesis, I will present my research findings alongside various theoretical and research findings. My research has so far involved 30 subjects with whom I have conducted semi-structured interviews using the critical incident technique. The results show that failure and mistakes have many positive effects on both individual and organizational levels in the world of work. Namely, employees benefit from effective error management because they receive constructive feedback from supervisors and co-workers (Edmondson, 1999). And feedback provides an opportunity for individuals to change their course of action while gaining new knowledge about different types of error situations and thus becoming more aware of the situations that caused the error (Edmondson, 1999). At the organizational level, effective error management can improve organizational effectiveness if people are confident that they will not be blamed, ridiculed, or punished when errors occur (Edmondson, 1999). Nevertheless, the benefits of errors are less obvious than their negative consequences (McCune, 1997). Learning orientation, managerial support, and adequate psychological safety are needed in the workplace to raise awareness of the positive effects (Newton et al., 2008).

*Keywords: positive psychology, failure, leaders*

## 7-minute science 7M05

### The story about university employees' self-efficacy and their wellbeing

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Researchers are still debating about the role of personal resources in predicting employees' wellbeing. We propose a positive story, in which employees' self-efficacy could act as a moderator diminishing the relationship between job demands and employees' health and strengthening the relationship between job resources and positive employees' attitudes towards job. These presumptions are based on the expanded Job demands-resources model (Bakker et al., 2007; Bakker, Demerouti, 2017). Cross-sectional survey in three Lithuanian universities involved 451 employees (31 percent males and 67 percent females; 57 percent academic staff, 22 percent non-academic staff and 20 percent doing both academic and administrative tasks). Occupational self-efficacy scale (Rigotti et al., 2008), COPSOQII (National Centre for the Working Environment, 2007) and UWES (Schaufeli, Bakker, 2003) were used as the main questionnaires. Results of the moderation analysis showed that in the group of employees with high self-efficacy the relationship between perceived work-family conflict and stress was weaker. However, in the same group of employees the relationship between perceived influence at work and work engagement was stronger than in the group with low self-efficacy. This story is in line with Dicke and colleagues' (2018) longitudinal research, insights from Mazzetti et al. (2021) metanalysis. Nevertheless, replication of the study in different context (type of organization, country, etc.) would be useful. The main message for practitioners – self-efficacy enhancement programs could be valuable HRM instruments in universities. Employees with high self-efficacy experience less stress because they believe they can deal with work-family conflict and they are more engaged because they know how to use influence, they have at work, effectively. This research also provides insights about significant predictors of good health and wellbeing, one of the sustainable development goals, in the university employees' sample. Consideration of employees' personal resources could help both to react to the changing world of work and to be proactive in designing valuable HRM practices.

Keywords: *self-efficacy, JDR, well-being*

## 7-minute science 7M74

### Time to tell a different story? Positive and negative follower perceptions of their leaders' storytelling

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#### Research goals and theoretical background

Storytelling, a form of leader-follower interaction in which past and future human experiences are shared (Boje, 1991), has received much attention in the popular management literature. Accordingly, storytelling in leadership is highly effective, driving follower commitment and innovative performance. However, in practice, leaders' storytelling may have ambiguous and even negative effects on followers. Notably, previous research on leaders' storytelling is scarce and disconnected from leadership theory, and thus fails to explain positive and negative follower perceptions of their leaders' storytelling. In the present research, we introduced and evaluated the intention-perception model of storytelling in leadership, providing a framework to systematically explain when and why unintended effects of storytelling happen.

#### Methodology

In Study 1, we developed the intention-perception model of storytelling in leadership, drawing on data from semi-structured interviews ( N = 27 independent leaders and followers) and integrating transformational leadership and leader-member exchange theory. In Study 2 ( N = 79), we developed a scale to assess followers' story perceptions and confirmed the scale's structure in Study 3, an online cross-sectional field study ( N = 60). In Study 3, we also tested a main assumption of the intention-perception model of storytelling, that is, the relationship between followers' story perceptions and story effects, mediated via followers' affective arousal.

#### Results

Across studies, we found that story effects depend on followers' perception of the story. In particular, the better a leader's story met followers' needs (need-supply fit), the more adequate the input load transported by the story (story load), and the more positive followers' appraisal of their leader's story (story appraisal), the more positive followers' affective reactions and effects of storytelling (transformation, leader-member exchange quality, and trust in the leader).

#### Limitations and future research

Whereas our findings imply causal links within our model, they are based on participants' recall of story effects and may thus be affected by hindsight bias and implicit theories about story effects. In future studies, we plan to apply experimental manipulations of standardized scenarios of storytelling situations.

#### Conclusion and Relevance

Taking a follower-centric perspective on a common leadership practice (i.e., storytelling), our research contributes to a growing body of managerial literature, revealing how followers' responses to leader behavior vary interpersonally and across situations, and thus refuting a one-fits-all approach to leadership. Particularly, we challenge the common premise that a good story is always helpful, the more intense and personal the story the better, and that storytelling is always perceived as genuine and authentic. In that way, we provide practical insights on how leaders may improve

collaboration by tailoring their communication behavior to the expectations and needs of their followers.

#### Relevance to the UN SDGs

With the present research we aim to be relevant to the UN Sustainable Development Goals by contributing to the identification and development of leadership behaviors that foster employee well-being and promote decent working conditions.

*Keywords: Storytelling, Leadership, Intention-Perception Shift*

## 7-minute science 7M37

### Towards an Understanding of Motives to Use Social Networking Sites on Well-Being

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science

Using social networking sites (SNSs) became a routine in many peoples' lives which is strengthened by the high number of daily usage time (Pew Research Center, 2021). This includes aspects regarding social life as well as the workplace that is highlighted by the fact that two out of three employees use SNSs for their work (Leftheriotis & Giannakos, 2014) and also work-related communication after work/during recovery time (Xu et al., 2022). Therefore, a lot of research has been conducted to explore consequences of SNS use on multiple well-being variables resulting in contradictory results. A more comprehensive instrument to measure SNS use is an approach to solve this problem (Valkenburg et al., 2021). In our study, we utilized a combination of two approaches for a more detailed way to assess SNS use: (1) active/passive dichotomization and (2) assessment of underlying motives for SNS use (cf., Liu et al., 2019; Ozimek & Förster, 2021). The examined motives are the Need for Self-Presentation (NSP), the Need to Belong (NB; Nadkarni & Hofmann, 2012), the Need for Social Comparison (NSC; Vogel et al., 2015), and the Need for Entertainment/Information (NEI; Gupta & Bashir, 2018). Two studies were conducted to reach the goal of providing a suitable instrument by validating a new scale to measure both aspects of SNS use. Moreover, the scale aimed to be universally applicable for both, work-related and non-work-related related SNS activities. Study 1 ( N = 597) focused on item development as well as item reduction, and identification of factor structure. The analysis resulted in an eight-factor structure that represented active and passive domains of each motive. Study 2 ( N = 437) confirmed this factor structure by showing good values for model fit. Furthermore, construct and criterion validity were demonstrated in both studies. Regarding criterion validity, differences between MOTUS subscales and indicators of well-being – namely satisfaction with life, self-esteem, positive/negative affect – were of particular interest. Results revealed that the passive domains of NSP, NB, and NEI were positively related to self-esteem and positive affect. Whereas, NSC showed negative associations with self-esteem as well as satisfaction with life, and a positive association with negative affect. The validated scale is a fruitful instrument for further investigations because it can universally be adapted to specific contexts and platforms. Results are discussed in terms of their practical implications towards the understanding of possible consequences associated with SNS use. Questions for further research may be: (1) How can SNSs be used as a coping resource? (2) Can motives actually be fulfilled when using SNSs? Or (3) How can people improve their usage behavior to obtain benefits regarding well-being?

*Keywords: social media, well-being, motives*

## 7-minute science 7M105

### **Trans-cending boundaries? Organizational consequences of gender-role violations for transgender women**

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Research goals and why the work was worth doing

Organizations and employees are increasingly appreciating the importance of managing gender diversity in work contexts. Transgender women experience some of the most discrimination, but it is unclear whether this is the result of bias against transgender people, bias against women, or bias based on violations of traditional gender norms. Our research addresses this current limitation.

Theoretical background

We drew on theories related to gender, stigmatization, social role theory (i.e., gender norm violations), and occupational stereotypes to ground our hypotheses.

Design/Methodology/Approach/Intervention

Study 1 involved in-depth interviews with ten transgender women (115 pages of text), which were transcribed and thematically coded in line with best practices for qualitative analysis. Study 2 involved 125 participants who were randomly assigned to evaluate a potential job applicant (ostensibly for a study about cybervetting) with respect to perceived hireability, discrimination likelihood, and job role suitability (based on gender stereotypes). Stimuli included pictures of applicants at different points in their gender transitions (beginning, mid-point, and end). We used a between-subjects design and note that photographic stimuli were acquired from multiple individuals who documented their transition over time.

Results obtained

Trans women in Study 1 reported receiving more positive interactions and increased feelings of acceptance among coworkers and greater acceptance in traditionally “feminine” jobs as their transitions progressed. Participants in Study 2 similarly evaluated job applicants who were near the end of their transitions (based on facial appearance alone) more positively on every outcome than those who had just begun or were in the process of transitioning.

Limitations

Our relatively small sample size in Study 1 may call the generalizability of our findings into question, but the consistency of responses provide useful background information in understanding this phenomenon. Some may criticize our use of MTurk in Study 2, but meta-analytic findings support its use for social science research and we implemented several data quality control measures and a between-subjects experimental design to increase confidence in our results.

Conclusions

These studies suggest that transgender women face a unique and complex set of challenges at work and highlight the pervasiveness of gender norms in workplace contexts. Although individuals may successfully transcend the boundaries associated with traditional gender expression, they nevertheless struggle with new challenges as women, despite no losses in human capital. As such,

gender norms continue to have pernicious effects for employees, even among those who may be least constrained by traditional conceptualizations of gender.

Relevance to the congress theme

As gender diversity increases and more employees feel comfortable expressing gender identities that have been considered nontraditional it is critically important to understand the psychological mechanisms that explain harassment and discrimination based on gender. Our results are extremely timely given these trends and the implications for protecting marginalized workers.

Relevant UN SDGs

Gender equality, reduced inequities, good health and wellbeing

*Keywords: transgender, gender identity, dei*

## Understanding The Great Resignation: Who Quits and Why?

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At the beginning of 2021, one-third of employees in the US and Germany were thinking about leaving their jobs (Microsoft, 2021; Xing, 2022). As this data was collected during the pandemic, one could argue that many people changed to better-paying jobs due to the high economic insecurity. However, pay only has a moderate impact on employee attrition (Allen et al., 2010; Rubenstein et al., 2018), also during the so-called post-pandemic “great resignation” (Sull et al., 2022). The great resignation is the process of a massive wave of voluntary job separations inherent to the COVID-19 pandemic (Kuzior et al., 2022). Although some attempts to explore the causes of the great resignation are made, e.g., by explaining it by occupational stress and anxiety (Jiskrova, 2022; Sheather & Slattery, 2021), by lack of citizenship and purpose (Hirsch, 2021), or by other non-materialistic factors (Kuzior et al., 2022), the ongoing attrition is not fully understood yet. In addition, it is unclear what employee subgroups reacted strongest to the post-pandemic work environment.

Instead of pay as the driving force, a toxic corporate culture and relational factors like the lack of belonging or not feeling valued are the most influential factors leading to turnover (Smet et al., 2021; Sull et al., 2022). A recent meta-analysis (Rubenstein et al., 2018) showed that younger workers were more likely to quit in a pre-pandemic context and asked future research to monitor this age-based trend. The answer might lie in younger employees’ high expectations regarding what they want from their employers (Bal & Jansen, 2016), a constant search for developmental opportunities (Kuzior et al., 2022), or in a more vigorous search for meaning among younger employees (Zhou & Zheng, 2022). We argue that young people experience more dissatisfaction and, hence, play an essential part in the great resignation.

To better understand the reasons for the great resignation’s unprecedented attrition numbers and to help leaders respond effectively, the aims of this study are to (1) assess the reasons for the great resignation in a German context and (2) examine whether there are specific demographic profiles of employees who quit during the great resignation.

This study is based on platform data provided by kununu, a professionally operated employer rating platform where employees can rate their employer anonymously and free of charge. We use self-reports and comments issued by employees who left their previous employer and analyze which keywords, e.g., toxic leadership, stressful environment, work-life conflict, family-unfriendly, lack of meaning, indicate certain organizational cultures that have contributed to the resignation. We utilize the R-Package RDQA for a qualitative content analysis that supports us in measuring and evaluating the prevalence, meanings, and correlations of certain words, themes, or concepts (Prasad, 2008; Stemler, 2015). While writing this for submission, we will be soon receiving the kununu ratings and comments from 2020 to 2022. Since we are dealing with a large volume of ratings and comments, we expect to process and evaluate the mixed methods data by the end of March 2023.

Despite this study’s importance in exploring the great resignation discourse, working with an online platform also entails limitations. Kununu is only one platform among many others providing similar reviewing possibilities and the quality of our analysis may be improved by considering additional platforms, such as glassdoor.com. Further, we should consider varying definitions of key terms as companies and their employees will apply their own definitions of similar constructs. Nevertheless,

we take the meanings of the key terms into account and try to cluster them accordingly in our large-scale coding scheme.

Business leaders and researchers still struggle to understand the factors causing mass attrition and are looking for ways to retain valued employees. This study aims to answer the most prevalent causes for the great resignation in Germany and whether particular age groups were more affected than others. We use mixed methods and focus on longitudinal effects from 2020 to 2022. Combined with the practical need to examine how to retain valued employees, our research approach substantially contributes to the discussion on employee attrition and retention based on workplace cultures during the great resignation.

A working world that retains young talent and a diverse workforce contributes to sustainable development goals by offering structures for a better work-life balance and, thus, contribute, e.g., to better gender equality. Further, when companies realize that their toxic work culture discourages their employees, they might see the value in improving their policies and promoting employee well-being and health, which, in turn, also improves public health.

*Keywords: great resignation, younger employees, content analysis*

## 7-minute science 7M66

### Validation of the Sense of Professional Self-Esteem Scale

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Background: There are a few concepts related to the sense of being needed and valuable in the workplace. Some are based on objective criteria, such as professional suitability described mainly in terms of a specific educational and professional context (Rodriguez et al. 2016) or as the learning process influenced by competences required for proper performance at work (Myklebust, 2022). A sense of professional self-esteem relates to the subjective feeling of being needed, successful, significant and worthy at work. The construct is similar to general self-esteem and self-worth measuring both positive and negative feelings about the self as proposed by Rosenberg (1965), but linked to a professional area. The general self-esteem is a belief in an individual's capabilities, which has an impact on behaviour, fulfilment of objectives and taking actions (Bandura, 1994). It also regulates well-being, informs about coping with difficulties, and supports relations with others (Leary & Baumeister, 2000). High professional self-esteem means that employees value and accept their professional roles (Tinsley, 2002) and try to perform as well as possible (Ceylan, Biçakçi, Gürsoy, & Aral, 2009). It consists of five dimensions such as satisfaction with the performed role, desire to develop skills necessary in a job, commitment, feeling of adapting to work conditions and a desire to share knowledge and experience with others (Arıcak, 1999).

The aim: The main objective of this study was to construct a Polish version of The Sense of Professional Self-Esteem scale, shorter than The Turkish Scale for Professional Self-Esteem of Arıcak (1999) which consists of 30 items. The Pakistani adaptation of the Turkish scale did not yield an acceptable reliability value and was extended to 37 items. This informed the decision not to base the Polish version of the tool on the original method because an importance of adapting a method to the cultural context was noticed (Iqbal, Bibi & Gul, 2016). The goal of the research is to test the validity and reliability of the Polish version of the constructed inventory and to examine its relationship to general self-esteem.

Procedure: 255 Polish employees took part in the research. They filled three questionnaires: the experimental version of The Sense of Professional Self-Esteem Scale consisting of 6 items based on the Rosenberg's self-esteem scale (Rosenberg, 1965), the Single-item Self-report Measure of Global Self-esteem (Skevington, Lotfy & O'Connell, 2004; adapted by Atroszko, Sawicki, Sendal & Atroszko, 2017). V) and the Satisfaction with the Job Scale consisting of 5 items (Kondratowicz, Godlewska-Werner, Połomski i Khosla, 2021). The obtained data were analysed with a view to ascertaining the validity and reliability of the experimental Polish scale and examining the relationship of the obtained results with general self-esteem.

Results: Statistical analyses showed of The Sense of Professional Self-Esteem Scale is reliable - the Cronbach alpha reliability coefficient was determined to be 0.89. There is a positive correlation between professional self-esteem and a global self-esteem and satisfaction with the job.

Conclusions: The professional self-esteem is a very important factor which is not used often in European studies. The Sense of Professional Self-Esteem Scale may be used for various research studies as it is short, but still valid and reliable.

*Keywords: professional self-esteem, self-esteem, validatio*

## 7-minute science 7M143

### **We need autonomy! The role of leadership styles, job autonomy and autonomous motivation in the work engagement of outsourcing employees: A case study**

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**Research goals and why the work was worth doing :** The question of how to sustain and stimulate the motivation and work engagement of employees is essential for Human Resource Management professionals in outsourcing organizations that face high voluntary turnover related to loss of engagement. To develop a strong rationale for HRM interventions appropriate to this context, the presented systematic mixed-method illustrative case study considers the contextual issues of mechanistic job design in outsourcing. Study 1 (quantitative) aimed to test a theoretical model of different motivational antecedents of followers' work engagement and provided empirical evidence on their relative importance. Study 2 (qualitative) was designed to understand and problematize the findings of Study 1, especially those that go beyond theory-based assumptions.

**Theoretical background :** In Study 1, we integrated Self-Determination Theory and transformational-transactional leadership theory with a work engagement model. In Study 2, we focused on the factor identified in Study 1 as having the most important role in work engagement, namely, followers' intrinsic motivation. We investigated leadership actions that promote it and identified thematic threads regarding enhancing followers' intrinsic motivation from the perspectives of both leaders and followers.

**Methodology :** This research was conducted in an outsourcing organization and includes quantitative data from an online survey in which 257 employees took part (Study 1) and qualitative data from four focus group discussions (Study 2).

**Results :** The results of Study 1 showed that employees who have a higher level of work engagement also have higher intrinsic motivation, and the strength of this autonomous type of motivation in predicting work engagement is higher than that of other motivational antecedents, i.e., identified motivation, job autonomy, and supervisors' leadership styles. Study 2 highlights leaders' specific activities that can be used in HRM interventions that offer substitute autonomy to outsourcing employees to support their motivation.

**Limitations :** We investigated one outsourcing organization and its employees' perspectives. Therefore, the applicability of the findings across other organizations in this sector may be challenged. At the same time, the purpose of a case study is to provide detailed descriptions and explanatory insights instead of generalizable results.

**Conclusions – research and or practical implications/Originality/Value :** Together, this research contributes to the existing literature on Human Resource Management in several ways. First, it considers the organizational context of the outsourcing sector in the analysis of factors that contribute to work engagement. Second, it bridges the research gap by showing that autonomous actions have great importance and can be introduced as substitute autonomy in mechanistically designed jobs. Third, it suggests various leadership actions that may stimulate autonomous motivation; therefore, it might also be useful for HRM professionals when introducing and developing appropriate interventions in the outsourcing sector.

Relevance to the Congress Theme : Motivational leadership

*Keywords: leadership, motivation, job autonomy*

## 7-minute science 7M171

### When does sleep predict burnout experiences? Self-reported vs. actigraphy-derived measures

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#### Aim

We explored if and how daily sleep, measured via self-reports and actigraphy, predicts daily burnout experiences among non-clinical employees and whether these relationships depend on trait levels of burnout and sleep quality.

#### Background

Previous studies provide several indications that sleep may be an important determinant and risk factor for the development and experience of burnout symptoms. Clinical burnout patients feel less recovered after sleeping than healthy controls (Sonnenschein et al., 2007) and improvements in burnout are accompanied by improvements in sleep quality and physiology (Ekstedt et al., 2009). However, given that sleep is an important mechanism for recovery from daily work demands, the preceding sleep episode may also be a crucial determinant of daily experiences related to burnout. Sleeping well could support the ability to recover from daily work demands by restoring psycho-physiological systems overnight, whereas sleep disruptions may impair recovery, likely resulting in an increased intensity of burnout experiences the next day. Yet, little is known about whether sleep can predict daily experiences related to burnout in non-clinical populations and which aspects of sleep (self-reported vs actigraphy-derived measures of sleep) are most important for predicting and preventing such experiences.

The strength of the relationship between sleep and daily burnout-related experiences may depend on trait levels of burnout. According to the Effort-Recovery Theory, inadequate recovery between work episodes causes employees to invest compensatory effort, further increasing the demand on the recovery system (Meijman & Mulder, 1998). Employees experiencing higher levels of trait burnout or more sleep disturbances on a regular basis may thus be more dependent on sleep between workdays to replenish their low levels of energy and motivation. This study contributes to knowledge regarding how burnout develops by investigating if and how trait levels of burnout and general sleep quality determine the importance of sleep (quality, duration, timing, latency, efficiency, and fragmentation) for daily experiences related to burnout.

#### Methods

We conducted a seven-day field study among 72 working employees. The study consisted of: (1) a questionnaire assessing trait burnout and disturbances in general sleep quality, (2) a daily morning diary assessing self-reported sleep quality, (3) seven short questionnaires assessing the momentary experience of disengagement and emotional exhaustion throughout the day and (4) wrist-worn actigraphy assessing sleep duration, timing, latency, efficiency, and number of awakenings from sleep, worn throughout the study period. Momentary questionnaires were aggregated to reflect daily levels of burnout-related experiences, and two-level linear mixed models were run to test associations between sleep and burnout-related experiences.

## Results

Self-reported sleep quality was negatively related to subsequent daily experiences of exhaustion. In contrast, self-reported measures of sleep were not associated with subsequent daily experiences related to disengagement. None of the actigraphy-derived sleep markers were related to burnout-related experiences at the day level. This finding suggests that it is the psychological experience of the preceding sleep episode, rather than actigraphy-derived aspects of that sleep episode, that is relevant to daily burnout experiences.

Moreover, trait burnout and trait sleep quality moderated the relationship between self-reported sleep quality and exhaustion. Daily sleep quality was a stronger predictor for the next day's energy levels when participants were more exhausted and had worse quality sleep in general. Moreover, trait exhaustion moderated the relationship between daily sleep duration and daily exhaustion, insofar that only for participants who experienced low levels of trait exhaustion, sleeping longer resulted in less daily exhaustion. This suggests that employees experiencing higher levels of trait exhaustion did not benefit from sleeping longer.

## Limitations

While sleep diaries and actigraphy are commonly used to monitor sleep in research and clinical practice, both methods have limitations. Actigraphy has been demonstrated to display a low ability to detect wakeful periods during sleep episodes and self-reports are prone to response biases and errors.

## Conclusions

In a non-clinical sample, self-reports were stronger predictors of daily burnout experiences than actigraphy-derived measures of sleep. Moreover, experiencing higher levels of burnout amplified the negative relationship between sleep quality and the subsequent daily experience of exhaustion. This suggests that experiencing poor quality sleep while already experiencing exhaustion may intensify the downward spiral of energy depletion found in the development of burnout. Sleep is thus of particular importance for non- and sub-clinical populations that aim to prevent long-term energy erosion.

*Keywords: Sleep, Burnout, Recovery*

## 7-minute science 7M44

### **Where the Psychopaths work: Cross-industry differences in the relation of Dark Triad and Psychological Capital**

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science

Research goals and why the work was worth doing

The purpose of this study was to explore differences and relationships between the concepts of Dark Triad (narcissism, psychopathy and Machiavellianism; DT) and Psychological Capital (PsyCap) across work-related industries.

Theoretical background

Both DT and PsyCap have been researched in detail. However, only the recent study (Zhu & Geng, 2021) combined both concepts in a student sample and found a positive relation of narcissism with PsyCap, and negative relation of each psychopathy and Machiavellianism with PsyCap.

As of industry differences, research (Judge & Cable, 1997) revealed that different industries attract different personalities. This effect, referred to as homogeneity hypothesis (Schneider et al., 1998), is explained by people actively choosing the company that best fits their need structure, and an organization helping employees to assimilate with industry values. Since only scattered industry differences have been found for individual DT facets (e.g., Malesza et al., 2019), this study investigated industry differences in a more comprehensive approach.

Design/Methodology

German employees (n=2,109) across 11 industries completed a survey on DT and PsyCap. ANOVAs and multiple regression analyses were used to test the hypotheses.

Results

Significant differences between industries were found for all DT facets as well as PsyCap. Highest scores for psychopathy were found among architecture, retail and consulting compared to lowest scores for education and research as well as health care. The effect of DT on PsyCap varied across industries. For industries architecture, automotive and consulting, only narcissism related significantly positively to PsyCap while psychopathy did not. For all other industries, narcissism related positively and psychopathy negatively with PsyCap. No significant effects were found for Machiavellianism.

Limitations

The study used self-reports and the groups of the different industries were not all equally sized. Future studies should therefore use implicit measurement instruments or combine self-reports with assessment of others.

Conclusions

This study is the first to explore DT and PsyCap among employees and their respective industry. The results extend previous findings by revealing differences of both concepts across and within

industries. Specific behavioral expectations are assumed to facilitate or impede the assimilation of different personalities to the work context (homogeneity hypothesis), depending on the industry. Jobs in some industries, for example, might require greater risk tolerance and use more prestige structures, which is more likely to attract psychopathic personality traits associated with lower fear of risk. This study can help to reconsider in which industries DT personalities affect PsyCap as an antecedent of workplace outcomes such as work satisfaction or job performance.

#### Relevance to Congress Theme

It is on us to change the future of work. Therefore, it is necessary to understand where DT personalities (such as psychopathic personalities) work and when such behavior might be beneficial or harmful. In this context, the study contributes to a better understanding in which industries differences exist and offers an explanation for them. Revealed differences can be used as basis to discuss how to improve the work environment to reduce the expectations for behavior that suits DT traits such as psychopathy.

*Keywords: dark triad, psychological capital, industry differences*

## 7-minute science 7M29

### **Who Gets the Credit? The Role of Team Context on Performance Signals for Human Capital Market Value**

Robert E. Ployhart, University of South Carolina; Gilad Chen, University of Maryland; Nicholas Folger, Technical University Munich; Marvin Schuth, Kühne Logistics University; Brosi Prisca, Kühne Logistics University

science

Researchers and practitioners predict that the future of work is organized in teams. Yet, teams are characterized by social complexity and ambiguity, which obscures the understanding who is ultimately responsible for performance in teams. Based on signaling theory, we therefore aim to understand how the team context changes the signal that individual performance sends on individuals' market valuations of human capital.

#### Theoretical background

We aim to advance theory for understanding the signal of individual performance on market valuations of human capital within team contexts, i.e., team performance and team tenure.

High-performing teams provide a strong support system for individuals. Yet, depending on whether team performance is ultimately taken as an explanation for individual performance or whether individuals are perceived as contributors to team performance, high-performing teams may harm or benefit individuals' market value.

In addition to team performance, the fact that individual performance is co-created in teams puts into question whether individual performance indeed signals the individual's — or other team members' — market value. This differentiation might become the more difficult, the longer individuals work in a team as individuals become deeply embedded in team structures.

#### Design/Methodology/Approach/Intervention

We used a comprehensive data set of professional European football players of the 'top-five' European football leagues from the 2008/2009 season to the 2017/2018 season. This data set allowed us to obtain objective measures for both individual and team performance ([www.whoscored.com](http://www.whoscored.com)) as well as players' market values for human capital ([www.transfermarkt.de](http://www.transfermarkt.de)).

#### Results

As expected, individual performance was positively related to changes in individual's market value. Yet, the team context nuanced this relationship. Team performance showed an additional positive relationship with individual's market value and strengthened the relationship between individual performance and individual's market value. Team tenure, in contrast, showed a negative relationship with individual's market value and weakened the relationship between individual performance and individual's market value.

#### Limitations

While the data set provides objective measures in clear temporal order, it does not allow to rule out all alternative explanations. Therefore, we cannot prove clear causality. Furthermore, despite football being a multi-million business in itself and the research question being relevant across industries, the research context might be seen as specific with limited external validity.

## Conclusions

Our results provide a meso-level approach to the valuation of human capital, which has so far been examined either on the micro or the macro level. Thereby, we clarify the signaling interplay between individual performance and team performance on individuals' market value, i.e., whether team performance may amplify or distort the signal of individual performance. Furthermore, showing that team tenure weakens the signal of individual performance, we extend the discussion about firm-specificity in human capital research. These findings help individuals and organizations alike to understand individual's market value when working in teams.

## Relevance to the Congress Theme

As teams are a major dimension of the future of work, this research elucidates a core aspect in the changing world of work.

*Keywords: Team, performance, human capital*

## 7-minute science 7M84

### **Who wants to lead: Relationships between the five-factor model of personality traits, lower-level facets, and Motivation to Lead**

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science

**Why the work is worth doing :** The concept of Motivation to Lead are found to be an important determinant for leadership careers. A narrower understanding of the individual characteristics behind leadership motivation helps researchers, recruiters, and others to interpret and direct actions more constructively.

**Theoretical background :** Chan & Drasgow (2001) introduced Motivation to Lead (MTL) as an individual difference construct to measure the desire to take part in leadership activities and enter leadership roles. The key assumption is that MTL develops because of engaging in leadership activities and roles. Higher levels of MTL affect individuals' willingness to participate in leadership activities and roles, where they will acquire the social skills and knowledge required to qualify and perform well as leaders in the future.

A more recent meta-analysis reported empirical evidence for the relevance of MTL, in multiple settings (Badura, Grijalva, Galvin, Owens, & Joseph, 2020). Whereas outputs of MTL demonstrate the effects of MTL, the inputs describe how individual differences characterize individuals carrying such aspirations. Whereas the five-factor model was established with the MTL already at its introduction, personality traits are criticized for being too broad to describe "how" individuals differ from each other. Studies have demonstrated how such broad traits consist of facets that are both positively and negatively related with outcomes, such as job performance (Judge, Rodell, Klinger, Simon, & Crawford, 2013).

**Methodology :** Over a three-year period, data has been gathered from more than 400 Norwegian students and non-students participating in psychology classes, workshops, and training activities in Norway. At the beginning of their classes/workshops/activities, participants have executed the NEO PI 3. During their classes/workshops/activities, participants have executed a questionnaire including the 27 item Motivation to Lead scale.

In addition to the five-factor model of personality, this study will include the NEO Sub-facets (Costa & McCrae, 1992; 1998) and the second-order facets proposed by DeYoung, Quilty, and Peterson (2007) in its analysis.

**Limitation :** As a study aimed to address leadership related information, the non-leader respondents are seen to be a limitation.

**Originality/Value :** By investigating lower-level facets of personality traits this study among the first to provide a narrower understanding of the relationship between traits and MTL.

**Practical Implications :** As relationships between personality traits and leadership often is used to describe "what is a leader", a narrower investigation of personality facets and MTL are relevant for both researchers, consultants, recruiters, lecturers, leaders, and other practitioners. As studies have demonstrated how broad traits might increase misinterpretations of leader characteristics, this study aim to help practice to make better decision, better models of leadership, and less biased "narratives" of leadership.

*Keywords: Motivation to Lead, Personality Traits, Leadership,*

## 7-minute science 7M122

### WOP-P Toolkit

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science&practice

The Work, Organizational, and Personnel Psychology (WOP-P) Toolkit is an educational collection of tools and resources meant to assist professionals, students, as well as multinational organizations in explaining, collaborating, and finding common terminology and concepts within WOP-P. The tools and resources were created and developed around potential difficulties that individuals may come across, such as stakeholders from different cultures, when looking to share or explain what they are working on, researching, or studying within this field. The toolkit's primary objective is to support WOP-P professionals from both Western and Nonwestern countries to find a common language and terminology in the realm of WOP-P, and ultimately be better able to both communicate and collaborate with one another, as well as indirectly raise awareness of WOP-P and its sister disciplines (i.e., Industrial-Organizational Psychology).

The toolkit is comprised of two manuals, a short and a long version, a cardstock, a slideshow, as well as an infographic explaining in greater detail what the field is comprised of. It allows any professional utilizing them to have detailed information, scientific evidence, and varying formats that will allow them to effectively communicate what WOP is and how it may benefit others, at easy reach.

To assess the toolkit's utility, data was collected from a total of 11 individuals (across X countries) within the field of WOP, through the use of a survey. The team in charge at the time opted to show the results through a percentage favorable score which combined the 4 and 5 responses from the survey and was further specified as "Unfavorable" (1, 2); "Neutral" (3); "Favorable" (4, 5). When asked to assess the usefulness of the components of the toolkit, the participants indicated that the infographic [73% (US:67% / Non-US: 87%)] was the most useful, with the slide deck [ 55% (US: 50% / Non-US:60%)] and the short manual [55% (US: 17% / Non-US: 100%)] receiving similar results. The participants indicated low use for the the long Manual [36% (US: 17% / Non-US: 60%)].

Overall, the results indicated that over 70% of participants would recommend the toolkit in its entirety, with the slide deck being indicated to be the most likely to be recommended [82% (US: 83% / Non-US: 80%)]. There were higher trends among our non-US sample when indicating if they would use the toolkit again Long Manual [55% (US: 33% / Non-US: 80%)]; Short Manual [55% (US: 17% / Non-US: 100%)]; Infographic PDF [63% (US: 50% / Non-US: 80%)]; Slide Deck [73% (US: 67% / Non-US: 80%)].

Using this feedback, the toolkit was revised and developed further by the publication of an already constructed website and a professional networking page, LinkedIn; both of which will allow for the toolkit to be accessible to all professionals, students, and organizations in need which will in turn increase communication between one another to occur, and flourish. This toolkit allows for a shared, better understanding of the field of WOP, along with the potential to educate different countries on how the field of Work and Organizational Psychology may be similar, or different to, a field in their own country.

*Keywords: International, Toolkit*

## 7-minute science 7M194

### **Work Addiction Risk, Stress and Wellbeing at Work: Testing the Mediating Role of Sleep Quality**

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science

Attention to work addiction risk is growing; however, more studies are needed to explore the vast impact of work addiction risk on various aspects of employees' work and life domains. Although several studies have considered the antecedents or consequences of work addiction risk, this study particularly focuses on sleep quality as a potential explanatory underlying mechanism in the relation between work addiction risk and three outcome variables including stress at home, stress at work and wellbeing. To do so, this study first aims to examine the direct associations of work addiction risk with the three study outcome variables. Second, it aims to consider the extent to which these associations are mediated by the employees' quality of sleep. The data was collected using an online platform and participants consisted of 188 French employees (88 females and 77 males) who were selected using simple random sampling method. Participants responded to the survey including the Work Addiction Risk Test (WART), stress at work, wellbeing, and sleep quality. The data was analyzed using JASP and SPSS-26 programs. The results revealed that there are significant positive relationships between work addiction risk and both stress at home and at work and negative relationships between work addiction risk and both sleep quality and wellbeing. In addition, the analyses of the mediation paths suggests the significant mediation role of sleep quality for the link between work addiction risk and stress at work as well as the link between work addiction risk and wellbeing. However, sleep quality was found to be a stronger mediator of work addiction risk and wellbeing.

*Keywords: Work addiction risk; sleep quality; stress at work, wellbeing*

## 7-minute science 7M199

### **Well-being oriented HRM practices increase employee eudaimonic workplace well-being. Multilevel study from 50 countries**

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Science

#### Research goals and why the study was worth doing

The purpose of this article is to explain the relationship between well-being-oriented HRM practices and employee eudaimonic well-being. The realization of the fourth Sustainable Development Goal, concerned with good health and well-being of a country's citizens, was used as a moderating variable. The research undertaken in the article allows to explain the interrelationship between organizational activities and national policies for achieving Sustainable Development Goals. The purpose of the research and its international scope make a unique contribution in the field of sustainable HRM and organizational psychology. The presented research is part of an international project entitled "Sustainable Human Resource Management – Cross-Cultural Empirical Study".

#### Theoretical background

Based on social exchange theory, the paper explains the extent to which the practices affecting the well-being of employees, implemented in companies, are enhanced by the realization of the Sustainable Development Goal concerning good health and well-being.

#### Design/Methodology/Approach/Intervention

This study is based on data from over 13,000 employees representing a number of companies. The questionnaires were completed using the computer-assisted web interview method. On the basis of multilevel analysis, we demonstrate how well-being-oriented HRM explains well-being between and within groups from each country.

Results obtained or expected (if not available, it must be made clear when they will be available)

The findings show that well-being oriented HRM practices explain eudaimonic well-being between and within groups. The relationships between these variables are stronger in those countries where state policies are oriented towards the fourth Sustainable Development Goal of good-health and well-being of citizens.

#### Limitations

This study has two limitations: its cross-sectional design and the use of self-reported questionnaire data.

#### Conclusions – research and or practical implications/Originality/Value

The study is the first to explore the relationship between well-being oriented HRM practices and employee eudaimonic well-being in the perspective of international analysis.

#### Relevance to the Congress Theme

The proposed research problem is directly related to the topic area included in the conference program and connected with well-being.

SDGs GOAL – Good health and well-being

*Keywords: eudaimonic well-being, HRM, SDGs*

## 7-minute science 7M123

### **Work Engagement as a mediator in the relationship between Social support and performance in digital services professionals**

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science&practice

On the basis of theories about the motivational potential of job resources, the purpose of this study is to examine how job resources (job autonomy, social support, and supervisor feedback) facilitate work engagement and task and contextual performance, taking into account different work modalities: onsite work, hybrid work, and telework. It is acknowledged that the effects of digitalization and technology on the relational aspects of work vary, and that information and communication technologies (ICT) can create both opportunities and constraints in supporting coworker relationships. In this study we predict that supportive colleagues (social support) can create positive working relationships with others which in turn will affect workers' task and context performance, and work engagement is a mediator of the relationship. Data were gathered from a cross-sectional survey of 261 workers of different Portuguese enterprises from digital services sector. Using regression analysis, this study examined the contribution of demographic and job resources variables (Job autonomy, Social Support and Supervisor Feedback) to the prediction of Work Engagement, task and contextual performance among workers who were working in three work modalities - Onsite Work, Hybrid Work, Telework. Work Engagement was analyzed as a mediator of that relationship Social Support and task and contextual performance. The results revealed that Job autonomy, Social support and Supervisor feedback accounted for the prediction of Work Engagement and also for the prediction of Task and of Contextual Performance. Social support was directly and indirectly associated with Task and Contextual Performance, through Work Engagement. Findings of the study suggest that enhancing Social support can be a potential strategy to foster Work Engagement and improve Task and of Contextual Performance outcomes. This study contributes to our understanding of the new workplace and working arrangements and the relational aspects of work.

*Keywords: Work Engagement; Social support ; Performance*

## Work-design and Occupational Well-Being

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Occupational well-being is one of the main areas of interests of many companies and organizations operating in the business environment. There is a growing awareness of its role in the context of building employee engagement and efficiency, and of how it translates into the overall functioning of an individual. Recent socio-economic changes have intensified the activities of many companies aimed at maintaining or increasing the occupational well-being of employees.

When talking about the employee's well-being, the proper work-design seems to be of great importance. Hence, the aim of this study was to determine the relationship between the characteristics of work and the employee's well-being.

As for the methods, the Well-Being Questionnaire in the Work Situation by Czerw (2017) was used. It enables the subjective assessment of one's own work and its place, includes 43 items divided into four categories: positive organization, fit and development, positive relations with colleagues, contribution to the organization. Additionally, the Work-Design Questionnaire by Hauk (2014) was used in order to estimate job characteristics. The tool consists of 46 items belonging to 11 factors: the complexity of the work; physical requirements and working conditions; feedback from work; autonomy; ergonomics; feedback from others; equipment used; mutual dependence of employees; interactions outside the organization; social support - friendships in the organization; the importance of work.

162 people participated in the study, 111 W and 51 M. 88,9% of the participants had higher or incomplete higher education (10,5%), the rest - secondary education. People working and living in large cities prevailed in the study group (over 500,000 inhabitants – 73,5% of the respondents).

In order to determine the relationship between job characteristics and occupational well-being, first we performed a correlation analysis ( $r$  - Pearson's). Only in the case of 2 characteristics: physical requirements and working conditions; interactions outside the organization - no statistically significant results were obtained. In the remaining cases, significant, positive correlations were noted. The highest results were obtained for such features, as: feedback from others ( $r = 0,690$ ,  $p < 0,01$ ) and feedback from work ( $r = 0,663$ ,  $p < 0,01$ ). In the next step, a linear regression analysis was performed. Model including 4 factors (respectively: feedback from others:  $\beta = 0,455$ ,  $p < 0,01$ ; autonomy:  $\beta = 0,265$ ,  $p < 0,01$ , feedback from work:  $\beta = 0,259$ ,  $p < 0,01$ ; work complexity:  $\beta = 0,162$ ,  $p < .01$ ) explains 68,1% of the variance of occupational well-being. Above mentioned results indicate that job characteristics are important predictors of employee's well-being.

The obtained results indicate also the need for more detailed analyzes of the relationship between job characteristics and employee's well-being. At the same time, it seems to be the imperative of organizations to design work and shape working conditions by increasing the level of above mentioned traits (por. Demerouti, Bakker, Halbesleben, 2015; Rudolph et al., 2017), what consequently may be connected with the employee's well-being augmentation.

It is worth to highlight that taking care of well-being of employees is directly aligned with the United Nations Sustainable Development Goals (respectively: Good health and Wellbeing).

*Keywords: work characteristics, well-being, work-design*

**Workplace Arrogance, Need for Power, and Counterproductive Work Behaviors among Corporate Managers: The Mediating Role of Humility**

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science

The accounts of arrogant managers abound, however minimal systematic research has been done on workplace arrogance, the need for power, and counterproductive work behaviours within organizations. The research article describes the results of our studies in response to this oversight. The study was carried out by following the correlational research design and the sample of N=260 corporate managers (males=181, females=79), with an age range from 30 years to 55 years (M =41.03, SD =7.06) was recruited from the different cities of Pakistan (i.e., Lahore n =40 (15.4%), Faisalabad n =38 (14.6%), Multan n =37 (14.2%), Karachi n =38 (14.6%), Islamabad n =38 (14.6%), Abbottabad n =26 (10%), and Bahawalpur n =43 (16.5%). The existing research was carried out to achieve the following research objectives, according to the first objective of the study, authors established a confirmatory factor structure of the workplace arrogance scale through confirmatory factor analysis (CFA) and retained 22 items with well-fitted indices of the one-factor solution model  $\chi^2 = 1.77$ , (df =206, N =260),  $p < .05$ , RMSEA=.05, CFI=.90, GFI=.90, TLI=.91. Furthermore, aligning with the second objective of the study, the results of the correlation analysis exhibited significant ( $p < .05$ ) positive relationships between workplace arrogance, the personalized need for power (P nPower), and counterproductive work behaviour however, the negative association was found between the socialized need for power (S nPower), humility, and agreeableness in corporate managers. The gender differences were explored as the third objective of the study, findings of the independent sample t-test revealed that male and female corporate managers have similar scores in terms of all study variables ( $p > .05$ ). In addition, the fourth objective of the study was achieved by identifying the significant predictors of counterproductive work behaviour, findings of multiple linear regression analysis revealed that workplace arrogance and personalized need for power with 25% of the variance were found to be significant ( $p < .01$ ) predictors of the counterproductive work behaviour among corporate managers. The path analysis through structure equational modelling (SEM) also suggested that personalized need for power, workplace arrogance, and humility are significant predictors of counterproductive work behaviour. Lastly, the fifth objective was achieved by the mediation analysis conducted through structure equational modelling (SEM), findings demonstrated that humility significantly mediated the relationship between workplace arrogance, the need for power, and counterproductive work behaviour in corporate managers ( $\chi^2 = 2.53$  (CMIN/df =5.06/2=2.53, N =260),  $p < .05$ , RMSEA=.05, CFI=.98, GFI=.92 and TLI=.97). Moreover, the two demographic variables such as work experience and the corporate sectors of the corporate managers have an impact on their counterproductive work behaviour and the overall model fit indices. The study provides researchers with a validated workplace arrogance scale on the corporate sample. It helps the researchers expand their understanding of the significance of these constructs in the field of industrial-organizational psychology. The study seeks to benefit many employees and employers to comprehend the nature and the association of counterproductive work behaviour with other undesirable variables in the workplace (i.e., workplace arrogance and personalized need for power).

*Keywords: Workplace Arrogance, Need for Power, and Counterproductive Work Behavior.*

## 7-minute science 7M198

### **The proof is in the pudding: Company image and work experiences are affected by diversity progress and not by diversity talk.**

Valerie De Cock, Université libre de Bruxelles; Pinar Celik, Université libre de Bruxelles; Claudia Toma, Université libre de Bruxelles.

While many organizations communicate publicly about their commitment to diversity and inclusion (D&I), progress in the domain remains slow. Given this controversial relation between diversity talk and diversity progress, the current paper investigates their joint impact on organizations and workers. Indeed, while previous research has mainly focused on the positive role of diversity talk on organizations' reputation and workers' experiences, less attention has been devoted to the effects of diversity progress. However, we contend that diversity talk alone can no longer be beneficial in a context in which there is increased scrutiny on diversity progress. We expect thus first that diversity progress, more than diversity talk, should have a decisive impact on workers' company perceptions and work experiences (Hypothesis 1). Second, based on the organizational decoupling literature (Mor Barak et al., 2021) and the functionalist approach in CSR communication (Schoeneborn et al., 2020), we also hypothesize that in the case of absence of diversity progress, diversity talk will have a negative impact on company perceptions and work experiences, while having no positive effects when diversity progress is present (Hypothesis 2).

We tested these hypotheses in two studies using a 2 (diversity talk: present, absent) X 2 (diversity progress: present, absent) design. Study 1 (N=437) employed an experimental design in which participants reacted to a hypothetical situation, while Study 2 (N=240) was a correlational study in which respondents were reporting about their own organization. In line with our first hypothesis, the results show that diversity progress, and not diversity talk, consistently affects workers' company image (perceived corporate hypocrisy) and their work experiences (sense of inclusion, organizational commitment, person-organization fit, negative affect). We did not find consistent support for our second hypothesis. Interestingly, these findings suggest that in a context in which information about diversity talk and diversity progress is present, workers disregard diversity talk and primarily care about diversity progress in their organization. We believe that our main findings are relevant for the signaling theory and the repetition-frequency-model of persuasive communication and can be explained through the concepts of organizational identification and psychological contract breach.

In conclusion, this research highlights that not only objective evidence of diversity progress is necessary to ensure positive company perceptions and work experiences amongst internal stakeholders, but that it is also important to consider the subjective evaluations of workers about the progress done in the D&I domain. Organizations should indeed provide consistent and clear evidence about their progress in the domain of diversity and inclusion and should monitor workers' perception regarding diversity and inclusion efforts.

By highlighting the costs associated with a (perceived) status quo in the D&I domain and by highlighting that a lack of evidence that progress takes place, endangers the exact objectives that an organization has by communicating on D&I (positive company image & inclusive work environments), we hope to sensitize organizations to the urgency of going beyond symbolic D&I actions and adopting policies that achieve systemic change and real progress in the D&I domain.

*Keywords: Diversity talk, diversity progress, work experiences*

## 7-minute science 7M94

### **How will you communicate with your colleagues today? Examining the relationship between various communication forms and social ties in organisations.**

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**Research goals.** This study explores the relationship between various forms of communication (in person, on screen, on the phone, and messaging) and social ties in organisations when working remotely and on-site.

**Theoretical background.** The COVID-19 pandemic has changed the world of work and posed various challenges, including decreased feelings of social connectedness (Rudolph et al., 2021). Indeed, teleworkers have long been known to experience poorer social interactions (Rockmann & Pratt 2015) and decreased job satisfaction (Golden 2007). According to media richness theory (Walther, 2011), computer-mediated communication (CMC) reduces nonverbal cues that might lead to miscommunication. In addition, teleworkers engage in fewer casual conversations and experience more delayed response times among colleagues, which can negatively affect interpersonal trust and cohesion (e.g., Driskell et al., 2003). As telework is becoming a customary way of working, we need to obtain a more fine-grained view of how the nature of communication might affect social connectedness to understand its benefits and potential pitfalls. We have therefore aimed to test the relationship between various forms of communication, team feel, perceived colleague help and job satisfaction among teleworkers and office workers.

**Methodology.** We used data from the 10th round of the European Social Survey, conducted in 2020 (<https://ess-search.nsd.no>). To test our assumptions, we used Lithuanian data of 433 workers from ISCO groups 1–4 (mean age = 45.08, 64% women). We conducted latent profile analyses with Mplus v8.8, based on the indicators of communication type and working mode (on-site or remote). These analyses allow inspecting the unobserved heterogeneity of the sample, revealing distinct subgroups that differ regarding their within-person configurations of profile indicators.

**Results.** In total, eight distinct configurations (latent profiles) were identified, demonstrating various communication practices with colleagues while working in the office versus at home. The biggest profile that characterised 27.5% of the sample was called "In-person office communicators" (denoting frequent on-site work and dominant in-person communication). The smallest profile, describing 7% of workers, was called "All-mode office communicators" (representing persons who work on-site and equally use different means of communication). We observed significant between-profile differences regarding one's team feel and expectations of getting help from colleagues. The levels of these outcomes varied depending on communication frequency and were the highest among teleworkers with the all-mode communication profile. In the case of job satisfaction, only a few pairwise differences were found. The highest job satisfaction was among employees who either work on-site with non-intense communication or those who work from home and frequently use different means of connecting with colleagues.

**Limitations.** Although country-representative data is undoubtedly the strength of this study, the study's cross-sectional nature does not allow for making causal inferences. Moreover, future studies could also control for the duration of the communication form and job type, as different communication forms are likely to benefit different task portfolios.

**Value.** Our study's results show that using various forms of communication when working remotely allows one to maintain a team feel, colleague support and job satisfaction.

*Keywords: social connectedness, remote work, forms of communication*